

**To: CVG Airlines and Tenants**

**Subject: 2021-2022 Winter Operations Overview**

**Date: October 1, 2021**

This Operations Memorandum serves to provide information about 2021-2022 Winter Operations via the Snow and Ice Control Plan, which is attached to this file. For information regarding the Aircraft Deicing Plan, please see Appendix 5 within the document.

2021 assignments:

- Line A, B, C – IDS (Alaska, Allegiant, American, FedEx, Frontier, Sun Country, and United)
- Line D – Southwest
- Line E – Delta/IDS overflow
- Line F, G – Delta

Additional Information:

**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 Microsoft Teams invite. 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. This year we will be utilizing Microsoft Teams to display various planning documents. Please attempt to access the call via the link to ensure these items are viewable to you. As personnel or roles change within your organization, please notify the AOC (7777@cvgairport.com) 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 AOC (859-767-7777). 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.



# Kenton County Airport Board

## Snow and Ice Control Plan

Federal Aviation Administration  
Southern Region Airports Division

APPROVED  
Sep 30 2021

LH  
Inspector

**RECORD OF CHANGES**

Revision Number	Date	Page
1	02/05/2021	All
2	9/29/2021	Appendix 5

Federal Aviation Administration  
Southern Region Airports Division

APPROVED

Sep 30 2021

LH  
Inspector

**TABLE OF CONTENTS**

Record of Changes .....	i
Table of Contents.....	ii
Definitions .....	iii
Phase #1 Pre and Post Winter Season Topics .....	1
1.0 Pre-Season Actions .....	1-1
1.1 Airport Preparation .....	1-1
1.2 Snow and Ice Committee (SICC) Meetings .....	1-2
2.0 Post Event/Season Actions .....	2-1
2.1 Post Event .....	2-1
2.2 Post Season .....	2-1
Phase #2 Winter Storm Actions and Procedures.....	3
3.0 Snow Removal Action Criteria .....	3.1-1
3.1 Activating Snow Removal Personnel.....	3.1-1
3.2 Departmental Responsibilities .....	3.2-1
3.3 Snow Control Center (SCC) .....	3.3-1
3.4 Airfield Clearing Priorities .....	3.4-1
3.5 Airfield Clearance Times .....	3.5-1
3.6 Snow Equipment List.....	3.6-1
3.7 Storage of Snow and Ice Equipment .....	3.7-1
4.0 Snow Clearing Operations and Ice Prevention .....	4.1-1
4.1 Snow Clearing Principles.....	4.1-1
4.2 Controlling Snow Drifts .....	4.2-1
4.3 Snow Disposal.....	4.3-1
4.4 Methods for Ice Control and Removal Chemicals .....	4.4-1
4.5 Sand .....	4.5-1
4.6 Surface Incident/Runway Incursion Mitigation Procedures .....	4.6-1
5.0 Surface Assessment and Reporting.....	5.1-1
5.1 General.....	5.1-1
5.2 Conducting Surface Assessments.....	5.2-1
5.3 Applying the Runway Condition Assessment Matrix (RCAM).....	5.3-1
5.4 Runway Friction Surveys and Equipment .....	5.4-1
5.5 Taxiways, Aprons, and Holding Bay Assessments .....	5.5-1
5.6 Surface Condition Reporting .....	5.6-1

Federal Aviation Administration  
Southern Region Airports Division  
**APPROVED**  
**Jun 03 2021**  
NBL  
Airport Certification Safety Inspector

5.7 Reportable Contaminants Without Performance Data .....5.7-1

5.8 Slippery When Wet Runway .....5.8-1

5.9 Requirements for Closures .....5.9-1

5.10 Continues Monitoring and Deteriorating Conditions .....5.10-1

5.11 Surface Conditions not Being Monitored/Reported .....5.11-1

6.0 Appendix 1: Snow & Ice Control Plan Committee Members .....6-1

7.0 Appendix 2: Airfield Cleaning Priorities .....7-1

8.0 Appendix 3: Snow Removal Equipment.....8-1

9.0 Appendix 4: Navigational Aid Critical Areas .....9-1

10.0 Appendix 5: Aircraft Deicing Plan.....10-1

10.1 Pad 13 .....10-1

11.0 Appendix 6: Runway Condition Assessment Matrix.....11-1

Federal Aviation Administration  
Southern Region Airports Division  
APPROVED  
Jun 03 2021  
NBL  
Airport Certification Safety Inspector

## DEFINITIONS

Contaminant: Any substance on a runway, for the purpose of this SICP contaminant is snow, slush, ice, wet ice, or standing water.

Dry Snow: Snow that insufficient free of water to cause cohesion between individual particles. If when making a snowball, it falls apart, the snow is considered dry.

Wet Snow: Snow that has grains coated with liquid water, which bonds the mass together, but that has no excess water in the pore spaces. A well-compacted, solid snowball can be made, but water will not squeeze out.

Compacted Snow: Snow that has been compressed into a solid mass that resists further compression and will hold together or break up into lumps if picked up.

Wet Ice: Ice that is melting, or ice with a layer of water (any depth) on top.

Slush: Snow that has water content exceeding its freely drained condition, such that it takes a fluid property (e.g. flowing and splashing). Water will drain from slush when a handful is picked up.

Patchy Conditions: Areas of bare pavement showing through snow and/or ice-covered pavements.

V-Box Spreader: An attachment for a dump bed truck. It is used to accurately put out applications of deicing materials and/or sand on airfield.

KCAB Snow Team: Team responsible for snow removal operations at CVG. This team consists of the following departments: Field Maintenance, Facilities Maintenance, Fleet Maintenance, Environmental Operations and Airport Operations.

Federal Aviation Administration  
Southern Region Airports Division

APPROVED

Jun 03 2021

NBL

Airport Certification Safety Inspector

**PHASE #1 PRE AND POST WINTER SEASON TOPICS**

Federal Aviation Administration  
Southern Region Airports Division  
**APPROVED**  
**Jun 03 2021**  
NBL  
Airport Certification Safety Inspector



## 1.0 PRE-SEASON ACTIONS

### 1.1 AIRPORT PREPARATION

#### Airport Management Meetings

The Vice President of Maintenance and Asset Management or designee will initiate a meeting in October to discuss equipment and material inventory, repair needs, staffing, budget, training, previous year's issues and any other topics associated with snow and ice control and the airport's plan for the upcoming snow season.

#### Personnel Training

Personnel with any responsibility for snow and ice control receive annual, recurrent snow removal training.

##### (a) Maintenance

The Field Maintenance Safety Trainer through the Senior Manager of Field Maintenance or designee conducts all training for maintenance personnel. The Senior Manager of Field Maintenance or designee maintains training records.

- (1) All personnel receive recurrent airfield driver's training through the airport's interactive employee training software.
- (2) All personnel responsible for operating snow removal equipment receive hands on airfield driver's training.
- (3) All personnel that operate snow removal equipment receive hands on training on specific equipment.
- (4) All personnel that operate snow removal equipment are trained to maintain a safe distance between equipment and aircraft.

##### (b) Airport Operations

The Airport Operations Manager and designated Airport Operations Trainers conducts all training for the airport operations personnel.

- (1) All personnel receive recurrent airfield driver's training through the airport's interactive employee training software.
- (2) All personnel responsible for operating friction measuring equipment receive hands on training.
- (3) All personnel responsible for condition reporting receive training in condition reporting, Notice to Airmen (NOTAM) issuance, and Runway Condition Codes (RwyCC).

##### (c) Equipment Preparation

The airports continuous friction monitoring vehicle (CFME) is calibrated, updated and certified as recommended by the manufacturer.

Beginning at least 60 days prior to the beginning of snow season (November 1st) fleet maintenance mechanics inspect and prepare each piece of snow removal equipment. Required fluids, replacement parts, and snow removal equipment components will be inventoried and stockpiled.

Federal Aviation Administration  
Southern Region Airports Division  
**APPROVED**  
**Jun 03 2021**  
NBL  
Airport Certification Safety Inspector

## 1.2 SNOW AND ICE COMMITTEE (SICC) MEETINGS

The Snow and Ice Control Committee (SICC) at the Cincinnati/Northern Kentucky International Airport (CVG) was developed to provide feedback and make recommendations to snow and ice removal operations and assist in updating the Snow and Ice Control Plan (SICP). The SICC is chaired by the Vice President of Maintenance and Asset Management or designee and includes Field Maintenance, Airport Operations, Federal Aviation Administration Control Tower personnel, airlines and other airport tenants (reference Appendix 1).

Tenants and airport users not able to participate in the SICC are provided minutes and kept apprised of all changes. Aircraft operators and the Federal Aviation Administration (FAA) Air Traffic Control Tower (ATCT) are notified of field conditions via NOTAMs. The public and other airport users are notified of applicable airport conditions via the Airport Public Information Officer.

The Airport will notify tenants and airport users to review and provide comments on the SICP that will be discussed during the season kick-off meeting during the month of October.

(a) The following topics should be discussed in the SICC

(1) Airport Clearing Operations Discussion Topics

- i. Designated snow removal areas, any new airfield infrastructure.
- ii. Clearing operations and follow-up airfield assessments.
- iii. Potentials for pilot or vehicular runway incursions or incidents.
- iv. Staff requirements and qualifications (training).
- v. Update training program.
- vi. Streamline decision making process.
- vii. Response time to keep runways, taxiways and ramp areas operational.
- viii. Communication.
- ix. Monitoring and updating of runway surface conditions.
- x. Issuance of NOTAMs and dissemination to ensure timely notification.
- xi. Equipment inventory.
- xii. Status of procurement contracts, including storage of materials.
- xiii. Snow hauling/disposing, snow dumps.
- xiv. New runoff requirements for containment or collection.
- xv. Changes to contract service for clearing ramps of accumulated snow.

(2) Air Carrier Ground Deicing/anti-icing programs

- i. Assessing all air carriers deicing programs by reviewing airport surface flow strategies; reviewing ground time and takeoff clearances after deicing; analyzing and adjusting airplane deicing plans.
- ii. Maximize efficiency of operations during icing conditions by identifying locations for airplane deicing; planning taxi routes to minimize ground times; developing rates for deiced departures; allocating departure slots; determination airport deicing crew needs; verifying communications.

(3) Any requirements for containment/collection of deicing/anti-icing.

Federal Aviation Administration  
Southern Region Airports Division  
**APPROVED**  
**Jun 03 2021**  
NBL  
Airport Certification Safety Inspector

## 2.0 POST EVENT/SEASON ACTIONS

### 2.1 POST EVENT

After each snow event all members of the SICC are encouraged to provide any feedback to the Vice President of Maintenance and Asset Management or designee. At the discretion of The Vice President of Maintenance and Asset Management or designee, a follow up meeting with the SICC may be held to discuss issues that have arisen from the event.

### 2.2 POST SEASON

After each snow season a SICC meeting will be held to review the snow season issues and recommendations for changes. The same topics as pre-season should be reviewed.

Fleet Maintenance will inspect all snow removal equipment prior to summer storage. All leased equipment will be prepared for return.

Federal Aviation Administration  
Southern Region Airports Division

APPROVED

Jun 03 2021

NBL

Airport Certification Safety Inspector

## PHASE #2 WINTER STORM ACTIONS AND PROCEDURES

Federal Aviation Administration  
Southern Region Airports Division  
**APPROVED**  
**Jun 03 2021**  
NBL  
Airport Certification Safety Inspector

### 3.0 SNOW REMOVAL ACTION CRITERIA

#### 3.1 ACTIVATING SNOW REMOVAL PERSONNEL

The Vice President of Maintenance and Asset Management has the direct responsibility of activating the snow and ice control program. This is accomplished through on going monitoring of weather forecasts, RADAR, and field inspections conducted by Field Maintenance and Airport Operations. Upon activation of the Snow and Ice Control Plan (SICP) the Senior Manager of Field Maintenance or designee will make appropriate notifications to personnel needed for the type of snow or ice event.

The Vice President of Maintenance and Asset Management and the Senior Manager of Field Maintenance or designee and Director of Airport Operations or designee will determine the level of staffing needed to adequately staff the snow or ice event. Once the staffing levels have been determined the Senior Manager of Field Maintenance or designee will make the necessary contact with the Snow Team to staff all necessary equipment.

##### Weather Forecasting

- (a) Airport Operations Center has the primary responsibility for monitoring the current and/or forecast weather conditions. Monitoring of weather conditions is continuous during the winter season.
- (b) Weather forecasts are obtained from local and national weather sources. The airport also contracts with WeatherSentry™ Online – Transportation Edition that provides weather forecasts specifically for CVG. This service provides hourly, daily, and ten-day forecast that include precipitation type and amounts, air temperature, surface temperature, dew point, wind speed and direction, blowing snow probability, and cloud cover.
- (c) The WeatherSentry™ Online – Transportation Edition utilizes information obtained from the airports in-pavement sensors to assist with weather forecasting and provide accurate pavement temperatures.

##### Roles and Responsibilities

- (a) The monitoring of the airfield and weather conditions is a joint effort by the Airfield Maintenance and Airport Operations departments.
- (b) Airfield inspections are conducted at intervals that are directly related to the precipitation amount and type, air temperature, surface temperature, wind direction/speed, drifting conditions and other environmental factors.
- (c) The Vice President of Maintenance and Asset Management and the Senior Manager of Field Maintenance or designee has the authority to initiate the snow and ice control program.
- (d) During normal shift hours required personnel will be contacted through company radio, cell phone, or office phone of the need to report for snow removal operations.
- (e) All personnel needed to report to the airport outside their regularly

Federal Aviation Administration  
Southern Region Airports Division  
**APPROVED**  
**Jun 03 2021**  
NBL  
Airport Certification Safety Inspector

- scheduled shift will be contacted by the Airport mass notification system and advised of their reporting requirements.
- (f) The Senior Manager of Field Maintenance or designee will advise personnel required to remain at the airport outside of their normal shift.

#### Triggers for Initiating Snow Removal Operations

- (a) Snow removal operations will begin when contaminants begin accumulating on pavement surfaces, when forecasted or current weather conditions indicate the use of anti-ice chemicals, or at the discretion of the Vice President of Maintenance and Asset Management or designee to maintain safe operating conditions for airport users. Snow removal operations will be carried out as indicated in this plan.

