CINCINNATI/NORTHERN KENTUCKY INTERNATIONAL AIRPORT

LOW VISIBILITY OPERATIONS/SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM PLAN (LVO/SMGCS)

Revised: August 2021

FEDERAL AVIATION ADMINISTRATION SMGCS PLAN APPROVAL LETTER

RECORD OF CHANGES

Revision Number	Date	Page
1	09/18/15	11, 12, 14, 16, 19, 25, 26, Exhibit 1
2	11/01/16	14,15,16, Exhibit 1 (25), Exhibit 2 (26)
3	08/18/17	14- 21, Exhibit 1 (25), Exhibit 2 (26)
4	8/16/21	All

RECORD OF DISTRIBUTION

Kenton County Airport Board departments, the Federal Aviation Administration (FAA), principal airport tenants (including scheduled air carriers, air carrier service providers, cargo operators, and other aviation tenants), the Cincinnati/Northern Kentucky International Airport Aircraft Rescue and Fire Fighting (ARFF) division, and other CVG stakeholders with responsibilities under this plan shall be notified of revisions and amendment to the plan.

The official FAA approved electronic copy of this plan is maintained in the Boards Airport Operation Office and is available for inspection upon request.

TABLE OF CONTENTS

1.0 INTRODUCTION

This Low Visibility Operations/Surface Movement Guidance and Control System (LVO/SMGCS) Plan describes enhancements made to the Cincinnati/Northern Kentucky International Airport, and it contains procedures and actions applicable to the airport operator, air traffic control, airlines and other tenants of CVG during low visibility conditions.

These enhancements, procedures and actions are in accordance with the guidance in the Federal Aviation Administration (FAA) Advisory Circular 120-57 Surface Movement Guidance and Control System. A SMGCS Plan is required for airports where scheduled air carriers conduct takeoff or landing operations in visibility conditions less than 1,200 feet runway visual rage (RVR) . When runway visibility conditions are less than 1,800 feet RVR down to and including 1,200 feet RVR, Category (CAT) II operations are conducted on a routine basis. When runway visibility conditions are less than 1,200 feet RVR, CAT III conditions exist, and this LVO/SMGCS plan will be in effect.

The procedures contained in this plan were developed by and in coordination with the LVO/SMGCS working group, which consisted of representatives from the following organizations: Kenton County Airport Board; Federal Aviation Administration; FAA Air Traffic Control (local and/or regional), FAA Airport District Office, FAA Safety & Standards, FAA Flight Technologies & Procedures Division, Flight Procedures and Airspace Group (AFS-420); Appropriate schedule air carriers; Cargo Operators; and service corporations (including general aviation and corporate operators).

This document does not supersede established policies, procedures, rules or guidelines for airports, aircraft or vehicle operators, or air traffic control. It does prescribe certain airfield lighting and marking improvements and operating procedures that have been designed to enhance the safety and efficiency of aircraft and vehicle movements.

To enhance the safety of low visibility operations, Federal Aviation Regulation (FAR) Part 91 operators are expected to follow the guidance in this plan to the maximum extent possible. Operators may request follow-me assistance to and from the runway environment for the purpose of enhancing safe operations during low visibility conditions.

This plan addresses both current and future enhancements to support low visibility takeoff, landing, and taxiing operations at the airport. The work of the LVO/SMGCS working group has continued after the initial plan is approved by the FAA. The LVO/SMGCS working group will meet as necessary, but not less than once a year to assess low visibility operations, and to modify the plan as necessary.

2.0 DEFINITIONS

Aircraft Rescue and Firefighting (ARFF): The airport fire department.

Airline Ramp Control: Refers to personnel from the airlines providing control of the concourse non-movement areas.

Airport Operations Area (AOA): That portion of the airport designed and used for landings, departures, servicing and surface maneuvering of aircraft.

Airport Operations: Personnel designated by the Chief Operating Officer responsible for airport duties under this plan.

Apron: The term apron comprises all areas and facilities used for aircraft parking and aircraft support and servicing operations. It includes the following subcomponents.

Aircraft Parking Positions: Used for parking aircraft to enplane and deplane passengers, load or unload cargo.

Aircraft Service Areas: On or adjacent to an aircraft parking position. These areas are used by airline personnel/equipment for servicing aircraft and staging baggage, freight and mail for loading and unloading of aircraft.

Taxilanes: Apron areas which provide taxiing aircraft access to and from the parking positions.

Vehicle Roadways: Identified rights-of-way on the apron areas designated for service and ARFF vehicles.

Clearance Bar: A clearance bar consists of three in-pavement steady burning yellow lights.

Chief Operating Officer: The Chief Operating Officer, or their designee, is the authorized representative of the KCAB with duties, responsibilities and authority to direct the operations of the airport on a day-to-day basis.

Follow-me service: A vehicle supplied and operated by the airport to guide aircraft to and from the runway environment when requested by Part 91 operators. The vehicle will be clearly marked FOLLOW ME and be outfitted with appropriate flashing lights to be visible to the pilots.

Gate Hold Procedures: Procedures at select airports to hold aircraft at the gate or other ground location whenever departure delays exceed or are anticipated to exceed 15 minutes. The sequence for departure will be maintained in accordance with initial call-up unless modified by flow control restrictions. Pilots should monitor the ground control/clearance delivery frequency for engine start/taxi advisories or new proposed start/taxi time if the delay changes.