Federal Aviation Administration  
Southern Region Airports Division

APPROVED

Jun 03 2021

NBL

Airport Certification Safety Inspector

### 3.2 DEPARTMENTAL RESPONSIBILITIES

#### Vice President of Maintenance and Asset Management

- (a) Overall responsible for the initiation and management of the snow and ice control plan.
- (b) Responsible for conducting pre-season, post-season, pre-event and post-event coordination meetings, that includes all airport users and FAA personnel.
- (c) Coordinates with the airport's Chief Operations Officer

#### Senior Manager of Field Maintenance

- (a) Responsible for implementing the snow and ice control program as defined by the Vice President of Maintenance and Asset Management.
- (b) Responsible for coordinating all pre-season personnel training and assuring all snow personnel are current with commercial driver's license (CDL) requirements.
- (c) Ensures notification of necessary personnel, assignment of personnel to equipment, management of equipment condition, management of stockpile of necessary and approved deicing and anti-icing chemicals, sand, and replacement parts.

#### Airport Maintenance

- (a) Conducts snow removal activities on movement and non-movement areas and airport owned roadways.
- (b) Coordinates the snow and ice control program with the FAA ATCT indicating which airfield surfaces will be cleared and approximate clearing times.
- (c) Responsible for all snow removal personnel radio communications with the FAA.

#### Airport Maintenance Specific Functions

##### (a) Snow Broom/Multi-Function Lead Operators

- (1) Responsible for listening to radio communications with the Senior Manager of Field Maintenance or designee and FAA ATCT personnel and assuring broom team members adhere to safe airfield operating procedures.

##### (b) Plow Truck Lead Operators

- (1) Responsible for listening to radio communications with the Senior Manager of Field Maintenance or designee and FAA ATCT personnel and assuring plow truck team members adhere to safe airfield operating procedures and will coordinate directly with FAA ATCT personnel at the direction of the Senior Manager of Field Maintenance or designee and advise of necessary clearing operations.

##### (c) Airfield Deicing Vehicle Operators

- (1) Conduct runway and taxiway deicing operations and rate applications as directed by the Field Maintenance Supervisor or designee.

##### (d) Snow Blower Operators

- (1) Responsible for listening to radio communications with the Senior Manager of Field

Federal Aviation Administration  
Southern Region Airports Division  
**APPROVED**  
**Jun 03 2021**  
NBL  
Airport Certification Safety Inspector

Maintenance or designee and FAA ATCT personnel and assuring blower team members adhere to safe airfield operating procedures and will coordinate directly with FAA ATCT personnel at the direction of the Senior Manager of Field Maintenance or designee and advise of necessary clearing operations.

(e) Ramp Plow Operators

- (1) Responsible for conducting terminal ramp snow and ice removal per the Senior Manager of Field Maintenance or designee.

(f) Ramp Deicing Vehicle Operators

- (1) Conduct terminal ramp deicing per the Senior Manager of Field Maintenance or designee.

Airport Operations Department

- (a) Responsible for overseeing airfield condition reporting, and friction testing of airfield surfaces. Report's airfield conditions and friction values to the Senior Manager of Field Maintenance or designee via company radio.
- (b) Responsible for inspections of airfield lighting, signage and pavement for compliance to Part 139.
- (c) Monitors weather forecasts for current and forecasted weather events.
- (d) Issues FICONs with use of the FAA Runway Condition Assessment Matrix (RCAM) and Runway Condition Codes (RwyCC) to update airport users on current conditions.
- (e) Closes airfield or portions of airfield if deemed necessary due to conditions.

Federal Aviation Administration  
Southern Region Airports Division

APPROVED

Jun 03 2021

NBL

Airport Certification Safety Inspector



### 3.3 SNOW CONTROL CENTER (SCC)

The SCC resides with the Airport Operations Center and is staffed by Airport Duty Managers and Telecommunicators. Airport Operations Agents also assist with SCC duties both inside the facility and via mobile connections. The SCC will perform the following functions:

- (a) Coordination with all air carriers as to snow removal operations and anticipated airfield closure times.
- (b) Coordination with the Senior Manager of Field Maintenance or designee on current and forecast removal operations and coordinating with the FAA ATCT as needed for flow control purposes and required closures.
- (c) Coordination with the issuing of NOTAMs/FICONs as required.
- (d) Monitoring current and forecasted weather conditions and providing forecast information to the Senior Manager of Field Maintenance or designee for necessary modifications to the snow and ice control program.
- (e) Receiving, prioritizing and coordinating snow removal requests from airport tenants.

In addition to the SCC, the Snow Team will establish a designated snow team member to provide operational oversight for snow events. This role will typically be filled by the Sr. Manager of Field Maintenance and delegated as required depending on event severity and length. This will be either a mobile center with company radio, ground control radio, cell phone, and a laptop computer with high-speed internet access or a stationary center with all referenced equipment. The operational oversight designee will be responsible for:

- (a) Coordinating all snow removal efforts.
- (b) Determining airfield clearing priorities.
- (c) Communicating with FAA ATCT on near term snow removal plans.

Federal Aviation Administration  
Southern Region Airports Division

APPROVED

Jun 03 2021

NBL

Airport Certification Safety Inspector

### 3.4 AIRFIELD CLEARING PRIORITIES

These procedures set forth categories for snow removal operations. Each of these categories will have a primary, secondary and other snow removal priority. Reference Appendix 2.

#### Runways and Taxiways

- (a) Primary: Runways 18L-36R and 18C-36C will be of primary importance, with their associated parallel taxiways; Taxiways Delta, Sierra, Uniform, Victor and Tango to the ramp. East/West Taxiways Juliet and Mike east of Runway 18C, and November will also be cleared, including all connectors to the terminal ramp and tenant aprons. The primary priority also includes Airport Rescue Fire Fighting (ARFF) access routes from each station and the ARFF mutual aid access points. Exit taxiways off runways will be cleared based on existing and forecast wind direction and speed.
- (b) Secondary: Runways 9-27 and 18R-36L will be next, along with their associated parallel taxiways; Taxiways Bravo, Charlie and Kilo, as well as east/west Taxiways Alpha, Echo, Juliet and Mike west of Runway 18C. Exit taxiways off runways will be cleared based on existing and forecast wind direction and speed.

Note: Weather conditions may change the primary and secondary runway assignments.

#### Ramp

- (a) Primary: Taxilanes Ramps 1, 2, 3 will be cleared during the snowstorm with 10-12 ramp plows, two to four (2-4) snow blowers and trucks as needed.
- (b) Secondary: Taxilanes Echo, Foxtrot, Hotel, Romeo and Golf will be cleared once primary surfaces are completed. In the event of a large snowstorm, outside contractors may be utilized to clear the ramp areas. Any contractors will be under direct supervision and escort by Airport personnel. Airport Operations will contact airlines to coordinate gate closures for the purpose of stockpiling snow on a temporary basis.

#### Access Drives and Service Roads – Terminal and General Aviation Area

- (a) Primary: The terminal access drive, service roads, and South Airfield Drive will receive primary snow removal priority.
- (b) Secondary: The perimeter road system will fall under this category.

On occasion if the storm is severe enough, it may be that only the primary task will be accomplished until the storm has subsided.

Federal Aviation Administration  
Southern Region Airports Division  
**APPROVED**  
**Jun 03 2021**  
NBL  
Airport Certification Safety Inspector

### 3.5 AIRFIELD CLEARANCE TIMES

Clearance times for runway, exit taxiways, and taxi routes to the terminal area will be based upon the type and rate of precipitation. Times are dependent on the weather conditions such as rate of precipitation, type of precipitation, air temperature, surface temperature, dew point, wind speed and direction, blowing snow probability, and cloud cover.

The snow and ice control program complies with Table 1-1, Clearance Times for Commercial Service Airports, below.

**Table 1-1. Clearance Times for Commercial Service Airports**

<i>Annual Airplane Operations (includes cargo operations)</i>	<i>Clearance Time<sup>1</sup> (hour)</i>
<i>40,000 or more</i>	<i>½</i>
<i>10,000 – but less than 40,000</i>	<i>1</i>
<i>6,000 – but less than 10,000</i>	<i>1½</i>
<i>Less than 6,000</i>	<i>2</i>
<i>General: Commercial Service Airport means a public-use airport that the U.S. Secretary of Transportation determines has at least 2,500 passenger boardings each year and that receives scheduled passenger airplane service [reference Title 49 United States Code, Section 47102(7)].</i>	
<i>Footnote 1: These airports should have sufficient equipment to clear 1 inch (2.54 cm) of falling snow weighing up to 25 lb/ft<sup>3</sup> (400 kg/m<sup>3</sup>) from Priority 1 areas within the recommended clearance times.</i>	

Federal Aviation Administration  
Southern Region Airports Division

APPROVED

Jun 03 2021

NBL

Airport Certification Safety Inspector

### 3.6 SNOW EQUIPMENT LIST

Reference Appendix 3.

Federal Aviation Administration  
Southern Region Airports Division  
**APPROVED**  
**Jun 03 2021**  
NBL  
Airport Certification Safety Inspector

### 3.7 STORAGE OF SNOW AND ICE EQUIPMENT

Most snow removal equipment is stored and maintained inside heated facilities.

Federal Aviation Administration  
Southern Region Airports Division  
**APPROVED**  
**Jun 03 2021**  
NBL  
Airport Certification Safety Inspector

## 4.0 SNOW CLEARING OPERATIONS AND ICE PREVENTION

### 4.1 SNOW CLEARING PRINCIPLES

#### Ramps and Terminal

Terminal ramp clearing operations are initiated with snow accumulation of 2 inches and with a forecast of additional accumulation, though snow team leadership may initiate snow removal with reduced accumulation based on their discretion and operational needs. Terminal ramp clearing operations are conducted by airport personnel utilizing rubber tire loaders with 24-32 foot ramp plows, truck mounted plows and sweepers, and various sized deicing vehicles.

The ramp plow's primary objective is to keep the apron ramp areas and aircraft taxilanes clear of heavy snow and ice accumulations. The truck mounted plows and sweepers primary objective is to clear the terminal ramp roads, aircraft gate areas; deicing vehicles may work all areas of the ramp depending on the type and rate of precipitation.

Prior to snow season, coordination with the airlines is conducted to identify areas where snow can be temporarily stockpiled. All stockpiled snow is on a temporary basis. Once the weather event is over, contract snow haulers are escorted from the stockpile areas to the snow dump area located on the north end of the terminal ramp area.

All ramp snow removal vehicle operators and the Senior Manager of Field Maintenance or designee in charge of the ramp clearing operations are aware of and monitor the location and visibility of all signs located in and adjacent to the terminal ramp area. If signs become obstructed, then all necessary measures are taken to remove the obstruction.

#### General Aviation Aprons

Responsibility for clearing general aviation aprons varies by area and is completed by various airport tenants according to their leasehold. The Airport ensures only airport approved chemicals are utilized on apron areas and non-Airport snow removal activities do not create a hazard to aircraft or personnel.

#### Runways and Taxiways

Runway and taxiway clearing operations are dictated by the weather conditions such as rate of precipitation, type of precipitation, air temperature, surface temperature, dew point, wind speed and direction, blowing snow probability, and cloud cover. The objective of the clearing operation for runways is to remove all containments from edge to edge and when necessary treat the center 75 feet with deicing/anti-icing chemicals and sand. The objective for taxiways is to remove all containments from edge to edge and when necessary treat the center 50 feet with deicing/anti-icing chemicals and sand.

Typical snow removal formations are primarily dependent on type and rate of precipitation and wind speed and direction. At the onset of a snow event or in a light to moderate event multi-function units are used to clear from edge to edge. The multi-function units will clear all applicable

Federal Aviation Administration  
Southern Region Airports Division  
**APPROVED**  
**Jun 03 2021**  
NBL  
Airport Certification Safety Inspector

turnoffs based on current and forecast wind conditions. They will operate on either a diagonal or V formation depending on the conditions. If necessary, deicing vehicles and sand trucks will follow the broom team. When the removal team exits the runway the CFME (friction truck) will run the full length of the runway offset from the centerline approximately 10 or 20 feet.