Call Spot: Pavement markings used to identify the location of aircraft or vehicles during low visibility conditions. They are referred to as “spots” by air traffic control (ATC). May also be known as “Call Blocks” or “Ramp Hold Position Markings”.

Judgmental Over-steering: Judgmental over-steering shall refer to complex maneuvering by the pilot when making the turns that would require this effort for the classification of aircraft indicated. It shall mean that the pilot cannot maintain cockpit over centerline and expect all wheel gear to

remain on full strength pavement.

KCAB: KCAB is the Kenton County Airport Board that operates the Cincinnati/Northern Kentucky International Airport.

Low Visibility: For the purpose of this plan, low visibility is when the measured visibility is less than 1,200 feet RVR.

Movement Area: The area of the airport used for aircraft taxiing, takeoffs and landings, exclusive of loading ramps and aircraft parking areas. Aircraft or vehicle operations within this area require an air traffic control clearance.

Non-Movement Area: Taxilanes and aprons not controlled by FAA Control Tower. Portions of this area are under the control of Delta Ramp Tower or DHL Airline Ramp Control.

Runway Guard Lights (Elevated): Double elevated flashing yellow lights located in line with the taxiway edge lights at a runway hold position marking on both sides of the taxiway. Their function is to confirm the presence of an active runway and to assist in preventing runway incursions. These lights are commonly referred to as wig wags.

Runway Guard Lights (In-pavement): Fixture consists of a row of in-pavement flashing yellow lights installed across the entire taxiway, at the runway hold position marking. Their function is to confirm the presence of an active runway and assist in preventing runway incursions.

Runway Holding Position Marking: Painted markings across a runway entrance taxiway where an aircraft must stop and be cleared by an air traffic controller for entrance onto the runway.

Taxilane: Apron areas that provide taxiing aircraft access to and from aircraft parking positions.

Runway Visual Range (RVR). An instrumentally derived value, based on standard calibrations, that represents the horizontal distance a pilot will see down the runway. It is based on the sighting of either high intensity runway lights or on the visual contrast of other targets whichever yields the greater visual range. RVR, in contrast to prevailing or runway visibility, is based on what a pilot in a moving aircraft should see looking down the runway. RVR is horizontal visual range, not slant visual range. It is based on the measurement by a transmissometer near the touchdown, midpoint or rollout points of the instrument runway and is reported in hundreds of feet. RVR is used in lieu of RVV (Runway Visibility Value) and/or prevailing visibility in determining minimums for a particular runway. (Pilot/Controller Glossary.) RVR values used in this plan refer to the value reported by a specific RVR sensor.

Low Visibility Operations/Surface Movement Guidance and Control System (LVO/SMGCS) Plan: A plan for guidance, regulation, and control of all aircraft, vehicles, and personnel on the movement area, when the measured visibility on any runway at the airport is less than 1,200 feet RVR.

LVO/SMGCS Operations: The operations or movement of aircraft, vehicles or personnel on the airport when one or more RVR measurements are less than 1,200 feet (as specified in this plan) and the LVO/SMGCS plan has been implemented by the FAA Control Tower.

LVO/SMGCS Runways; Runways 18C/36C and 18L/36R are the designated SMGCS runways. When the lowest runway RVR of any LVO/SMGCS runway on the airport is less than 1,200 feet, down to and including 600 feet, arrivals will be conducted on runways 36R and 36C and departures

will be conducted on runways 36R and 36C. Runways 18L and 18C are not CAT II/III runways; therefore, there will never be arrivals on these runways when the LVO/SMGCS plan is in effect. However, if wind conditions change during LVO/SMGCS operations these runways may be utilized for departures to the south. Conditions for this situation will be discussed further in Section 6.

LVO/SMGCS Taxi Routes: These routes are a series of specific taxiways/taxilanes to and from a LVO/SMGCS runway, used by Aircraft during low visibility operations. These routes have appropriate marking, lighting and sign enhancements to support aircraft ground operations during visibility from 1,200 feet RVR down to and including 600 feet RVR. These routes are appropriately depicted and identified on a low visibility taxi chart published for use of pilots and vehicle operators. These routes have 12-inch-wide yellow centerline stripes with a 6-inch-wide black border on each side on concrete surfaces and yellow centerline stripes on asphalt surfaces.

Service Road: Identified routes on the apron designated for vehicles and fire equipment.

Surface Painted Taxiway Direction Signs: Pavement markings used at intersections where it is not possible to provide taxiway direction signs in accordance with AC 150/5340-18 or where it is necessary to supplement the taxiway direction signs. The letters have a height between 9-feet and 12-feet and the width of the letters is proportional to the height.

Surface Painted Hold Position Sign: Pavement marking that is used to identify a specific runway. These markings are configured the same as the associated sign.

Taxi-Hold Position Lights (In-Pavement): A configuration of five in-pavement yellow lights across taxiway at the runway hold position markings.

Taxiway/Taxilane Centerline Lights: A series of continuous green in-pavement lights delineating the taxiway or taxilane centerline. These lights will typically connect to runway lead-in and lead-off centerline lighting. NOTE: Not all taxiways on the airport have taxiway/taxilane centerline lighting.