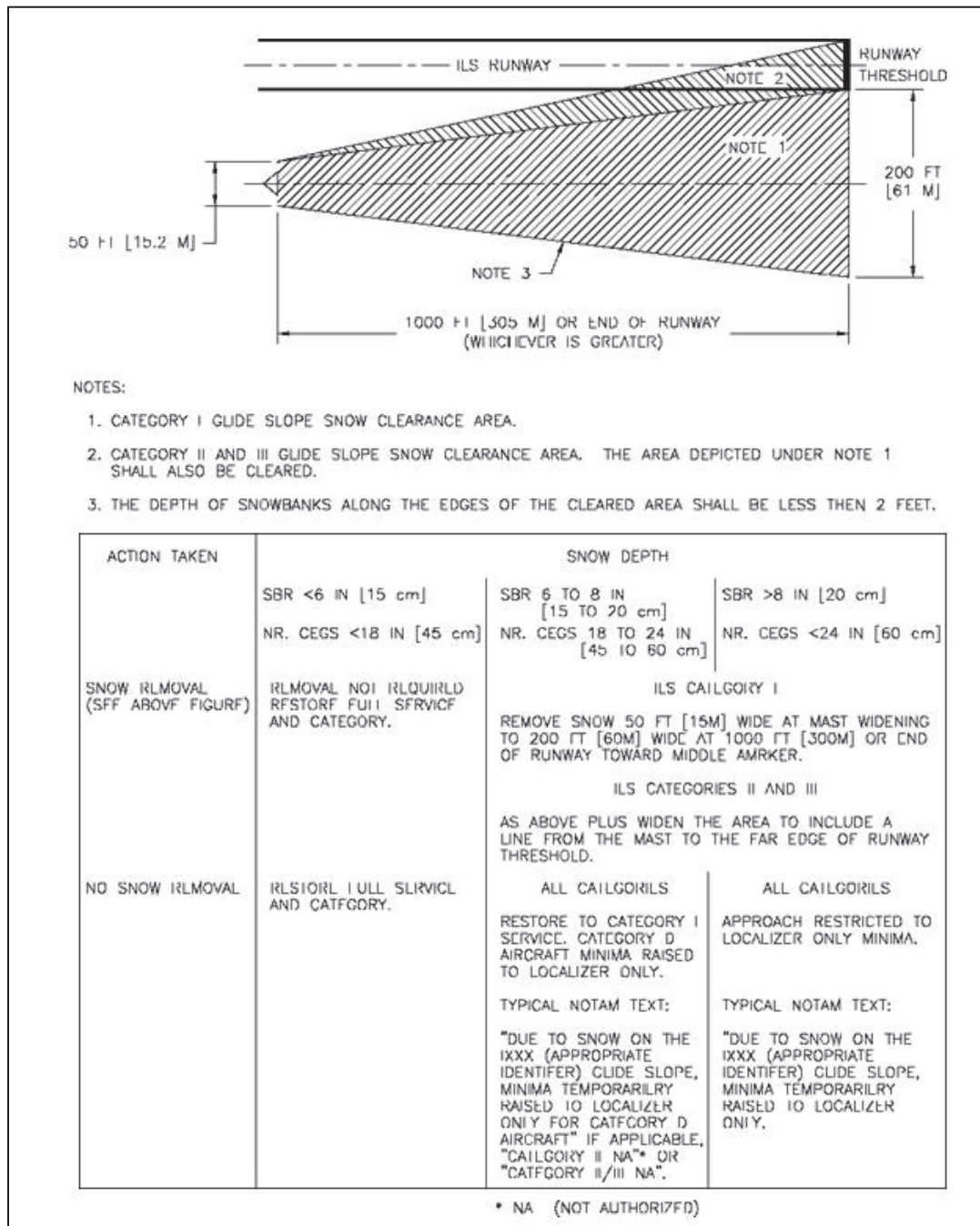
With heavier accumulations and the formation of windrows or snowbanks, snow blower vehicles are utilized to throw the snow over the runway and taxiway edge lights to keep them from being obstructed and to avoid damage to aircraft. Windrows and snowbanks shall be only reported when their height exceeds the minimums depths based on Figure 4-2.

#### Navigational Aids (NAVAIDs)

The Airport is responsible for ensuring that NAVAIDs are not obstructed by snow contaminant or foreign object debris (FOD). A covering of snow or ice may affect visual/electronic NAVAIDs. In the event that the NAVAIDs are obstructed, the Airport Operations Department will be responsible for contacting FAA Tech Ops and developing a plan to correct the deficiency. Figure 4-1 provides graphic representations of the glide slope ground snow clearance areas with prescribed snow depth limitations required for the Airport's ILS CAT I and CAT II/III approaches.



Figure 4-1. ILS CAT I and CAT II/III Snow Clearance Area Depth Limitations (AC 150/5200-30D)



Federal Aviation Administration  
Southern Region Airports Division

APPROVED

Jun 03 2021

NBL

Airport Certification Safety Inspector



### Airfield Signs and Lights

Airfield and ramp signs should be kept clean of plowed snow to maintain the legibility of signage. Priority should be given to lights and signs associated with hold lines, direction, and location signs. Common methods to remove snow from signs include spraying the faces of signs with an approved liquid deicer, or hand shoveling. The lights will be cleared of snow by utilizing a light plow, hand shoveling and/or other necessary means.

### Snowbanks

Snowbanks along runway edges will remain within tolerances to accommodate the airport's Design Group V aircraft (See Figure 4-2 below). Should an aircraft in a larger design category request landing permission during winter weather operations, Airport Operations personnel will determine if adequate snowbank clearance exist and then deny or approve the operation.

Federal Aviation Administration  
Southern Region Airports Division

APPROVED

Jun 03 2021

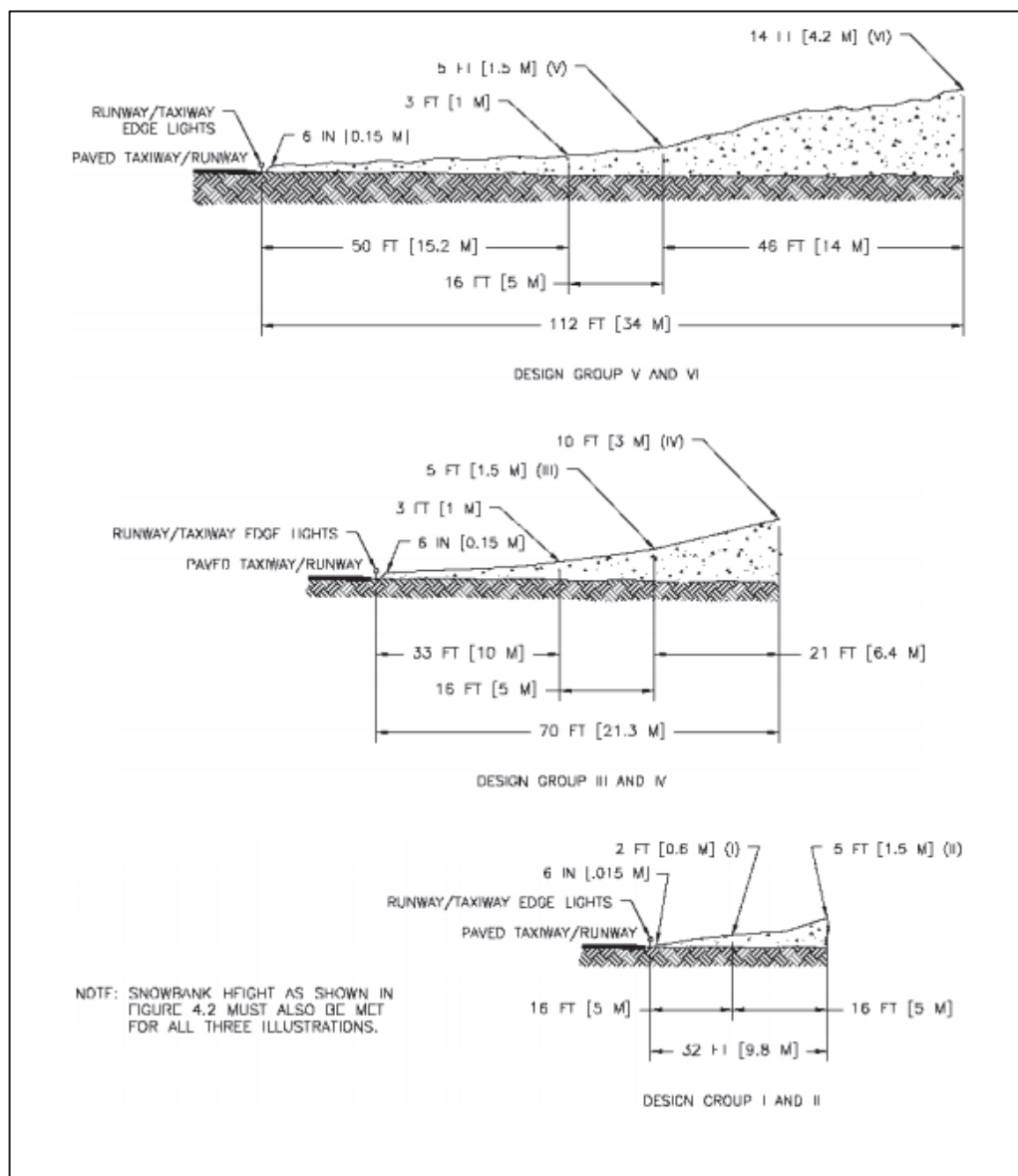
NBL

Airport Certification Safety Inspector

## 4.2 CONTROLLING SNOW DRIFTS

Snowdrifts are controlled by monitoring the runways and taxiways during drifting conditions and removing the drifts with snow removal equipment. Figure 4-2 below identifies snowbank limits.

Figure 4-2 Snowbank Profile Limits Along Edges of Runways and Taxiways with the Airplane Wheels on Full Strength Pavement (see Figure 4-2 guidance) (AC 150/5200-30)



Federal Aviation Administration  
Southern Region Airports Division

APPROVED

Jun 03 2021

NBL

Airport Certification Safety Inspector

#### 4.3 SNOW DISPOSAL

Snow dumps are located on the northwest side of the terminal area and on the north side of Taxiway "N".

Federal Aviation Administration  
Southern Region Airports Division  
**APPROVED**  
**Jun 03 2021**  
NBL  
Airport Certification Safety Inspector

#### 4.4 METHODS FOR ICE CONTROL AND REMOVAL CHEMICALS

Anti-icer and deicer products are utilized at the Cincinnati/Northern Kentucky International Airport (CVG) and are purchased/stocked prior to and during the snow removal season. Typically, CVG uses deicer/anti-icers such as Potassium Acetate (liquid), Potassium Formate (liquid), Sodium Formate (granular), or Sodium Acetate (granular). The liquid anti/deicer (potassium acetate) are applied through the use of boom sprayers mounted on truck chassis. The 50-75 feet. sprayers are designed to apply anti/deicer at a rate of .5 gallons per 1,000 square feet up to 2.5 gallons per 1,000 square feet depending on the need and situation. Granular anti/deicer will be applied through the use of truck mounted v-box spreaders. The spreaders will be calibrated and monitored throughout the winter season and depending on the conditions may be altered to apply less or a greater amount of product as needed.

Federal Aviation Administration  
Southern Region Airports Division

APPROVED

Jun 03 2021

NBL

Airport Certification Safety Inspector

#### 4.5 SAND

Sand is utilized at CVG and is purchased/stockpiled prior to and during the snow removal season. Currently, CVG stockpiles approximately 1,000 tons outside and 1,500 tons in a covered heated building. The heated building is to ensure the sand is warm and is easily useable during the winter season. The in-door building will be re-stocked as needed throughout the winter season to maintain maximum amount of useable sand. Sand will be applied to all surfaces within the AOA as needed to increase friction. This will include but not be limited to; runways, taxiways, ramps and aprons. The sand will be applied with use of v-box spreaders mounted in the beds of plow trucks or standalone spreader units. It will be up to the discretion of the Vice President of Maintenance and Asset Management and/or the Senior Manager of Field Maintenance or designee as to where and what amounts of sand will be used. At the conclusion of the snow event, it will be a priority that all sand be removed from runways, taxiways, ramps and apron to ensure damage will not occur to aircraft.

All sand utilized at CVG is evaluated against the FAA gradation standards (Table 4-2, 4-3). Upon review, management recommends to the Kenton County Airport Board the vendor that best meets the gradation standards for their approval. The selected vendor is required to provide proper documentation verifying that information before purchase.

**Table 4-2. Standard Gradation for Sand**

Sieve Designation	Percent by Weight Passing
8	100
80	0-2

**Table 4-3. Expanded Sand Gradation Standard**

Sieve Designation	Percent by Weight Passing
8	100
30	20-50
80	0-2

Federal Aviation Administration  
Southern Region Airports Division

APPROVED

Jun 03 2021

NBL

Airport Certification Safety Inspector

#### 4.6 SURFACE INCIDENT/RUNWAY INCURSION MITIGATION PROCEDURES

All surface incidents that occur at CVG during the year, not just during snow removal operations, are reviewed with all personnel with airfield driving privileges. All snow personnel responsible for snow removal operations are trained with classroom training, interactive computer-based training, and hands on training on an annual basis.

Vehicles will be marked and lighted in accordance with AC 150/2510-5, Painting, Marking and Lighting of Vehicles Used on an Airport.

##### Radio Communication

Radio communications include both company radios and ground control radios. All snow removal equipment is equipped with both company and ground control radios and are checked prior to the snow removal season. FAA ATCT personnel will coordinate which ground control frequency they want to work the snow team with the Field Maintenance Senior Manager. The Senior Manager of Field Maintenance or designee will communicate to the snow team which the ground control frequency to monitor and which company radio talk group to monitor. All personnel are trained on the operation and proper phraseology to use on both radio systems.

The Senior Manager of Field Maintenance or designee is responsible for communicating with the FAA ATCT for current and future snow removal plans.

All snow team members monitor the proper frequencies to assure they are hearing all communications affecting the team. During heavy snow events there may be a need for the Senior Manager of Field Maintenance or designee to have more than one snow removal operation occurring at different areas of the airfield. In this event the Senior Manager of Field Maintenance or designee will direct the lead operator to coordinate with the FAA ATCT and advise which vehicle number will be the point of contact for the other operation.

##### Failed Radio Communication

In the event of radio failure, snow team operators are instructed to contact the Senior Manager of Field Maintenance or designee or their lead operator via the company radio and advise of the situation.

The Senior Manager of Field Maintenance or designee will advise the AOC and a member of the Airport Operations Department will escort that piece of equipment off of the airfield to Fleet Maintenance for repairs by another team member. If both radios fail, all members of the snow team have company issued cell phones and they will call the Senior Manager of Field Maintenance or designee and advise of the situation. In the event the Senior Manager of Field Maintenance or designee has radio failure then the Vice President of Maintenance and Asset Management or the lead operator will take over coordination with the FAA ATCT until the radios can be fixed.

Federal Aviation Administration  
Southern Region Airports Division  
**APPROVED**  
**Jun 03 2021**  
NBL  
Airport Certification Safety Inspector

### Low Visibility and Whiteout Conditions

In the event of very low visibility or whiteout conditions members of the snow team are to indicate their visibility conditions immediately over the company radio and indicate their intentions to stop or substantially slow down operations until conditions improve. The Senior Manager of Field Maintenance or designee will advise the FAA ATCT of the severe weather conditions and what the intentions are for the snow team and ask the controller to increase the intensity of the airfield lighting system to see if that aids in visibility. The airport does have an approved Surface Movement Guidance Control System (SMGCS) plan in place that will be activated as required. When in effect, all snow removal operations will adhere to the procedures contained within the plan.

### Driver Fatigue

All snow removal personnel will be closely monitored for fatigue. Personnel are allowed sufficient rest to ensure they remain safe while operating on the AOA. During rest periods, qualified off shift personnel will be notified and will serve as replacements until the Vice President of Maintenance and Asset Management or designee and/or Senior Manager of Field Maintenance or designee feels a necessary amount of rest has been granted for the primary personnel. At that time, the primary shift personnel will assume their role during the snow removal process and off shift personnel will be granted sufficient rest. This procedure will continue until the snow removal process is complete.

### Equipment Maintenance Procedures

There are no time limits on equipment over all shifts. Vehicles are maintained and are in good working condition during all snow events and throughout the winter season. If a problem arises with a piece of equipment, all necessary measures will be taken to ensure the vehicle is repaired and back in service. If the vehicle cannot be repaired in-house an outside contractor will be notified and directed to repair the vehicle as soon as possible.

Federal Aviation Administration  
Southern Region Airports Division  
**APPROVED**  
**Jun 03 2021**  
NBL  
Airport Certification Safety Inspector

## 5.0 SURFACE ASSESSMENT AND REPORTING

### 5.1 GENERAL

Airfield Maintenance and Airport Operations Departments will monitor all paved surface conditions in order to plan and carry out appropriate maintenance actions in accordance with the Snow and Ice Control Plan. The airport strives to maintain a 'no worse than wet' surface condition.

In compliance with Part 139.339, the airport will utilize the Digital NOTAM system to transmit the field condition to all airport users and the FAA ATCT through email or fax. A NOTAM will be initiated at the onset of a winter weather event when there are reportable accumulations of snow depending on current and forecast weather conditions, or any depth of ice.

The NOTAM will contain pertinent information that includes:

- (a) Contaminant type and depth.
- (b) The portion of a runway, taxiway, or apron surface that has been cleared.
- (c) Type of snow removal being conducted (ex. swept full length and width).
- (d) Type of deicing/anti-icing chemicals applied and the portion(s) of the surface it is applied.
- (e) If sand has been applied and to what portion of the surface it is applied.
- (f) If blowing snow conditions are occurring.

The NOTAM will be updated:

- (a) During changing weather conditions.
- (b) Any time a change in runway/taxiway/terminal ramp conditions are reported.
- (c) After reopening a runway after snow removal operations.
- (d) After the weather event subsides and field conditions are returned to normal.

Field condition reports are initiated a minimum of 30 minutes after the field conditions are such that notification to users is warranted as required by the FAA.

Federal Aviation Administration  
Southern Region Airports Division  
**APPROVED**  
**Jun 03 2021**  
NBL  
Airport Certification Safety Inspector



## 5.2 CONDUCTING SURFACE ASSESSMENTS

Personnel responsible for implementing the SICP will carefully monitor changing airfield conditions as necessary based upon forecasted and current weather conditions, and precipitation type/rate. Surface assessments will be conducted by utilizing some or all of the following methods: visual inspections for type and depth of contaminant, CFME testing and vehicular braking action.

The FAA ATCT will also provide pilot reports of deteriorating braking action (BA) reports on the runways and taxiways. Runway pavement surface temperatures are monitored with in-pavement sensors.

Federal Aviation Administration  
Southern Region Airports Division

APPROVED

Jun 03 2021

NBL

Airport Certification Safety Inspector

### 5.3 APPLYING THE RUNWAY CONDITION ASSESSMENT MATRIX (RCAM)

#### Determining Runway Conditions

When identifiable containments are present on a runway surface, the Runway Condition Assessment Matrix (RCAM) system will be utilized. (Appendix #7)

##### (a) Runway Condition Code (RwyCC) Applicability

- (1) If 25 percent or less of the overall runway length and width or cleared width is covered with contaminants, RwyCCs will not be applied, or reported. The contaminant percentage, type and depth will be reported for each third of the runway and will include any treatments or improvements.
- (2) If the overall runway length and width coverage or cleared width is greater than 25 percent, RwyCCs will be assigned, and reported, informing airplane operators of the contaminant present, and associated codes for each third of the runway. The RwyCCs will serve as a trigger for all airplane operators to conduct a take-off and/or landing performance assessment.

##### (b) Apply Assessment Criteria

- (1) Based on the contaminants observed, the associated RwyCC from the RCAM for each third of the runway will be assigned.

##### (c) Validating Runway Condition Codes

- (1) If the observations by the airport operator determine that RwyCCs assigned accurately reflect the runway conditions and performance, no further action is necessary, and the RwyCCs generated may be disseminated.

##### (d) Downgrade Assessment Criteria

- (1) When observations indicate a more slippery condition than generated by the RCAM, the airport may downgrade the RwyCC(s). When applicable, the downgrade of RwyCCs may be based on friction ( $\mu$ ) readings, vehicle control or pilot reported braking action or temperature.

NOTE: Temperatures near and above freezing (e.g., at 26.6° F (-3° C) and warmer) may cause contaminants to behave more slippery than indicated by the runway condition code given in the RCAM and can downgrade the RwyCC if appropriate.

##### (e) Upgrade Assessment Criteria Based on Friction Assessments.

RwyCCs of 0 or 1 may only be upgraded when the following requirements are met.

- (1) All observations, judgment, and vehicle braking action support the higher RwyCC, and
- (2) Mu values of 40 or greater are obtained for the affected third(s) of the runway by a calibrated friction measuring device that is operated within allowable parameters.
- (3) This ability to raise the reported RwyCC to no higher than a code 3 can only be applied to those runway conditions listed under code 0 and 1 in the RCAM.
- (4) The airport must continually monitor the runway surface as long as the higher code is in effect to ensure that the runway surface condition does not deteriorate below the assigned code.

Federal Aviation Administration  
Southern Region Airports Division

APPROVED

Jun 03 2021

NBL

Airport Certification Safety Inspector

- (5) The extent of monitoring must consider all variables that may affect the runway surface condition, including any precipitation conditions, changing temperatures, effects of wind, frequency of runway use, and type of aircraft using the runway.
- (6) If sand or other approved runway treatments are used to satisfy the requirements for issuing the higher runway condition code, the monitoring program must confirm continued effectiveness of the treatment.

Federal Aviation Administration  
Southern Region Airports Division

APPROVED

Jun 03 2021

NBL

Airport Certification Safety Inspector

## 5.4 RUNWAY FRICTION SURVEYS AND EQUIPMENT

The airport operates an “Airport Surface Friction Monitor” continuous friction measuring vehicle.

### Conditions Acceptable to Use Decelerometers or Continuous Friction Measuring Equipment to Conduct Runway Friction Surveys on Frozen Contaminated Surfaces

- (a) The data obtained from such runway friction surveys are only considered to be reliable when the surface is contaminated under any of the following conditions.
  - (1) Ice or wet ice.
  - (2) Compacted snow at any depth.
  - (3) Dry snow 1 inch or less.
  - (4) Wet snow or slush 1/8 inch or less.

### When to Conduct

- (a) Friction assessments should be conducted if any of the following occurs:
  - (1) When the central portion of the runway, centered longitudinally along the runway centerline, is contaminated 500 feet or more.
  - (2) After any type of snow removal operations or chemical application (including sanding).
  - (3) Immediately following any aircraft incident or accident on the runway.

### How to Conduct

- (a) A friction test is initiated after snow removal operations and is coordinated by the Senior Manager of Field Maintenance. The vehicle is operated at a continuous speed recommended by the manufacturer and approximately 10 or 20 feet either side of the runway centerline. The friction test is conducted in the same direction as aircraft operations and is conducted in one pass. Friction readings are recorded and provided in three zones: touchdown, midpoint, and rollout.

### Calibration

The friction equipment is self-calibrated prior to each use and is inspected and calibrated annually by the manufacturer. A NOTAM will be issued whenever the airport’s surface friction vehicle is out-of-service and will remain valid until the vehicle has returned to service.

Federal Aviation Administration  
Southern Region Airports Division  
APPROVED  
Jun 03 2021  
NBL  
Airport Certification Safety Inspector

## 5.5 TAXIWAYS, APRONS, AND HOLDING BAY ASSESSMENTS

Assessments to these surfaces will occur when contaminants are present on the surface. Assessments will occur anytime the pavement is worse than wet. Surfaces will be monitored on a regular or continual basis.

Federal Aviation Administration  
Southern Region Airports Division

APPROVED

Jun 03 2021

NBL

Airport Certification Safety Inspector

## 5.6 SURFACE CONDITION REPORTING

Personnel responsible for implementing the SICP will carefully monitor changing airfield conditions and disseminate information about those conditions via the Federal NOTAM System (FNS) in a timely manner to airport users.

- (a) Runway: Runway condition reports will occur when contaminants are present on a runway surface via the Federal NOTAM System (FNS). Condition Reports and RwyCCs will be updated as necessary whenever conditions change, such as a contaminant type, depth, percentage or treatment/width change.
- (b) Taxiway, Apron or Holding Bay: Taxiway, Apron or holding bay condition reports will occur when contaminants are present on these surfaces via the Federal NOTAM System (FNS). NOTAMs will be updated as necessary whenever conditions change, such as a contaminant type, depth, percentage or treatment/width change.

Pavement surfaces will also be monitored and re-evaluated when there is rapidly changing precipitation conditions or temperatures, and effects of changing wind speeds or direction.

Assessments to these surfaces will occur when contaminants are present, and whenever a contaminant is present on the surface. Assessments will occur anytime the pavement is worse than wet. Surfaces will be monitored on a regular, continual basis. Any change in runway condition will be reported as a FICON NOTAM through the process previously identified and by Airport Operations.

The term 'DRY' is used to describe a surface that is neither wet nor contaminated. While a FICON NOTAM is not generated for the sole purpose of reporting a dry runway, a dry surface will be reported when there is need to report conditions on the remainder of the surface (for example: snow is present on the first two thirds of the runway). Surface conditions that warrant the revision of an existing FICON NOTAM could be induced by any of the following criteria:

- (a) Upon the increase of accumulations on pavement surfaces.
- (b) Plowing/brooming/deicing/sanding.
- (c) Rapidly rising or falling temperatures.
- (d) Rapidly changing conditions.
- (e) Presence of snowbanks, windrows or snow piles.

Federal Aviation Administration  
Southern Region Airports Division

APPROVED

Jun 03 2021

NBL

Airport Certification Safety Inspector

## 5.7 REPORTABLE CONTAMINANTS WITHOUT PERFORMANCE DATA

If present, unable to be removed and posing no hazard, mud will be reported with a measured depth. Ash, oil, sand, and rubber contaminants will be reported without a measured depth. These contaminants will not generate a RwyCC.

Federal Aviation Administration  
Southern Region Airports Division  
**APPROVED**  
**Jun 03 2021**  
NBL  
Airport Certification Safety Inspector

## 5.8 SLIPPERY WHEN WET RUNWAY

For runways where a friction survey (for the purposes of pavement maintenance) indicates the averaged Mu value at 40 mph on the wet pavement surface failed to meet the minimum friction level classification specified in AC 150/5320-12, the airport will report via the NOTAM system a RwyCC of '3' for the entire runway (by thirds: 3/3/3) when the runway is wet.

A runway condition description of 'Slippery When Wet' will be used for this condition.

If it is determined by the airport that a downgrade is necessary, the downgrade will be made to all three runway thirds match (i.e. 3/3/3, 2/2/2, 1/1/1).

The NOTAM will be cancelled when the minimum runway friction level classification has been met or exceeded.

Federal Aviation Administration  
Southern Region Airports Division

APPROVED

Jun 03 2021

NBL

Airport Certification Safety Inspector



## 5.9 REQUIREMENTS FOR CLOSURES

CVG has several triggers that constitute a runway closure. During snow removal operations, surface condition monitoring is performed by Field Maintenance and Airport Operations representatives that may determine a runway exhibits characteristics that require it to be closed due to accumulation of ice, snow, excess slush, or blowing/drifted snow. Under this situation, the FAA ATCT, the Vice President of Maintenance and Asset Management or designee, and Senior Manager of Field Maintenance or designee will be notified via telephone, company radio, or cell phone to coordinate the runway closure, issue a NOTAM, and initiate appropriate snow removal procedures.

Runways receiving a "NIL" braking action report or a RwyCC of "0" (either pilot reported or by airport assessment) are unsafe for aircraft operations and will be closed immediately per the Braking Action Report Letter of Agreement.

When previous PIREPs have indicated GOOD or MEDIUM braking action, two consecutive POOR PIREPS should be taken as evidence that surface conditions may be deteriorating. If the airport operator has not already instituted its continuous monitoring procedures, an assessment should occur before the next operation. If the airport operator is already continuously monitoring runway conditions, this assessment should occur as soon as air traffic volume allows.

The airport will maintain available airport surfaces in a safe operating condition at all times and provide prompt notifications when areas normally available are less than satisfactorily cleared for safe operations. If a surface (runway, taxiway, apron, lane or holding bay) becomes unsafe due to a NIL (by braking action or assessment) or otherwise unsafe hazard or condition, the surface will be closed until the condition no longer exists and is safe.

Federal Aviation Administration  
Southern Region Airports Division

APPROVED

Jun 03 2021

NBL

Airport Certification Safety Inspector

## 5.10 CONTINUES MONITORING AND DETERIORATING CONDITIONS

CVG will continuously monitor runway conditions throughout a snow event. The continuous monitoring includes pilot reports, surface checks performed by a Field Maintenance representative or Operations representative. Surface conditions that are reported as less than “good” or MU readings less than .40 will trigger continuous monitoring. In all cases the information will be relayed to the Senior Manager of Field Maintenance or designee to determine what snow removal action and extent will occur. This close monitoring will continue until the snow removal process is complete and the threat for adverse conditions ceases.

Under deteriorating conditions, the airport will take all reasonable steps using available equipment and materials that are appropriate for the condition to improve the braking action. If braking action cannot be improved, and the surface is not NIL, the airport will continually monitor the runways, taxiways, aprons and holding bays to ensure braking does not become NIL.

Including but not limited to:

- (a) Frozen or freezing precipitation.
- (b) Falling air or pavement temperatures that may cause a wet runway to freeze.
- (c) Rising air or pavement temperatures that may cause frozen contaminants to melt.
- (d) Removal of abrasives previously applied to the runway due to wind or airplane effects.
- (e) Frozen contaminants blown onto the runway by wind.