Taxiway/Taxilane Edge Lights: A series of elevated medium intensity blue lights normally located along the sides of a taxiway/taxilane. All taxiways and taxilanes used as LVO/SMGCS routes on this airport have these lights.

Unserviceable: Refers to equipment that is inoperative, obscured (i.e., by ice, snow, sand), degraded, not operating normally (e.g., abnormally low intensity), or not performing its intended function.

3.0 FACILITIES, SERVICE & EQUIPMENT

3.1. Airport Surface Detection (ASDE) Radar: The FAA has Airport Surface Detection Equipment (ASDE-3 radar) located on top of the tower cab. The FAA utilizes this equipment to monitor the geographical position of aircraft and vehicles on the AOA during reduced visibility conditions and at night.

3.2. LVO/SMGCS Runways:

Runway 36R: 10,000 feet X 150 feet, concrete, grooved, has a CAT III Instrument Landing System (ILS), DME, touchdown, midpoint and roll-out RVR equipment, approach lighting system with sequence flashers (ALSF-2), touchdown zone lighting, centerline, lead-on and lead-off lighting, high intensity edge lighting, and is appropriately marked for instrument operations. All of the taxiways connecting to the runway have elevated and in-pavement runway guard lights and taxiway hold position markings.

Runway 36C: 11,000 feet X 150 feet, asphalt and concrete, grooved, has a CAT III Instrument Landing System (ILS), touchdown, midpoint and roll-out RVR equipment, approach lighting system with sequence flashers (ALSF-2), touchdown zone lighting, centerline, lead-on and lead-off lighting, high intensity edge lighting and is appropriately marked for instrument operations. All of the taxiways connecting to the runway have elevated and in-pavement runway guard lights and taxiway hold position markings.

Runway 18L: 10,000 feet X 150 feet, concrete, grooved, has an Instrument Landing System (ILS), DME, touchdown, midpoint and roll-out RVR equipment, medium-intensity approach lighting system with runway alignment indicator lights (MALSR), touchdown zone lighting, centerline, lead-on and lead-off lighting, high intensity edge lighting, and is appropriately marked for instrument operations. All of the taxiways connecting to the runway have elevated and in-pavement runway guard lights and taxiway hold position markings.

Runway 18C: 11,000 feet X 150 feet, asphalt and concrete, grooved, has an Instrument Landing System (ILS), DME, touchdown, midpoint and roll-out RVR equipment, medium-intensity approach lighting system with runway alignment indicator lights (MALSR), touchdown zone lighting, centerline, lead-on and lead-off lighting, high intensity edge lighting, and is appropriately marked for instrument operations. All of the taxiways connecting to the runway have elevated and in-pavement runway guard lights and taxiway hold position markings.

3.3. Taxiway Lighting: Continuous green taxiway centerline lights and blue edge lights are installed on all taxiways leading to and from low visibility runways. Centerline lights generally stop at the entrance to apron areas. Taxiway edge lights are installed at all intersections of the airport. Taxi routes and taxi procedures are described in Section 6, AIR TRAFFIC CONTROL PROCEDURES.

3.4. Runway Guard Lights In-Pavement: All the taxiway connectors to runway 18R-36L, 18C-36C, and 18L-36R have this system of lights. Taxiway M connections to runway 9-27 also include this system of lights along with connectors K-10, K-9, K-7, K-6, C, D, and E. These lights will be illuminated at all times.

3.5. Runway Guard Lights Elevated: These yellow flashing lights are installed at all taxiways connecting to all 4 runways: (18L-36R, 18C- 36C, 18R-36L, and 9-27). These lights will be illuminated at all times.

3.6. Taxiway Guidance Signing and Marking Inspections: Taxiway guidance signage and marking are inspected routinely as a part of the Airport Operations Airfield Inspection Program. All

required signs are lighted. Taxiway signs are legible and not obscured.

3.7. Non-movement Area Control: The airlines and/or the Airport Operations Department administer control of the non-movement area between and around the concourses. Other non-movement areas are controlled by the tenants of those respective areas. Appropriate movement/non-movement area markings are installed on apron edges.

3.8. Follow-me Service: Airport Operations will provide follow-me service for air carrier aircraft upon request, subject to availability of equipment and the need to accomplish higher priority duties. To enhance safe operations in low visibility conditions, Part 91 operators should request follow-me service to and from runway environment when needed. Red or yellow flashing lights will identify the follow-me vehicle. A follow-me request may be initiated by the pilot, or the airport apron controller. ATC will notify Airport Operations of requests made by pilots.

3.9. Aircraft Docking: The airlines assume control of the aircraft in the vicinity of the gate, as directed by the airport apron controller, and provides aircraft docking by the use of wing walkers, follow-me vehicles, tugs or other appropriate means as set out in the airline's operational manuals.

3.10. Automatic Terminal Information Service (ATIS): Once the LVO/SMGCS Plan is implemented, ATCT will add a message to the ATIS stating "low visibility procedures in effect".

4.0 AIRCRAFT RESCUE & FIRE FIGHTING (ARFF)

4.1. ARFF Coverage: Each of the ARFF stations provides primary coverage during low visibility operations, depending on runway use configuration. ARFF Station No. 1 is located just south of taxiway M and ARFF Station No. 2 is located just east of taxilane E at the northern end of runway 18C-36C. Each ARFF vehicle will be equipped with a copy of the low visibility taxi chart and with Forward Looking Infrared (FLIR) equipment to support low visibility response to accidents or incidents.