Federal Aviation Administration  
Southern Region Airports Division

APPROVED

Jun 03 2021

NBL

Airport Certification Safety Inspector

### 5.11 SURFACE CONDITIONS NOT BEING MONITORED/REPORTED

In the event of moderate to heavy snow or ice, a NOTAM will be issued closing all unmonitored surfaces on the airfield until the areas can be cleared and inspected.

Federal Aviation Administration  
Southern Region Airports Division

APPROVED

Jun 03 2021

NBL

Airport Certification Safety Inspector

**6.0 APPENDIX 1: SNOW & ICE CONTROL PLAN COMMITTEE MEMBERS**

<b>Name</b>	<b>Entity</b>	<b>Phone</b>
Vice President of Maintenance and Asset Management	KCAB	859-767-7777
Vice President of Customer Service	KCAB	859-767-7777
Senior Manager Field Maintenance	KCAB	859-767-7777
Senior Manager Environmental Operations	KCAB	859-767-7777
Director Airport Operations	KCAB	859-767-7777
Senior Manager Airport Operations	KCAB	859-767-7777
Senior Manager Airport Operations Center	KCAB	859-767-7777
FAA ATCT Tower Cab	FAA	859-372-6450
FAA ATCT Radar Room	FAA	859-372-6440
CVG Ramp Tower	Robinson Aviation	859-767-5199
Alaska Airlines	Alaska Airlines	206-948-1585
Air Canada	Trego-Dugan	859-767-5544
Allegiant	Trego-Dugan	859-767-5544
American	Envoy	859-767-3756
Delta Air Lines	Delta Air Lines	859-767-5199
Frontier Airlines	Trego-Dugan	859-767-5544
Southwest Airlines	Southwest Airlines	859-568-6180
United Airlines	Menzies	859-525-5930/5931
Integrated Deicing Solutions	IDS	612-790-8168
DHL	DHL	859-817-8750
FedEx	FedEx	859-767-7200

Federal Aviation Administration  
Southern Region Airports Division

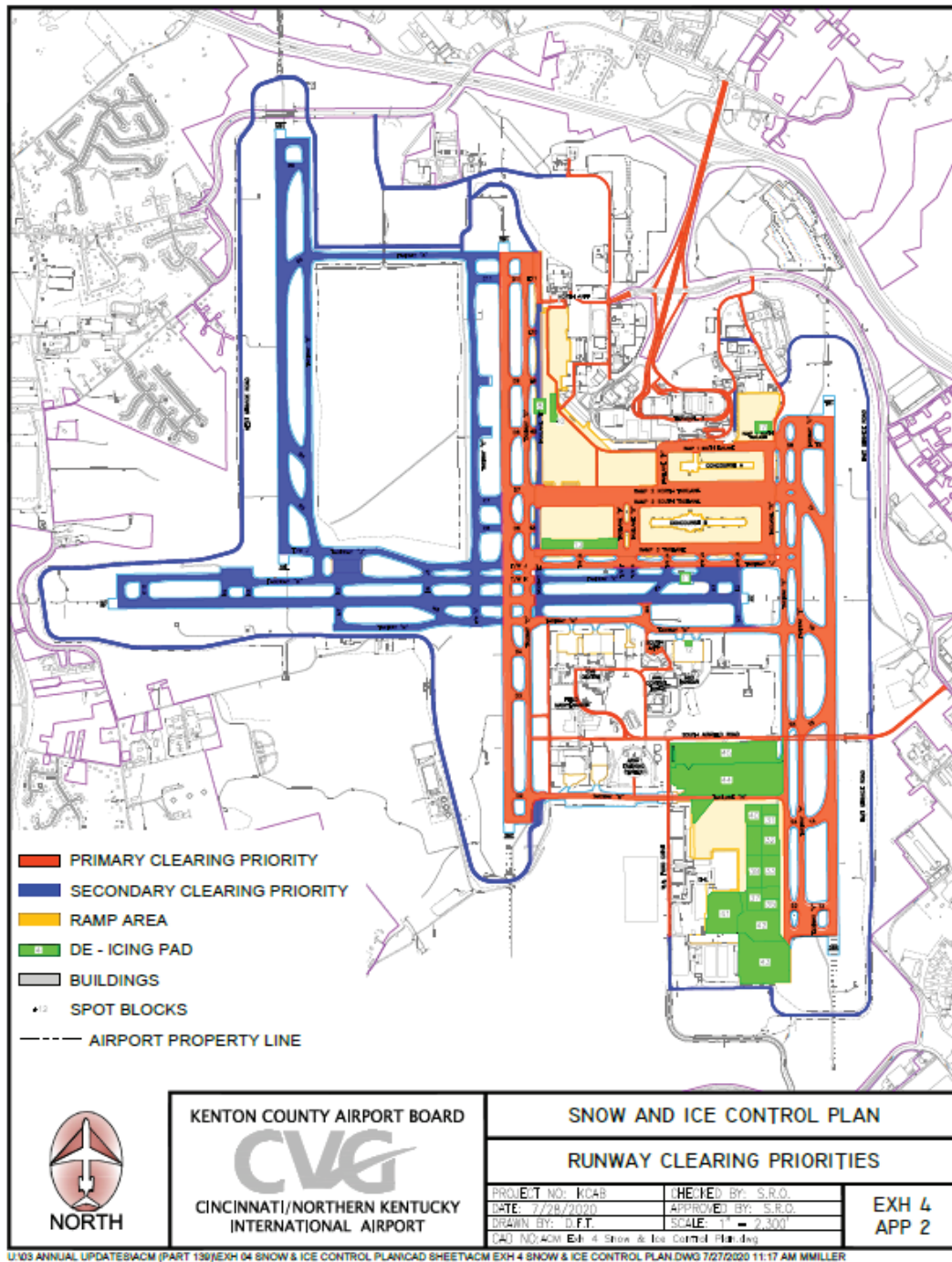
APPROVED

Jun 03 2021

NBL

Airport Certification Safety Inspector

## 7.0 APPENDIX 2: AIRFIELD CLEANING PRIORITIES



Federal Aviation Administration  
 Southern Region Airports Division

APPROVED

Jun 03 2021

NBL

Airport Certification Safety Inspector

## 8.0 APPENDIX 3: SNOW REMOVAL EQUIPMENT

Equipment Number	Description	Asset	Dept Assigned To
	14' STRAIGHT BLADE PLOW	EQPT.SNOWE.00029	AIRFIELD
	14' RAMP PLOW BOX	EQPT.SNOWE.00044	AIRFIELD
402	(402) DODGE 1500 CREW CAB 4 X 4	VEHI.PUTK.00017	AIRFIELD
403	(403) C2500 PICK UP	VEHI.PUTK.653.2008	AIRFIELD
405	(405) F350 CREW C&C 4WD WITH FLATBED AND PLOW	VEHI.PUTK.00009	AIRFIELD
406	(406) PICKUP WITH PLOW	VEHI.PUTK.525.2005	AIRFIELD
409	(409) SILVERADO 2500 PICK UP	VEHI.PUTK.1170.2013	AIRFIELD
415	(415) RUNWAY BROOM W/MB HEAD	EQPT.SNOWE.540.2005	AIRFIELD
416	(416) RUNWAY BROOM W/MB HEAD	EQPT.SNOWE.541.2005	AIRFIELD
417	(417) RUNWAY BROOM W/MB HEAD	EQPT.SNOWE.538.2005	AIRFIELD
418	(418) MULTI FUNCTION UNIT WITH PLOW	EQPT.SNOWE.1146.2011	AIRFIELD
419	(419) F250 4WD CREW CAB	VEHI.PUTK.00008	AIRFIELD
420	(420) F 250 PICKUP WITH PLOW	VEHI.PUTK.1133.2012	AIRFIELD
421	(421) MULTI FUNCTION UNIT WITH PLOW	EQPT.SNOWE.1141.2011	AIRFIELD
422	(422) MULTI FUNCTION UNIT WITH PLOW	EQPT.SNOWE.1145.2012	AIRFIELD
423	(423) MULTI FUNCTION UNIT WITH PLOW	EQPT.SNOWE.1142.2011	AIRFIELD
424	(424) MULTI FUNCTION UNIT WITH PLOW	EQPT.SNOWE.1150.2012	AIRFIELD
425	(425) MULTI FUNCTION UNIT WITH PLOW	EQPT.SNOWE.1132.2011	AIRFIELD
426	(426) MULTI FUNCTION UNIT WITH PLOW	EQPT.SNOWE.1152.2012	AIRFIELD
427	(427) MULTI FUNCTION UNIT WITH PLOW	EQPT.SNOWE.1153.2012	AIRFIELD
428	(428) MULTI FUNCTION UNIT WITH PLOW	EQPT.SNOWE.1147.2012	AIRFIELD
431	(431) SWEEPSTER RUNWAY BROOM	EQPT.SNOWE.546.2005	AIRFIELD
432	(432) SWEEPSTER HI SPEED RUNWAY BROOM W/MB HEAD	EQPT.SNOWE.545.2005	AIRFIELD
433	(433) SWEEPSTER HI-SPEED RUNWAY BROOM W/MB HEAD	EQPT.SNOWE.544.2005	AIRFIELD
434	(434) SWEEPSTER HI-SPEED RUNWAY BROOM W/MB HEAD	EQPT.SNOWE.542.2005	AIRFIELD
435	(435) M2 DUMP TRUCK	VEHI.UTLK.665.2007	AIRFIELD
439	(439) DUMP 108SD W/V-BOX & PLOW	VEHI.SNOWE.1366.2016	AIRFIELD
440	(440) DUMP TRUCK WITH PLOW	VEHI.SNOWE.669.2005	AIRFIELD
441	(441) GMC SIERRA 3500 PICKUP W/PLOW	VEHI.PUTK.1128.2012	AIRFIELD
442	(442) FORD F250 FLATBED	VEHI.PUTK.00024	AIRFIELD
444	(444) DUMP TRUCK WITH PLOW	VEHI.SNOWE.673.2002	AIRFIELD
445	(445) DUMP TRUCK WITH PLOW	VEHI.SNOWE.674.2002	AIRFIELD
446	(446) DUMP TRUCK WITH PLOW	VEHI.SNOWE.675.2002	AIRFIELD
447	(447) DUMP TRUCK WITH PLOW	EQPT.SNOWE.1376.2015	AIRFIELD
448	(448) DUMP TRUCK WITH PLOW	EQPT.SNOWE.1377.2015	AIRFIELD
450	(450) VECTOR GLYCOL RECOVERY VEHICLE	VEHI.SNOWE.681.1998	AIRFIELD
454	(454) F450 PICKUP W/DUMP BODY & PLOW	VEHI.PUTK.1403.2016	AIRFIELD
455	(455) DUMP TRUCK WITH PLOW	VEHI.SNOWE.682.2005	AIRFIELD
456	(456) DUMP TRUCK WITH PLOW	VEHI.SNOWE.683.2005	AIRFIELD
457	(457) DUMP TRUCK WITH SNOWPLOW	VEHI.SNOWE.684.2005	AIRFIELD
458	(458) DUMPTRUCK WITH SNOWPLOW	VEHI.SNOWE.685.2005	AIRFIELD
459	(459) 350 UTILITY TRUCK W/READING BODY	VEHI.UTLK.00005	AIRFIELD
460	(460) DUMP TRUCK W/PLOW & SALT SPREADER	VEHI.SNOWE.00001	AIRFIELD
461	(461) DUMP TRUCK, 7400 SFA 4X2 W/PLOW	VEHI.SNOWE.1138.2012	AIRFIELD
462	(462) DUMP TRUCK 7400 SFA 4X2 W/PLOW	VEHI.SNOWE.1139.2012	AIRFIELD
471	(471) CONDOR DEICING TRUCK W PLOW	VEHI.AFSP.688.2004	AIRFIELD
472	(472) BATTS DEICER - INTERNATIONAL CHASSIS	VEHI.AFSP.689.2005	AIRFIELD
473	(473) BATTS DEICER - INTERNATIONAL CHASSIS	VEHI.AFSP.690.2005	AIRFIELD
487	(487) SNOW BLOWER w/spotcasting & loading chute	EQPT.SNOWE.565.2005	AIRFIELD
488	(488) SNOW BLOWER, W/SPOTCASTING & LDG. CHUTE	EQPT.SNOWE.555.2005	AIRFIELD
489	(489) SNOW BLOWER w/spotcasting & loading chute	EQPT.SNOWE.252.2005	AIRFIELD
490	(490) Snow blower, M-B4	EQPT.SNOWE.1351.2015	AIRFIELD
491	(491) Snow Blower, MB-4	EQPT.SNOWE.1352.2015	AIRFIELD
493	(493) SNOWBLOWER	EQPT.SNOWE.418.2002	AIRFIELD
495	(495) Freightliner 108SD with Tyler Deicer	VEHI.AFSP.1367.2016	AIRFIELD
497	(497) DEICER TRUCK	EQPT.AFSP.422.1998	AIRFIELD
702	(702) F-150 PICK-UP	VEHI.PUTK.1156.2012	AIRFIELD
716	(716) DODGE 1500 CREW CAB 4 X 4	VEHI.PUTK.00019	AIRFIELD
BCB-1	(BCB-1) 72" SWEEPER ATTACHMENT	EQPT.GRDS.1120.2011	AIRFIELD
BH-2	(BH-2) BACKHOE W/HAMMER 590 SM	EQPT.CON.450.2002	AIRFIELD
BH-3	(BH-3) BACKHOE LOADER 310SE	EQPT.CON.439.1999	AIRFIELD
BS-1	(BS-1) Federal Coach Bus	VEHI.BUS.230.1998	AIRFIELD
BS-3	(BS-3) Shuttle Bus Chevrolet Express 4500	VEHI.BUS.00010	AIRFIELD
BS-4 ADA	(BS-4 ADA) Shuttle Bus Chevrolet Express 3500	VEHI.BUS.00021	AIRFIELD
BS-5 ADA	(BS-5 ADA) Shuttle Bus Chevrolet Express 3500	VEHI.BUS.00022	AIRFIELD
EPOKE-1	(EPOKE-1) SALT SPREADER	EQPT.GRDS.882.1998	AIRFIELD
EPOKE-3	(EPOKE-3) SALT SPREADER	EQPT.GRDS.901.1998	AIRFIELD
EPOKE-4	(EPOKE-4) SALT SPREADER	EQPT.GRDS.883.1998	AIRFIELD
GA-4	(GA-4) GATOR XUV 855D WITH WINCH, SNOWPLOW AND SPREADER	EQPT.GRDS.1144.2012	AIRFIELD
GM-8	(GM-8) KUBOTA UTV W/PLOW AND SPREADER	EQPT.SNOWE.00006	AIRFIELD
HMSS-1	(HMSS-1) SALT SPREADER, HITCH MOUNT	EQPT.SNOWE.00045	AIRFIELD
L-1	(L-1) WHEEL LOADER 921C	EQPT.CON.614.2001	AIRFIELD
L-2	(L-2) LOADER - FOUR WHEEL DRIVE Model 966F II	EQPT.CON.300.1993	AIRFIELD
L-4	(L-4) Model 950G-SW loader	EQPT.CON.355.1998	AIRFIELD
L-5	(L-5) 744 H LOADER	EQPT.CON.413.2001	AIRFIELD
L-6	(L-6) 744H LOADER	EQPT.CON.795.2001	AIRFIELD
OPS-8	(OPS-8) (Dynatest 6875 Runway Friction Tester - CFME)	VEHI.AFSP.1047.2011	AIRFIELD
P-1	(P-1) 66" STRAIGHT BLADE PLOW FOR POLARIS	EQPT.SNOWE.00040	AIRFIELD
P-2	(P-2) 66" STRAIGHT BLADE PLOW FOR POLARIS	EQPT.SNOWE.00041	AIRFIELD
P-400	(P-400) 27.5' PLOW FOR VAMMAS MULTI-FUNCTION	EQPT.SNOWE.00017	AIRFIELD
P-405	(P-405) 9' STRAIGHT BLADE SNOW PLOW	EQPT.SNOWE.00023	AIRFIELD
P-418	(P-418) 27.5' PLOW FOR VAMMAS MULTI-FUNCTION	EQPT.SNOWE.00008	AIRFIELD
P-420	(P-420) 8' STRAIGHT BLADE PLOW	EQPT.SNOWE.00018	AIRFIELD
P-421	(P-421) 27.5' PLOW FOR VAMMAS MULTI-FUNCTION	EQPT.SNOWE.00016	AIRFIELD
P-422	(P-422) 27.5' PLOW FOR VAMMAS MULTI-FUNCTION	EQPT.SNOWE.00015	AIRFIELD