4.2. ARFF Coordination: Coordination between ATC and ARFF is accomplished annually to ensure effectiveness of ARFF services. This coordination is accomplished as part of the annual airport emergency plan review required by Part 139.

5.0 VEHICLE CONTROL

5.1. Vehicle Access: Vehicle access to the airport is controlled by a system of perimeter fencing and gates. All airport and tenant vehicles entering the airport operations area (AOA) are identified by a mandatory Apron Access Permit, displayed in the windshield of the vehicles, which is obtained from the Airport Operations Department and enforced by Airport Security.

5.2. Vehicle Service Roads: Except for the necessary movement in leased areas, vehicles must be operated within the clearly marked system of vehicle service roads. Solid white edge lines with a dashed white line used as centerline divider identifies these roads. Where a service road intersects a taxiway, a solid white stop line is provided across the vehicle lane at a point that assures adequate clearance from taxiing aircraft.

5.3. Driver Training: Vehicles driven on the AOA during low visibility conditions will only be operated by drivers that have completed training provided by Airport Operations. All airport and tenant driver training courses use video training aids which include topics such as SMGCS lighting, signage, marking, and procedures and conclude with written tests. Drivers are instructed to pay particular attention to striped and dashed lines used in combination with one another, i.e., a single stripe and single dash, or two stripes and two dashes. These markings denote runway holding positions or the movement/non-movement area boundary and must not be crossed without authorization from the ATC. The driver training programs are reviewed annually by Airport Operations to ensure currency.

5.4. Access Restrictions: Only vehicles operated by the Airport or by FAA Airways Facility maintenance personnel are allowed on the airport movement area. All other access to the movement area will be coordinated and approved by Airport Operations. In low visibility conditions, only vehicles that are in direct support of the LVO/SMGCS plan are permitted in the movement areas. All vehicles accessing the movement area during LVO/SMGCS operations will have a copy of the low visibility taxi route chart.

5.5. Vehicle Operations: To prevent any incursion by non-essential vehicles into airports operations areas utilizing LVO/SMGCS plan procedures, all ground vehicles will operate under LVO/SMGCS plan procedures and limitations on all parts of the airport when any part of the airport is operating under LVO/SMGCS plan procedures.

6.0 AIR TRAFFIC CONTROL PROCEDURES

6.1. Background and Operating Concept: The LVO/SMGCS plan provides guidance and control of the aircraft between various apron locations and the runways in a safe and efficient manner during low visibility conditions. The coordinated efforts of ATC and Airport Operations are all focused on assuring safe movement and avoiding inadvertent or unauthorized entry onto the movement area during low visibility conditions. The concept for accomplishing these objectives is to only use the north-south runways in a northerly flow direction. The principal arrival runway is runway 36R while runway 36C, being the longest, is predominately used for departures. In certain instances, both runways may be used for arriving and departing aircraft. Also, as the weather and wind direction changes, runways 18L and 18C may each be available for departures to the south. The authority for making these determinations will rest with ATC.

6.2. SMGCS Implementations: While the LVO/SMGCS plan will typically be implemented for the entire airport, ATC and Airport Operations recognize that the LVO/SMGCS plan may be dynamically implemented for either Runway 36R or 36C depending on existing weather/visibility conditions. The LVO/SMGCS plan becomes effective when the RVR values for Runway 36R or 36C are less than 1,200'.

When LVO/SMGCS is implemented for the entire airport only the LVO/SMGCS designated Runways and Taxiways, as specified in this document, are available for use.

When LVO/SMGCS is implemented on a dynamic basis for either Runway 36R or Runway 36C only that portion of the airport impacted will operate under the LVO/SMGCS plan procedures for aircraft operations.

Runway 36R operating under LVO/SMGCS, Taxiways S and T will operate under LVO/SMGCS.

Runway 36C operating under LVO/SMGCS, Taxiway D will operate under LVO/SMGCS.

Anytime Runway 36C is operating under LVO/SMGCS, Runway 9/27 and Runway 18R/36L are not available for use.

Aircraft operations with RVR below 600 feet are not authorized by KCAB.

NOTE: The LVO/SMGCS plan is not intended to override common-sense judgment of the air traffic controller and/or pilot in specific situations where continuing the operation may be safer than taxiing the aircraft to a new location in LVO/SMGCS conditions.

6.3. Visibility Reporting: ATC will coordinate with Airport Operations when RVR values are at 1,600 feet with a downward trend to indicate that visibility less than 1,200 feet RVR is possible and LVO/SMGCS procedures may go into effect. These procedures are terminated by ATC when no longer deemed necessary due to prevailing weather conditions. ATC will broadcast this information on the ATIS when LVO/SMGCS operations are in effect and terminated. ATC will also advise Airport Operations when the LVO/SMGCS plan is no longer required.

6.4. Lighting: When visibility is less than 1,200 feet RVR, down to and including 600 feet RVR, all LVO/SMGCS runway and taxiway lighting shall be illuminated to light LVO/SMGCS runways and taxi routes. Note: Non-LVO/SMGCS Runway and Taxiways lighting can be illuminated for operational necessity reasons, such as snow removal.

6.5. LVO/SMGCS Runways: Runway 36R and 36C for arrivals; Runway 36R, 36C, 18L and 18C for departures.

6.6. LVO/SMGCS Taxiways/Taxilanes: Taxiway D is parallel to runway 36C and located on the east side of runway 36C; taxiways F and G are parallel north-south taxiways located between

concourse B and Deice Pad 13; taxiway T is the north-south parallel to runway 18L/36R and is located to its west; and taxiway J is located north and parallel to runway 27. taxilane N is an east-west taxilane from the taxiway S to taxiway D. taxiway M is the east-west parallel taxiway connecting the general aviation FBO to taxiways S and T, located to the south of runway 27, and taxiway S is the north-south parallel to taxiway T from Spot 2 south to runway 36R approach. All of these taxiways have centerline lights and medium intensity elevated taxiway edge lights along the low visibility taxi route. The only exception to taxiway centerline lighting is the east portion of taxiway M between the FBO entrance and taxiway connector M2.

6.7. Departures: The aircraft will contact ATC ground control for taxi instructions when established at the Call Spot. ATC will provide RVR readings to pilots prior to taxiing in the movement area.

6.8. Departure Routings: Aircraft routings for departure will vary depending on the initial location of the aircraft and whether deicing is required prior to departure. Aircraft must have ATC clearance prior to entering the movement area.

Runway 36R Departures

From Concourse A or Concourse B: Expect to exit the non-movement area from the nearest call spot abeam taxiway S, or taxiway J, and proceed to taxiway S or T. Turn south on taxiway S or T to runway 36R.

From Amazon Apron: Expect to exit the non-movement area at call spot 54 located on taxilane N. Turn south on taxiway S or T to runway 36R.

From DHL Apron: Expect to exit the non-movement area from the nearest call spot abeam taxiway S. Turn south on taxiway S or T to runway 36R.

From FBO Apron: Expect to exit the non-movement area via taxiway M. Turn east on taxiway M, turn south on taxiway S or T and proceed to runway 36R.

From Deice Pads 7, 8, 10, & 13: Expect to exit the non-movement area from the nearest call sport abeam taxiway S, J or D. Turn south on taxiway D and turn east on taxiway J to taxiway S or T. Turn south on taxiway S or T and proceed to runway 36R.

Runway 36C Departures

From Concourse A or Concourse B – East taxi route: Expect to exit the non-movement area from the nearest call spot abeam taxiway S, or taxiway J, and proceed to taxiway S or T. Turn south on taxiway S or T to the intersection of taxiway J. Turn west on taxiway J to taxiway D. Turn south on taxiway D and when cleared by ATC cross runway 9-27 proceeding south on taxiway D to runway 36C.

From Concourse A or Concourse B – West taxi route: Expect to exit the non-movement area from the nearest call spot abeam taxiway J or taxiway D. Turn west on J to taxiway D. Turn south on taxiway D and when cleared by ATC cross runway 9-27 proceeding south on taxiway D to runway 36C.

From Amazon Apron: Expect to exit the non-movement area at call spot 75 located on taxilane N or call spot 76 located on the Amazon apron. Turn south on taxiway D to runway 36C.

From DHL Apron: Expect to exit non-movement area at call spot 75 located on taxilane N. Turn south on taxiway D to runway 36C.

From FBO Apron: Expect to exit the non-movement area via taxiway M. Turn east on taxiway M and proceed to taxiway S. Turn north on taxiway S to taxiway J. Turn west on taxiway J and proceed to taxiway D. Turn south on taxiway D and when cleared by

ATC cross runway 9-27 proceeding south on taxiway D to runway 36C.

From Deice Pads 7, 8, 10 & 13: Expect to exit the non-movement area from the nearest call spot abeam taxiway S, J, or D. Turn south on taxiway S, or T and turn west on taxiway J to taxiway D. Turn south on taxiway D and when cleared by ATC cross runway 9-27 proceeding south on taxiway D to runway 36C.

Runway 18L Departures

From Concourse A or Concourse B: Expect to exit the non-movement area from the nearest call spot abeam taxiway S, or taxiway J, and proceed to taxiway S or T. Turn north on taxiway S or T to runway 18L.

From Amazon Apron: Expect to exit the non-movement area at call spot 54 located on taxilane N. Turn north on taxiway S or T to runway 18L.

From DHL Apron: Expect to exit the non-movement area from the nearest call spot abeam taxiway S. Turn north on taxiway S or T to runway 18L.

From FBO Apron: Expect to exit non-movement area via taxiway M. Turn east on taxiway M, Turn north on taxiway S or T to runway 18L.

From Deice Pads 7, 8, 10, & 13: Expect to exit the non-movement area from the nearest call sport abeam taxiway S, J or D. Turn south on taxiway D and turn east on taxiway J to taxiway S or T. Turn north on taxiway S or T and proceed to runway 18L.

Runway 18C Departures

From Concourse A or Concourse B – East taxi route: Expect to exit the non-movement area from the nearest call spot abeam taxiway S or taxiway J and proceed to taxiway S or T. Turn south on taxiway S or T to the intersection of taxiway J. Turn west on taxiway J to taxiway D. Turn north on taxiway D to runway 18C.