Federal Aviation Administration  
Southern Region Airports Division

APPROVED

Jun 03 2021

NBL

Airport Certification Safety Inspector

P-423	(P-423) 27.5' PLOW FOR VAMMAS MULTI-FUNCTION	EQPT.SNOWE.000010	AIRFIELD
P-424	(P-424) 27.5' PLOW FOR VAMMAS MULTI-FUNCTION	EQPT.SNOWE.00009	AIRFIELD
P-425	(P-425) 27.5' PLOW FOR VAMMAS MULTI-FUNCTION	EQPT.SNOWE.00014	AIRFIELD
P-426	(P-426) 27.5' PLOW FOR VAMMAS MULTI-FUNCTION	EQPT.SNOWE.00012	AIRFIELD
P-427	(P-427) 27.5' PLOW FOR VAMMAS MULTI-FUNCTION	EQPT.SNOWE.00013	AIRFIELD
P-428	(P-428) 27.5' PLOW FOR VAMMAS MULTI-FUNCTION	EQPT.SNOWE.00011	AIRFIELD
P-435	(P-435) 12' STRAIGHT BLADE SNOW PLOW	EQPT.SNOWE.00039	AIRFIELD
P-440	(P-440) 22' STRAIGHT BLADE SNOW PLOW	EQPT.SNOWE.00030	AIRFIELD
P-441	(P-441) 9' STRAIGHT BLADE SNOW PLOW	EQPT.SNOWE.00024	AIRFIELD
P-442	(P-442) 8' STRAIGHT BLADE PLOW	EQPT.SNOWE.00019	AIRFIELD
P-444	(P-444) 22' STRAIGHT BLADE SNOW PLOW	EQPT.SNOWE.00031	AIRFIELD
P-445	(P-445) 22' STRAIGHT BLADE SNOW PLOW	EQPT.SNOWE.00032	AIRFIELD
P-446-1	(P-446-1) 14' STRAIGHT BLADE (STEEL) SNOW PLOW	EQPT.SNOWE.00033	AIRFIELD
P-446-2	(P-446-2) 14' STRAIGHT BLADE (RUBBER) SNOW PLOW	EQPT.SNOWE.00034	AIRFIELD
P-447	(P-447) 22' STRAIGHT BLADE SNOW PLOW	EQPT.SNOWE.00020	AIRFIELD
P-448	(P-448) 22' STRAIGHT BLADE SNOW PLOW	EQPT.SNOWE.00021	AIRFIELD
P-454	(P-454) 9' STRAIGHT BLADE SNOW PLOW	EQPT.SNOWE.00025	AIRFIELD
P-455	(P-455) 18' STRAIGHT BLADE SNOW PLOW	EQPT.SNOWE.00035	AIRFIELD
P-456	(P-456) 18' STRAIGHT BLADE SNOW PLOW	EQPT.SNOWE.00036	AIRFIELD
P-457	(P-457) 18' STRAIGHT BLADE SNOW PLOW	EQPT.SNOWE.00037	AIRFIELD
P-458	(P-458) 18' STRAIGHT BLADE SNOW PLOW	EQPT.SNOWE.00038	AIRFIELD
P-460	(P-460) 10' STRAIGHT BLADE SNOW PLOW	EQPT.SNOWE.00026	AIRFIELD
P-461	(P-461) 10' STRAIGHT BLADE SNOW PLOW	EQPT.SNOWE.00027	AIRFIELD
P-462	(P-462) 10' STRAIGHT BLADE SNOW PLOW	EQPT.SNOWE.00028	AIRFIELD
P-471	(P-471) 10' STRAIGHT BLADE SNOW PLOW	EQPT.SNOWE.00022	AIRFIELD
PD-APD-1	(PD-APD-1) Ranger 570	EQPT.GRDS.1401.2016	AIRFIELD
PD-APD-2	(PD-APD-2) Ranger 570	EQPT.GRDS.1402.2016	AIRFIELD
P-GA-4	(P-GA-4) 72" PLOW FOR JOHN DEERE GATOR	EQPT.SNOWE.00046	AIRFIELD
RL-1	(RL-1) 2020-2021 SNOW RENTAL - WHEEL LOADER	EQPT.GRDS.00075	AIRFIELD
RL-2	(RL-2) 2020-2021 SNOW RENTAL EQUIPMENT- 1121	EQPT.GRDS.00076	AIRFIELD
RL-3	(RL-3) 2020-2021 SNOW RENTAL EQUIPMENT- 721	EQPT.GRDS.00077	AIRFIELD
RL-4	(RL-4) 2020-2021 SNOW RENTAL EQUIPMENT- 121	EQPT.GRDS.00078	AIRFIELD
RL-5	(RL-5) 2020-2021 SNOW RENTAL EQUIPMENT- SS	EQPT.GRDS.00079	AIRFIELD
RL-6	(RL-6) 2020-2021 SNOW RENTAL EQUIPMENT- SS	EQPT.GRDS.00080	AIRFIELD
RL-7	(RL-7) 2020-2021 SNOW RENTAL EQUIPMENT- SS	EQPT.GRDS.00081	AIRFIELD
RL-8	(RL-8) WILLIE 865 MTE LOADER	EQPT.GRDS.00084	AIRFIELD
RP-1	(RP-1) 24 FT RAMP PLOW	EQPT.SNOWE.828.2001	AIRFIELD
RP-10	(RP-10) SECTIONAL SNOW PLOW MODEL	EQPT.SNOWE.1258	AIRFIELD
RP-11	(RP-11) 24 FT RAMP PLOW	EQPT.SNOWE.830	AIRFIELD
RP-12	(RP-12) 24 FT RAMP PLOW	EQPT.SNOWE.831.1999	AIRFIELD
RP-13	(RP-13) 24 FT RAMP PLOW	EQPT.SNOWE.832.2001	AIRFIELD
RP-14	(RP-14) SECTIONAL SNOW PLOW MODEL 26HD MODEL	EQPT.SNOWE.1259	AIRFIELD
RP-15	(RP-15) 14 FT PLOW	EQPT.SNOWE.00007	AIRFIELD
RP-2	(RP-2) 24 FT RAMP PLOW	EQPT.SNOWE.833	AIRFIELD
RP-4	(RP-4) 27.5 FT PLOW	EQPT.GRDS.1374.2016	AIRFIELD
RP-5	(RP-5) 24 FT RAMP PLOW	EQPT.SNOWE.835.2001	AIRFIELD
RP-6	(RP-6) 24 FT RAMP PLOW	EQPT.SNOWE.836.2001	AIRFIELD
RP-7	(RP-7) 32 FT RAMP PLOW	EQPT.SNOWE.837	AIRFIELD
RP-8	(RP-8) 24 FT RAMP PLOW	EQPT.SNOWE.838.1999	AIRFIELD
RP-9	(RP-9) 24 FT RAMP PLOW	EQPT.SNOWE.839	AIRFIELD
RSB-1	(RSB-1) COMFORTCAB SIDEWALK SNOW BROOM	EQPT.SNOWE.00004	AIRFIELD
RSB-2	(RSB-2) COMFORTCAB SIDEWALK SNOW BROOM	EQPT.SNOWE.00005	AIRFIELD
RWLP	(RWLP) RUNWAY LIGHT SNOW CLEARING PLOW#203327	EQPT.SNOWE.1151.2012	AIRFIELD
SB-10	(SB-10) SNOWBLOWER HS520A MODEL	EQPT.HSKP.1204	AIRFIELD
SB-11	(SB-11) SNOW BLOWER FOR BOBCAT	EQPT.SNOWE.948.2005	AIRFIELD
SB-12	(SB-12) SNOW BLOWER, WALK BEHIND, 18"	EQPT.SNOWE.00042	AIRFIELD
SB-2	(SB-2) Walk behind snow blower - HS720ASA	EQPT.SNOWE.1363.2015	AIRFIELD
SB-3	(SB-3) Walk behind snow blower-HS720ASA	EQPT.SNOWE.1362.2015	AIRFIELD
SB-4	(SB-4) Portable Snow Blower ST924	EQPT.SNOWE.1399.2010	AIRFIELD
SB-5	(SB-5) 22" Snow Blower (0011507762902201770)	EQPT.SNOWE.1406.2015	AIRFIELD
SB-6	(SB-6) 22" Snow Blower (0011507765902201525)	EQPT.SNOWE.1407.2015	AIRFIELD
SB-7	(SB-7) WALK BEHIND ALL SEASON POWER BROOM #1	EQPT.SNOWE.00001	AIRFIELD
SB-8	(SB-8) WALK BEHIND ALL SEASON POWER BROOM #2	EQPT.SNOWE.00002	AIRFIELD
SB-9	(SB-9) WALK BEHIND ALL SEASON POWER BROOM #3	EQPT.SNOWE.00003	AIRFIELD
SISS-1	(SISS-1) SALT DOGG SALT SPREADER	EQPT.SNOWE.00043	AIRFIELD
SISU-1	(SISU-1) 550 GALLON TANK/SPRAYER - HOMEMADE	EQPT.GRDS.00072	AIRFIELD
SISU-2	(SISU-2) 1800 GALLON TANK/SPRAYER	EQPT.GRDS.00073	AIRFIELD
SP-1	(SP-1) SNOW PUSHER	EQPT.SNOWE.952.2005	AIRFIELD
SP-2	(SP-2) SNOW PUSHER	EQPT.SNOWE.972.2005	AIRFIELD
SP-3	(SP-3) 10.5 FT PLOW	EQPT.GRDS.1375.2016	AIRFIELD
SS-1	(SS-1) SALT SPREADER FOR TRUCK 460	EQPT.GRDS.887	AIRFIELD
SSA-9	(SSA-9) SILT FENCE PLOW	EQPT.SNOWE.1247	AIRFIELD
SSL-1	(SSL-1) SKID STEER LOADER S160	EQPT.CON.499.2005	AIRFIELD
SSL-2	(SSL-2) SKID STEER LOADER S220	EQPT.CON.617.2005	AIRFIELD
SSL-3	(SSL-3) COMPACT TRACK LOADER, SER.# NDM463133, PRODUCT # JAFTR320LDM463133	EQPT.CON.1305.2014	AIRFIELD
SSL-4	(SSL-4) CASE RUBBER TRACK LOADER MODEL TR340	EQPT.CON.00002	AIRFIELD
SSL-5	(SSL-5) SKID STEER LOADER S220	EQPT.CON.500.2004	AIRFIELD
TR-6	(TR-6) MF7716S TRACTOR	EQPT.TRTR.00004	AIRFIELD
TR-7	(TR-7) MF7716S TRACTOR W/3 POINT HITCH	EQPT.TRTR.00005	AIRFIELD

Federal Aviation Administration  
Southern Region Airports Division

APPROVED

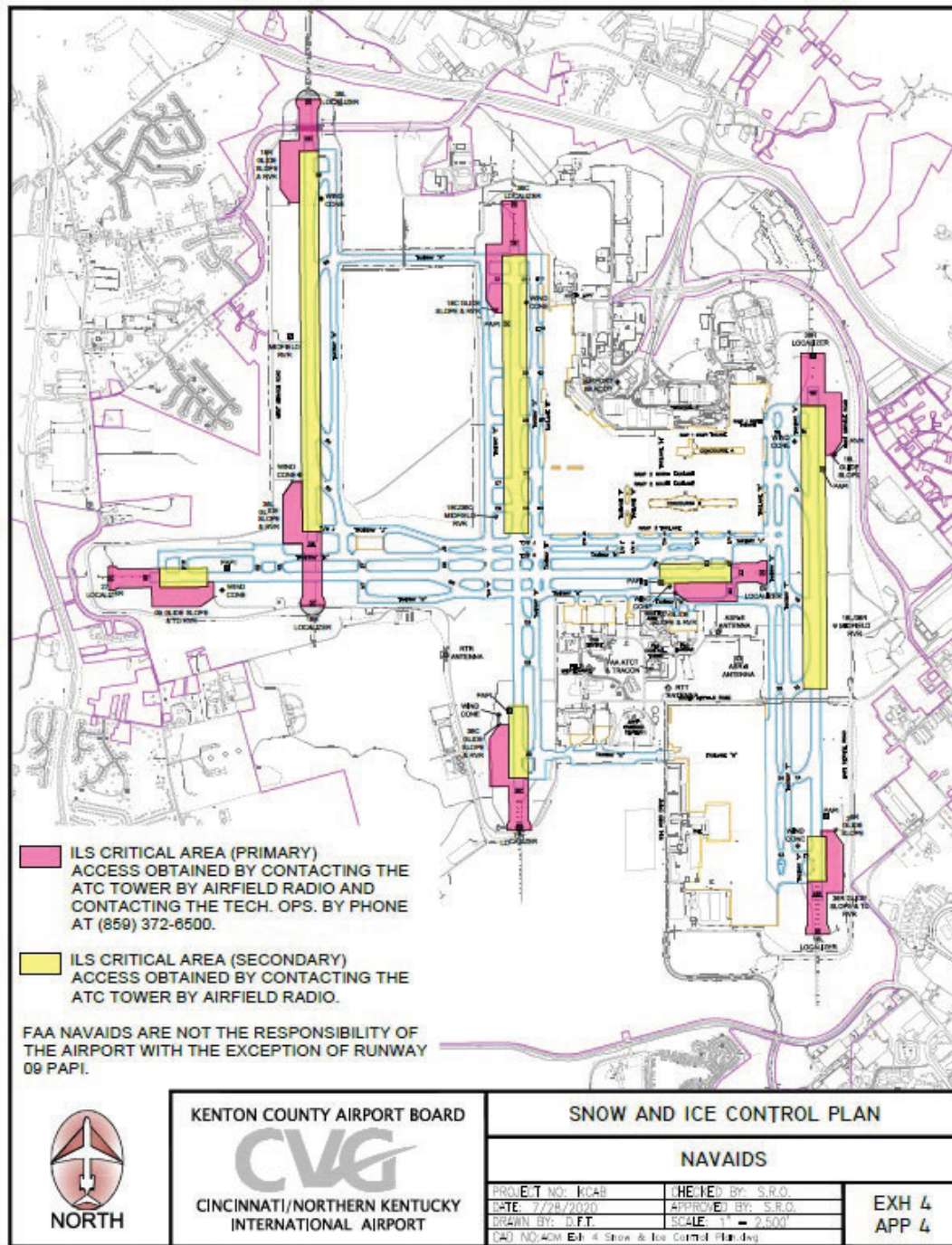
Jun 03 2021

NBL

Airport Certification Safety Inspector



## 9.0 APPENDIX 4: NAVIGATIONAL AID CRITICAL AREAS



Federal Aviation Administration  
Southern Region Airports Division

APPROVED

Jun 03 2021

NBL

Airport Certification Safety Inspector



## 10.0 APPENDIX 5: AIRCRAFT DEICING PLAN

### 10.1 PAD 13

#### Overview

Common use Deice Pad (approximately October through April).

- (a) Supports centralized operation of:
  - (1) Ramp snow removal personnel and equipment.
  - (2) Deice personnel and equipment.
  - (3) Containment of spent deice fluid and reclamation processes.
- (b) Seven (7) alphabetic line designators, Lines A through G oriented north-to-south. Deicing assignments are determined annually, prior to deicing season.
- (c) 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.
- (d) All Lines support Group III aircraft; design based on A321-Neo and B737-800
- (e) Lines A and G support Group IV aircraft (e.g. 767).
  - (1) 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).
  - (2) 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.

- (f) 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.
  - (1) This is critical to allow for arriving aircraft flow from Runway 18C/36C to the concourses.
  - (2) CVG 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.
- (g) 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.
  - (1) 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

Federal Aviation Administration  
Southern Region Airports Division

APPROVED

Sep 30 2021

LH  
Inspector

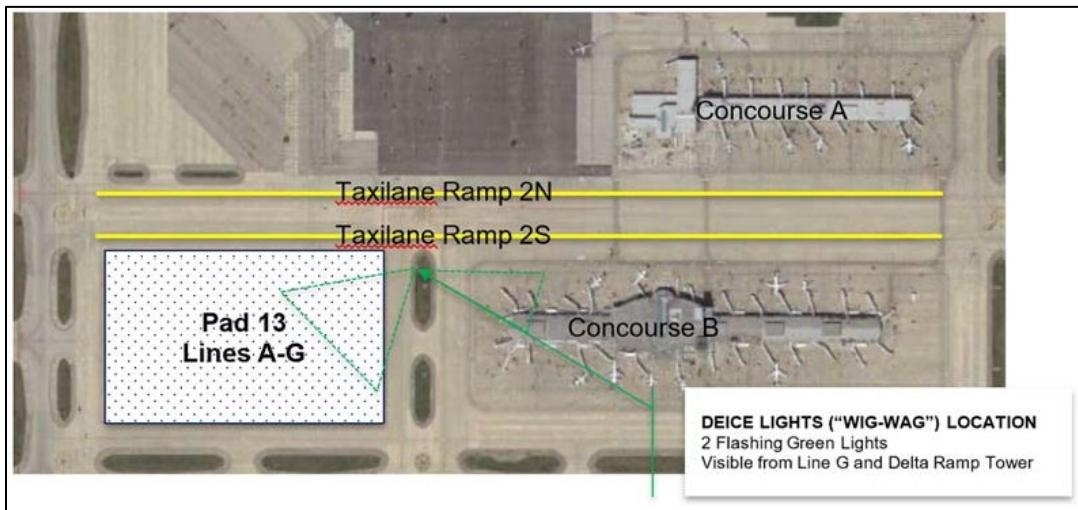
optioned, coordination must occur with KCAB in support of any area treatment or expedited snow removal.

**Remote Aircraft Parking (approximately May through September)**

In brief, 14 additional remote parking positions oriented diagonally.

- (a) Six (6) edge positions supporting Group IV (e.g. B767-4).
- (b) Eight (8) central positions supporting Group III (e.g. A321-Neo, B737-800).
- (c) Remote aircraft parking will not be performed on Pad 13 during deicing season.

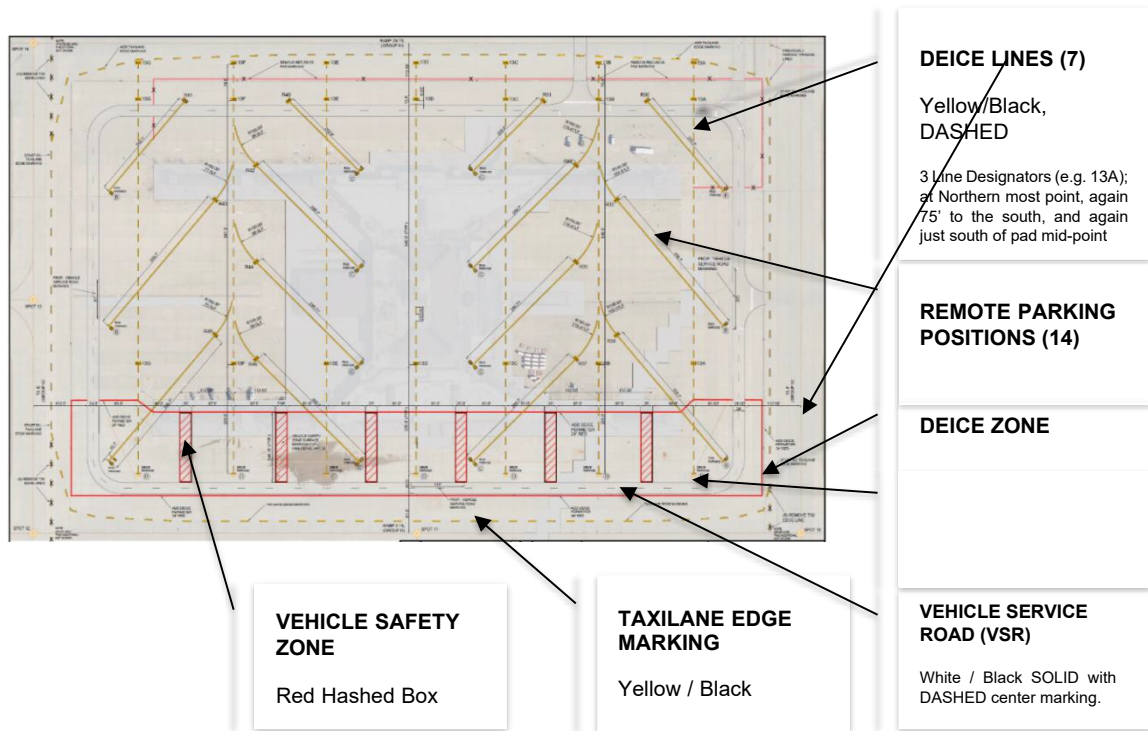
Location:



Federal Aviation Administration  
Southern Region Airports Division

APPROVED  
**Sep 30 2021**

LH  
Inspector



Deicing (also applies during training events)

#### Gate Departure

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.

#### (a) Airline or Contract Ops/Ramp Personnel

##### (1) Prior to pushback.

- i. Relay numeric pad and alphabetic line assignment (Pad 13 only) to flight crew.
- ii. 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"

##### (2) 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.

- i. KCAB has asked CVG Ramp Tower to provide feedback if effective metering is not used resulting in taxilane congestion while waiting for the assigned pad.
- ii. 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

Federal Aviation Administration  
Southern Region Airports Division

**APPROVED**  
**Sep 30 2021**

LH  
Inspector

beyond three hours (domestic) or four hours (international) or greater. KCAB's plan may be found in detail at CVGAirport.com.

(b) Flight Crew

- (1) Receives numeric pad and alphabetic line assignment (Pad 13 only).
- (2) Communicates numeric pad and alphabetic line assignment (Pad 13 only) to CVG Ramp Tower.
- (3) Receives taxi clearance from CVG Ramp Tower.
- (4) Communicates to ramp to commence pushback.
- (5) Taxies to deice pad via CVG Ramp Tower instructions.
- (6) Remain on CVG Ramp Tower frequency 130.9 at all times until departing the Pad.
- (7) This supports
  - i. Radioing emergency conditions (e.g. smoke in the cabin)
  - ii. Listening for "Pad 13 Emergency All-Stop", if issued by CVG Ramp Tower to cease all movement on the pad for emergent safety conditions.
- (8) Identifies alphabetic line by
  - i. Visually identifying company/contracted deice vehicle acting as a "Follow-Me" guide that will be positioned on line assignment
  - ii. To be used by the first aircraft into the pad.
  - iii. 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 Control Systems (SMGCS) plan that may be in place during extreme low visibility conditions.
  - iv. Visually identifying preceding company aircraft tail and/or other operator(s) assigned to the same contracted deice vendor.
- (9) 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.
  - iv. 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.
- (10) Follow routine company deicing procedures.
- (11) Contact CVG 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.
- (12) Each deice line designation has an FAA intersection "Spot" assignment. They are (see depiction below)
  - i. 13A & B – Ramp 3, Spot 10

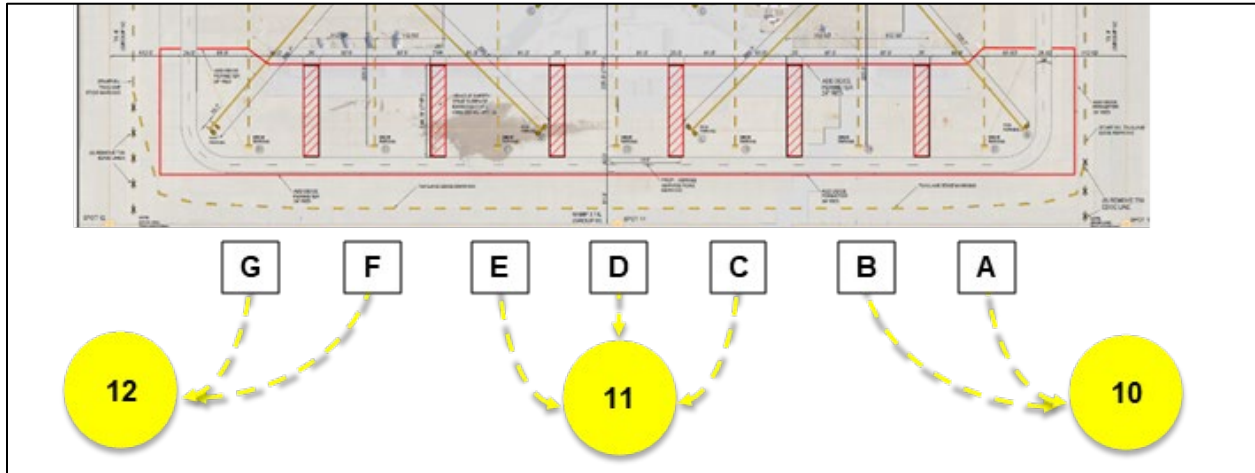
Federal Aviation Administration  
Southern Region Airports Division

APPROVED

Sep 30 2021

LH  
Inspector

- ii. 13C, D, E – Ramp 3, Spot 11
- iii. 13F & G – Ramp 3, Spot 12
- (13) 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”).



#### Deice Team

- (1) Confirms deice pad is open and operational.
  - i. Pad indicator lights (“wig-wag”) must be flashing green.
  - ii. Notify the Airport Operations Center (859-767-7777) 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.
- (2) Confirm for Ramp/Ops Personnel that you are ready to accept aircraft.
- (3) Always monitor two radio frequencies.
  - i. Company frequency for direct communication with the flight crew.
  - ii. CVG Ramp Tower frequency 130.9 to maintain listen-and-avoid situational awareness for taxi instructions for all aircraft departing the pad.
- (4) Situational awareness for aircraft departing the pad is critical to everyone’s safety in consideration for:
  - i. Aircraft cleared to cross the vehicle service road.
  - ii. Jet blast hazards
  - iii. 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).
- (5) Using the deice vehicle, act as a “Follow-Me” guide for company aircraft.