From Concourse A or Concourse B – West taxi route: Expect to exit the non-movement area from the nearest call spot abeam taxiway J or taxiway D. Turn west on J to taxiway D. Turn north on taxiway D to runway 18C.

From Amazon Apron: Expect to exit the non-movement area at call spot 75 located on taxilane N or call spot 76 located on the Amazon apron. Proceed north on taxiway D and when cleared by ATC cross runway 9-27 to runway 18C.

From DHL Apron: Expect to exit non-movement area at call spot 75 located on taxilane N. Turn north on taxiway D. Proceed north on taxiway D and when cleared by ATC cross runway 9-27 to runway 18C.

From FBO Apron: Expect to exit non-movement area via taxiway M. Turn east on taxiway M and proceed to taxiway S. Turn north on taxiway S to taxiway J. Turn west on taxiway J and proceed to taxiway D. Turn north on taxiway D to runway 18C.

From Deice Pads 7, 8, 10 & 13: Expect to exit the non-movement area from the nearest call spot abeam taxiway S, J, or D. Turn south on taxiway S, or T and turn west on taxiway J to taxiway D. Turn north on taxiway D and proceed to runway 18C.

6.9. Arrivals: Landings may be conducted on parallel north-south runways 36C or 36R during SMGCS Operations. At various times, ATC may ask arriving aircraft to report clear of the runway.

Runway 36R Arrivals

To Concourse A or Concourse B: Expect to exit the runway on taxiway T6, T7 or the

end of runway 36R (taxiway T north connector) and taxi via taxiway T or S to the nearest call spot abeam taxiway S.

To Amazon Apron: Expect to exit the runway on taxiway T6, T7, or the end of runway 36R (taxiway T north connector) and turn south on taxiway T or S. Turn west on taxilane N (call spot 75).

To DHL Apron: Expect to exit the runway on taxiway T6, T7, or the end of runway 36R (taxiway T north connector) and turn south on taxiway T or S. Turn west to the nearest call spot abeam taxiway S.

To FBO Apron: Expect to exit the runway on taxiway T6, T7, or the end of runway 36R (taxiway T north connector) and turn south on taxiway T or S. Turn west on taxiway M and proceed to the FBO Apron.

Runway 36C Arrivals

To Concourse A or Concourse B: Expect to exit the runway on taxiway D7, D8, or the end of runway 36C (taxiway D north connector) and taxi via taxiway D to the nearest call spot abeam taxiway D or taxiway J.

To Amazon Apron: Expect to exit the runway on taxiway D7, D8, or the end of runway 36C (taxiway D north connector) and turn south on taxiway D. When cleared by ATC cross runway 9-27 proceeding south on taxiway D to taxilane N (call spot 75) or call spot 76.

To DHL Apron: Expect to exit the runway on taxiway D7, D8, or the end of runway 36C (taxiway D north connector) and turn south on taxiway D to taxiway J. Proceed east on taxiway J and turn south of taxiway S or T. Turn west to the nearest call spot abeam taxiway S.

To FBO Apron: Expect to exit the runway on taxiway D7, D8, or the end of runway 36C (taxiway D north connector) and turn south on taxiway D to taxiway J. Proceed east on taxiway J and turn south of taxiway S or T. Turn west on taxiway M and proceed t

7.0 AIRLINE PROCEDURES DURING LOW VISIBILITY CONDITIONS

7.1. General. Pilots conducting low visibility operations at Cincinnati/Northern Kentucky International Airport (CVG) are required to have a copy of the low visibility taxi route chart. Low visibility taxi routes are depicted on the appropriate Jeppesen charts.

The airport apron controller will resolve aircraft and vehicle movement conflicts in the non-movement area. This will be accomplished through the use of two-way radio communication, ground movement control procedures, follow-me vehicles, and ground marshaling. ATC will monitor and control aircraft in the movement area.

7.2. Departures. Departing aircraft will follow company procedures for pushback, engine start, and initial taxi to the movement area boundary at the Call Spot. If appropriate, the pilot should request from the ground handing agency taxiing assistance such as signalman and wing walkers, follow-me service, or towing to the Call Spot. In all cases, aircraft must have ATC clearance prior to entering the movement area.

7.3. Arrivals. Arriving aircraft will follow company procedures for taxi to the gate on the apron concourse or to other parking areas as appropriate. The airline assumes control of the aircraft in the vicinity of the gate and provides aircraft docking by the use of signalman and wing walkers, follow-me service, towing or other appropriate means as set out in the airlines' operating instructions.

7.4. Deicing. If deicing is required prior to departure, aircraft proceed on the apron to deicing pad before proceeding on LVO/SMGCS route. Typical deicing pads are listed below for each area of the airport:

Concourses A and B aircraft may use all active deice pads during low visibility and proceed to the nearest Call Spot within the non-movement area.

DHL aircraft will use deicing pads 30-43 in front of their building.

Amazon aircraft will use deice pads located on their ramp prior to entering LVO/SMGCS route.