Federal Aviation Administration  
Southern Region Airports Division

APPROVED  
**Sep 30 2021**

LH  
Inspector



- 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.
  - iii. Use the "Follow-Me" steps for the first aircraft into the pad.
  - iv. 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 Control Systems (SMGCS) plan that may be in place during extreme low visibility conditions.
  - v. 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.
- (6) 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 Taxiway Ramp 2S. The deice operator is responsible for ensuring this standard is maintained or advising last aircraft crew by radio accordingly.
- (7) Upon completion of deicing the aircraft, radio the pilot to contact CVG Ramp Tower for further taxi direction to the assigned intersection assignment and hand-off to FAA ATCT.
- i. Monitoring the CVG 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.
- (8) Upon completion of deicing services, the designated person will update KCAB's SurveyMonkey data capture tool. The site will be distributed to applicable parties at the beginning of each snow season.

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

- (9) Deice personnel must exit Pad 13 using the north vehicle service road.

#### CVG Ramp Tower

- (1) Visually confirm the Wig-Wags are operating for Pad 13.
- (2) Upon request, clears flight crew to commence pushback and taxi to pad and line assignment.
- (3) Maintains orderly flow of aircraft to Pad 13 using Taxiway Ramp 2N.
- (4) Maintains a means of access to the Concourses using Taxiway Ramp 2S.
- (5) 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 Taxiway Ramp 2S.
- (6) Be alert for activation of the Airport's Surface Movement Guidance Control Systems (SMGCS) plan that may be in place during extreme low visibility conditions.

Federal Aviation Administration  
Southern Region Airports Division

APPROVED

Sep 30 2021

LH  
Inspector

- (7) Monitors ramp control of Pad 13 and alerting aircraft and deice personnel, who are monitoring ramp control, of any taxi hazards.

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.

- (8) 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

#### KCAB Ramp Snow Removal and Storm Water Treatment Personnel

- (1) Monitor Pad conditions for snow removal purposes.
- (2) Open/Close valves according to conditions.
- (3) Monitor and utilize vacuum vehicle for excess glycol overspray outside Deice Zone.

#### Alternate Pad Availability

- (1) Pad 8: Wide-body Group V aircraft (e.g. 747-4)
- (2) Pad 10: Upon request (emergency conditions only)
- (3) Pad 7: Upon request (emergency conditions only)
- (4) Pad 12: Wheels Up

Federal Aviation Administration  
Southern Region Airports Division

APPROVED

Sep 30 2021

LH  
Inspector



APPROVED

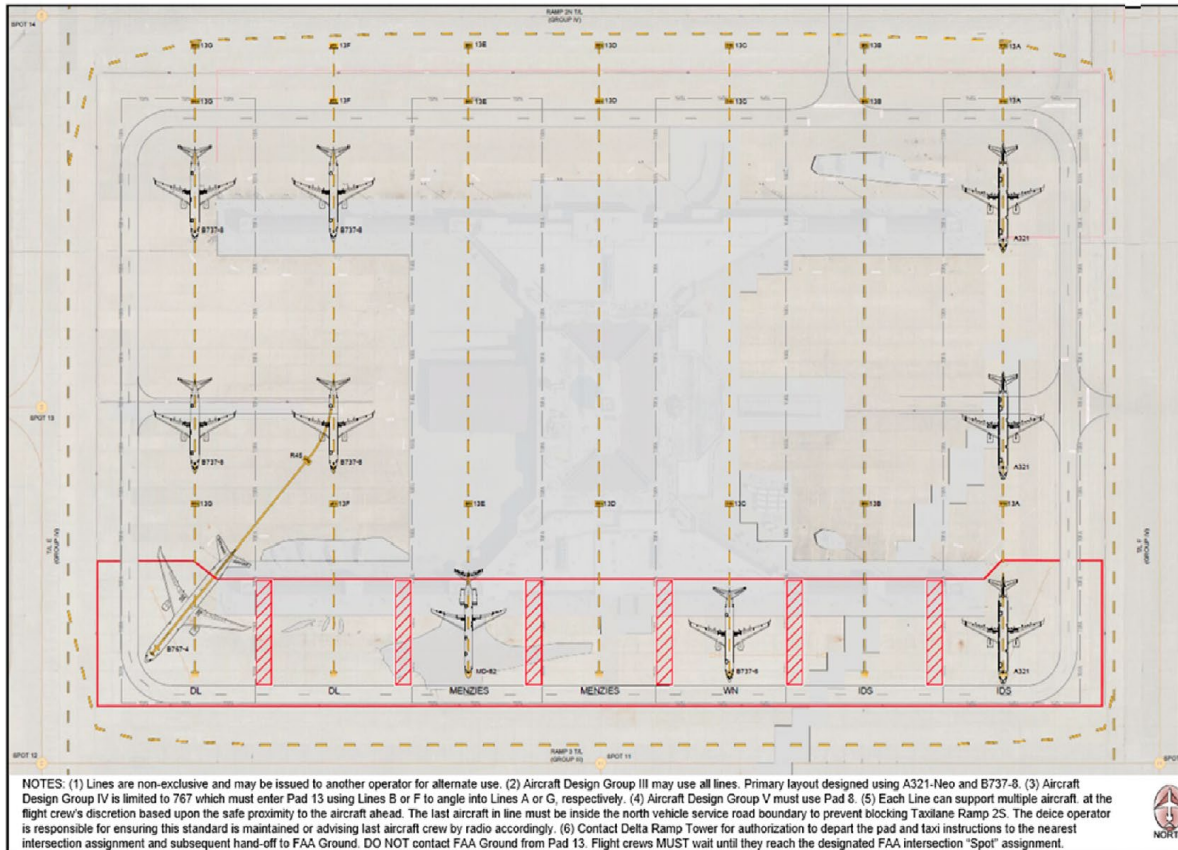
Sep 30 2021

LH  
Inspector



## 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 25. 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.

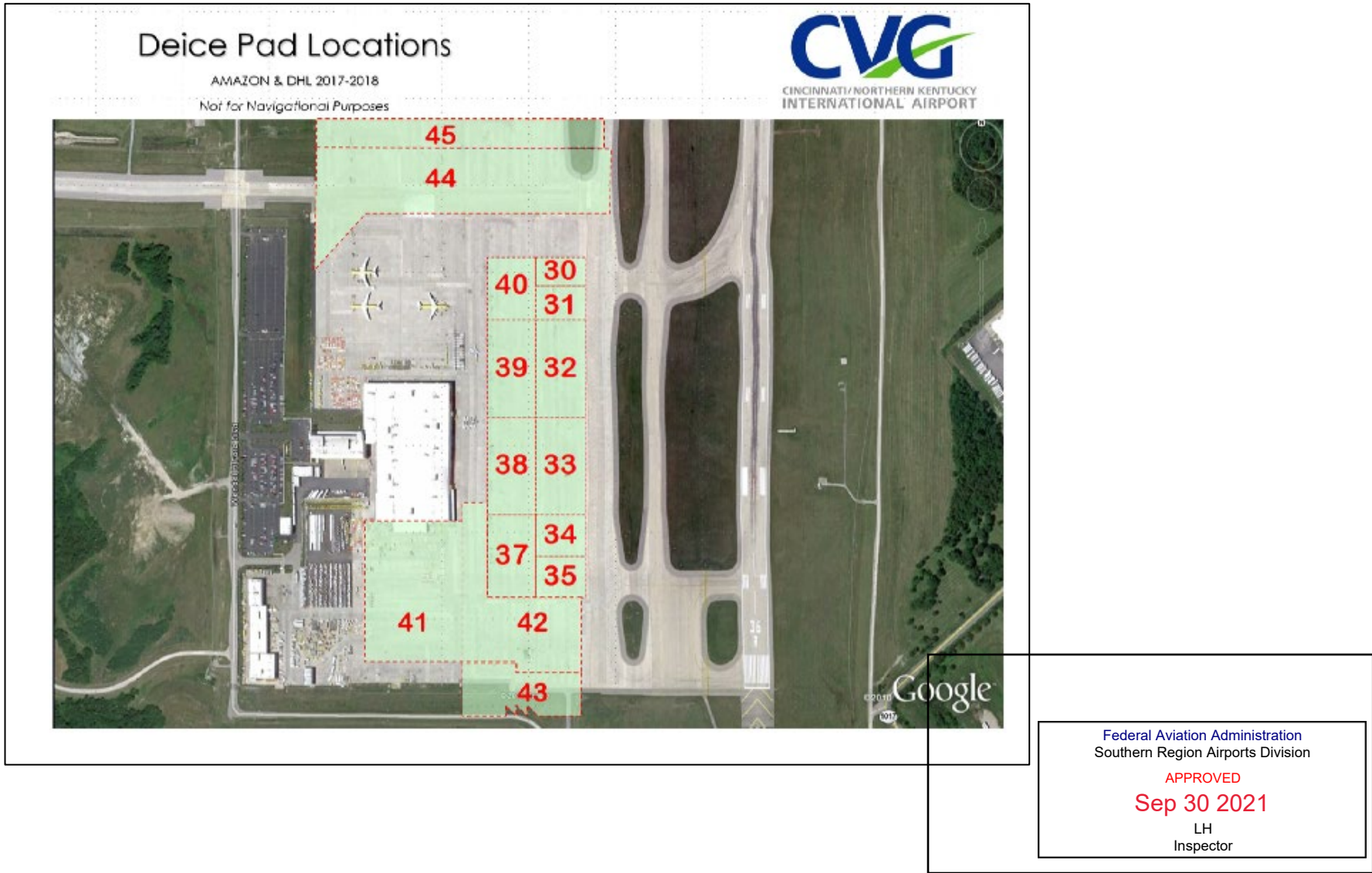
Federal Aviation Administration  
Southern Region Airports Division

APPROVED  
Sep 30 2021

LH  
Inspector

Scheduled Cargo Airlines Pad Assignments

Pads 30-45: Amazon and DHL (alternate pads may be used upon notification to KCAB)



## 11.0 APPENDIX 6: RUNWAY CONDITION ASSESSMENT MATRIX

**Table 5-2. Runway Condition Assessment Matrix (RCAM) (for Airport Operators' Use Only)**

Assessment Criteria		Downgrade Assessment Criteria		
Runway Condition Description	Code	Mu ( $\mu$ ) <sup>1</sup>	Vehicle Deceleration or Directional Control Observation	Pilot Reported Braking Action
• Dry	6	40 or Higher	----	----
• Frost • Wet (Includes Damp and 1/8 inch depth or less of water)  1/8 inch (3mm) depth or less of: • Slush • Dry Snow • Wet Snow	5		Braking deceleration is normal for the wheel braking effort applied AND directional control is normal.	Good
5° F (-15°C) and Colder outside air temperature: • Compacted Snow	4	39 to 40	Braking deceleration OR directional control is between Good and Medium.	Good to Medium
• Slippery When Wet (wet runway) • Dry Snow or Wet Snow (Any depth) over Compacted Snow  Greater than 1/8 inch (3mm) depth of: • Dry Snow • Wet Snow  Warmer than 5° F (-15°C) outside air temperature: • Compacted Snow	3	30 to 39	Braking deceleration is noticeably reduced for the wheel braking effort applied OR directional control is noticeably reduced.	Medium
Greater than 1/8 (3mm) inch depth of: • Water • Slush	2	29 to 30	Braking deceleration OR directional control is between Medium and Poor.	Medium to Poor
• Ice <sup>2</sup>	1	21 to 29	Braking deceleration is significantly reduced for the wheel braking effort applied OR directional control is significantly reduced.	Poor
• Wet Ice <sup>2</sup> • Slush over Ice <sup>2</sup> • Water over Compacted Snow <sup>2</sup> • Dry Snow or Wet Snow over Ice <sup>2</sup>	0	20 or Lower	Braking deceleration is minimal to non-existent for the wheel braking effort applied OR directional control is uncertain.	Nil

<sup>1</sup> The correlation of the Mu ( $\mu$ ) values with runway conditions and condition codes in the Matrix are only approximate ranges for a generic friction measuring device and are intended to be used only to downgrade a runway condition code; with the exception of circumstances identified in Note 2. Airport operators should use their best judgment when using friction measuring devices for downgrade assessments, including their experience with the specific measuring devices used.

<sup>2</sup> In some circumstances, these runway surface conditions may not be as slippery as the runway condition code assigned by the Matrix. The airport operator may issue a higher runway condition code (but no higher than code 3) for each third of the runway if the Mu value for that third of the runway is 40 or greater obtained by a properly operated and calibrated friction measuring device, and all other observations, judgment, and vehicle braking action support the higher runway condition code. The decision to issue a higher runway condition code than would be called for by the Matrix cannot be based on Mu values alone; all available means of assessing runway slipperiness must be used and must support the higher runway condition code. This ability to raise the reported runway condition code to a code 1, 2, or 3 can only be applied to those runway conditions listed under codes 0 and 1 in the Matrix.

The airport operator must also continually monitor the runway surface as long as the higher code is in effect to ensure that the runway surface condition does not deteriorate below the assigned code. The extent of monitoring must consider all variables that may affect the runway surface condition, including any precipitation conditions, changing temperatures, effects of wind, frequency of runway use, and type of aircraft using the runway. If sand or other approved runway treatments are used to satisfy the requirements for issuing this higher runway condition code, the continued monitoring program must confirm continued effectiveness of the treatment.

**Caution:** Temperatures near and above freezing (e.g., at 26.6° F (-3°C) and warmer) may cause contaminants to behave more slippery than indicated by the runway condition code given in the Matrix. At these temperatures, airport operators should exercise a heightened level of runway assessment, and should downgrade the runway condition code if appropriate.

Federal Aviation Administration  
Southern Region Airports Division

APPROVED

Jun 03 2021

NBL

Airport Certification Safety Inspector