8.0 RESPONSIBILITIES

8.1. Airport Operator:

- Serve as the point of contact for the SMGCS plan, hold meetings of the SMGCS Working Group, and maintain documentation of proceedings.
- Coordinate periodic reviews of the plan, and amend, publish, and distribute the initial and revised plan.
- Monitor adherence to sections of the plan that are under the Board's control and take action to correct deficiencies.
- Conduct inspections, report failures, and provide maintenance of lighting aids associated with the plan.
- Assure initial and recurrent training of the LVO/SMGCS procedures for personnel with responsibilities defined in the LVO/SMGCS plan.
- Make "follow-me" services available as needed.

8.2. Air Traffic Control Tower:

- Initiate and terminate the LVO/SMGCS procedures specified in 10.0, LVO/SMGCS Plan Implementation.
- Coordinate with the Airport Operations Department prior to officially implementing the plan.
- Provide directional assistance to ARFF units and other emergency equipment responding during an emergency in LVO/SMGCS conditions.
- Monitor and control aircraft and vehicles in the Movement Areas.

8.3. Airport Tenants:

- Participate in the SMGCS Working Group and disseminate LVO/SMGCS plan procedures to company employees.
- Train personnel in LVO/SMGCS procedures.
- Enforce LVO/SMGCS plan driving procedures and if authorized conduct driver training
- Assure adherence to the sections of the plan that are under airport tenant control and take action to correct deficiencies.

9.0 PLANS & MILESTONES

9.1. Striping: Assure pavement marking of routes include a 12” wide centerline stripe with glass beads and black outline as required.

9.2. Future conversions to LED lighting when applicable.

10.0 LVO/SMGCS PLAN IMPLEMENTATION

10.1. FAA Air Traffic Control Tower

The FAA Operations Supervisor/Controller in charge has the responsibility to implement and terminate the LVO/SMGCS Plan operation at CVG when RVR values drop below 1,200' feet RVR and a visual check of the lighting system is satisfactory.

LVO/SMGCS Plan Advisory:

When CAT II operations commence and/or when the meteorological trend of weather phenomenon indicate that RVR visibility below 1,200' will likely occur in the time it would normally take to implement the LVO/SMGCS Plan, then the FAA Operational Supervisor/Controller in Charge will:

- Activate the airfield emergency generators.
- Advise Airport Operations via the AOC to prepare for the likely implementation of low visibility operations in accordance with the SMGCS Plan.
- Configure the airfield lighting as necessary.

LVO/SMGCS Plan Implementation:

When RVR values drop below 1,200' (CAT III Operations), the FAA Operational Supervisor/Controller in Charge will:

- Implement the LVO/SMGCS Plan.
- Verify the airfield lighting has been configured as necessary to conduct low visibility operations.
- Advise the AOC that the LVO/SMGCS Plan has been officially implemented.
- Record an ATIS message indicating that low visibility operations procedures are in effect for CVG.
- Provide progressive advisories as necessary to ARFF and other pertinent responders during an emergency.
- Maintain ground separation between aircraft and ground vehicles on the Movement Area.
- Notify the AOC of any known airfield lighting discrepancies.

LVO/SMGCS Plan Termination:

When RVR Values exceed and will likely remain above 1,200', the FAA Operational Supervisor/Controller in Charge will:

- Terminate the LVO/SMGCS Plan.
- Advise the AOC that the the LVO/SMGCS Plan has been officially terminated.
- Delete the the low visibility operations advisory from the ATIS message.
- Reconfigure airfield lighting as necessary.

10.2. Airport Operations

LVO/SMGCS Plan Advisory:

When notified by the FAA Operational Supervisor/Controller in Charge via the AOC to prepare for the likely implementation of low visibility operations, Airport Operations will:

- Conduct an inspection of all required airfield visual aids or verify that one has been conducted within the last four hours to ensure compliance with low visibility operation requirements.
- Advise the ATCT if lighting abnormalities beyond tolerance are observed.
- Notify (via the airport mass notification system) affected parties to prepare for the

likely implementation of the LVO/SMGCS Plan.
- Analyze construction or special activity on the airfield and identify those which may be necessary to suspend if the LVO/SMGCS Plan is implemented by the ATCT.
- Notify the ATCT when the airport is prepared for low visibility operations.

LVO/SMGCS Plan Implementation:

When notified by the FAA Operational Supervisor/Controller in Charge via the AOC that the LVO/SMGCS Plan has been officially implemented, Airport Operations will:
- Make notifications to affected parties that the LVO/SMGCS Plan has been officially implemented.
- Conduct airfield visual aid inspections every four hours while low visibility operations remain in effect and monitor the condition of the airfield, as appropriate.
- Notify ATCT if lighting abnormalities beyond tolerance are observed, and act upon any visual aid abnormalities by restricting operations from the affected portion of the airfield until abnormalities are corrected.
- Reduce of suspend construction or special activity on the airfield as deemed necessary to enhance airfield safety.
- Provide "follow-me" services as requested.

LVO/SMGCS Plan Termination:

When notified by the FAA Operational Supervisor/Controller in Charge that the LVO/SMGCS Plan has been terminated, Airport Operations will:
- Make notifications to affected parties that the LVO/SMGCS Plan has been officially terminated.
- Approve construction or special activity to resume on the airfield.

10.3. Air Carriers

Participating pilots and vehicle operators are required to be familiar with the CVG LVO/SMGCS Plan Taxi Routes Chart. Further, air carriers will appropriately train affected personnel in low visibility procedures.

LVO/SMGCS Plan Advisory

When notified by the AOC that the LVO/SMGCS Plan operations are probable:
- Air Carriers will advise ramp and maintenance personnel
- Restrict all non-essential vehicle movements not directly related to servicing arriving or departing aircraft.

LVO/SMGCS Plan Implementation

Once notified by the AOC that the LVO/SMGCS Plan has been officially implemented, air carriers will, in addition to the above requirements, ensure the following:
- Trained personnel equipped with tug, tow bar, and the necessary equipment are available for tow-in/tow-out service.
- Flight crews will:
  - Follow ATC/Ramp Tower instructions utilizing the CVG Low Visibility Taxi Routes
  - Report off of all runways after landing
  - Advise air carrier operations that they are on the ground and confirm their gate assignment

LVO/SMGCS Plan Termination

When notified by the AOC that low visibility operations are terminated, air carriers will advise al affected personnel.

APPENDIX 1: DISTRIBUTION LIST

FAA Airport District Office
FAA Aviation Safety, Flight Standards Service (Flight Technologies & Procedures Division)
FAA Air Traffic Control – CVG
Chief Operations Officer Division – KCAB
Current Air Carriers – CVG
Current Cargo Operators – CVG
Fixed Based Operators – CVG
Group Support Service Companies - CVG

EXHIBIT 1: SMGCS LETTER OF AGREEMENT

CINCINNATI AIR TRAFFIC CONTROL TOWER
and
KENTON COUNTY AIRPORT BOARD
LETTER OF AGREEMENT

EFFECTIVE: November 9, 2020

SUBJECT: Surface Movement Guidance Control System (SMGCS)

1. **PURPOSE.** This agreement prescribes procedures to be utilized by Cincinnati Air Traffic Control Tower (Tower) and Kenton County Airport Board (KCAB) during low visibility conditions.

2. **CANCELLATION.** The Cincinnati Tower and Kenton County Airport Board Letter of Agreement, dated July 20, 2017, Subject: Surface Movement Guidance Control System (SMGCS)

3. **RESPONSIBILITIES**. Tower will initiate the SMGCS Plan by notifying Airport Operations when the runway visual range (RVR) values and weather conditions indicate the RVR trends toward, or is reporting less than 1,200 feet.

   Airport Operations is responsible for notifying Airport Rescue and Firefighting (ARFF) personnel and appropriate tenants. Airport Operations must complete required airfield lighting inspections prior to SMGCS implementation.

   Tower is responsible to terminate SMGCS when conditions improve to 1,200 RVR or better, and are expected to remain as such.

4. **PROCEDURES.**

   a. Tower will:

      1) Notify Airport Operations when RVR values are at 1,600 feet RVR, with a downward trend indicating visibility less than 1,200 feet RVR is possible.

      2) When the SMGCS plan is in effect, illuminate all SMGCS designated runway and taxiway lighting. If SMGCS is implemented on a dynamic basis, runway and taxiway lighting in the portion of the airport not operating under the SMGCS plan may be operated in accordance to FAA JO 7110.65.

      3) Non-SMGCS lighting may be illuminated for operational necessity, such as snow removal.

      4) When the SMGCS plan activates, and upon completion of field lighting inspection by Airport Operations, broadcast on the Digital Automated Terminal Information System (D-ATIS) the statement low visibility taxi routes in effect.

      5) Direct participating aircraft via taxi routes depicted on the published low visibility taxi route charts unless otherwise directed.

      6) Notify Airport Operations when SMGCS operations are terminated.

   b. Airport Operations will:

      1) Conduct airfield lighting checks prior to beginning SMGCS operations.

      2) Advise Tower when the required lighting inspections have been completed.

      3) Perform inspections every two hours to ensure all applicable airfield lighting is

1

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

CINCINNATI AIR TRAFFIC CONTROL TOWER
and
KENTON COUNTY AIRPORT BOARD
LETTER OF AGREEMENT

EFFECTIVE: November 9, 2020

operating in accordance with SMGCS requirements.

4) Maintain all lighted runway/taxiway signs along the low visibility routes.
5) Restrict vehicle access to vehicles in direct support of the SMGCS plan or ARFF when any portion of the airport is operating under the SMGS Plan.
6) Advise users and tenants when low visibility operations are terminated.
7) Ensure all parties participating in low visibility operations are familiar with the SMGCS Plan for Cincinnati/Northern Kentucky International Airport.

5. GENERAL.

a. SMGCS operations are limited to taxi routes depicted in Attachment 1, to and from:
   1) Landings on Runways 36R and 36C
   2) Departures from Runways 18C/36Cand 18L/36R, as appropriate.

b. Aircraft operations are not authorized below 600 RVR.

Lyndon M. Bertke
Lyndon M. Bertke (Dec 16, 2020 11:52 EST)

Lyndon M. Bertke
Air Traffic Manager
Cincinnati Air Traffic Control Tower

Candace McGraw
Candace McGraw (Dec 16, 2020 09:2[illegible] EST)

Candace McGraw
Chief Executive Officer
Kenton County Airport Board

2

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Airport Certification Safety Inspector

EXHIBIT 2: AIRFIELD LIGHTING/MARKING/SIGN DIAGRAMS

See Exhibit 2

EXHIBIT 3: AIRPORT LOW VISIBILITY TAXI ROUTE CHART

See Exhibit 3