



# Airport Certification Manual

Salt Lake City International Airport

Original ACM Date: 1 November 2004

Revision Date: <u>5 April 2022</u>

FAA Approval:

Northwest Mountain Region Airports Division May 31 2022 The second

Bill Wyatt Executive Director

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#### Appendix D – Airport Emergency Plan

Airport Emergency Plan	.Maintained	Separately
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## **DISTRIBUTION LIST**

The Executive Director of Airports is responsible for the currency of the Airport Certification Manual. The official printed copy of the manual is maintained in the Operations Division and the manual is provided only to the FAA Regional Airports Division in printed form. The manual is maintained in electronic form on the Airport's Intranet and is available to those with the need to access it. Compact Discs or flash drives with copies of the electronic edition are provided to those without access to the Intranet. With exception to the Airport's Emergency Plan, the manual can also be freely accessed on the Airports website. Access to the Airport Certification Manual, including all revisions and amendments, are made available as noted to the following:

Entity Receives Access to the Sections Marked			
	Main Body	Wildlife	Emergency
FAA/Airport Certification Safety Inspector (2 printed)	Х	Х	Х
Executive Director of Airports	Х	Х	Х
Director of Operations	Х	Х	Х
Director of Engineering	Х		Х
Director of Maintenance	Х	Х	Х
Assistant Operations Directors	Х	Х	Х
Airport Operations Managers - Airfield	Х	Х	Х
Airport Division Police Captain	Х	Х	Х
Airport Division Police Lieutenants	Х	Х	Х
Airport Division Police Sergeants	Х	Х	Х
Airport Engineers	Х		Х
Airport ARFF	Х		Х
Airport Director of Finance			Х
Airport Director of Planning			Х
Airport Public Information Officer			Х
Airport Fleet Superintendent			Х
Communications/Control Center Manager	Х	Х	Х
Airfield Electrical Superintendent	Х		Х
Airfield Maintenance Ops Superintendent	Х		Х
Airfield Maintenance Sr. Supervisor	Х		Х
FAA/Air Traffic Control Tower	Х	Х	Х

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Entity Receives Access to the	Sections Mark	ked	
	Main Body	Wildlife	Emergency
Airline Station Managers			
AeroMexico	Х		Х
Alaska Airlines	Х		Х
American Airlines	Х		Х
Delta Air Lines	Х		Х
Eurowings	Х		Х
Frontier Airlines	Х		Х
JetBlue Airlines	Х		Х
KLM	Х		Х
SkyWest Airlines	Х		Х
Southwest Airlines	Х		Х
Spirit Airlines	Х		Х
United Airlines	Х		Х
Fixed Base Operators/Fuelers	Х		Х
Atlantic Aviation	Х		Х
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Utah Air National Guard	Х	Х	Х
Transportation Security Administration (TSA)			Х
State & Local Emergency Agencies			Х
Salt Lake City Emergency Management			Х
State of Utah Dept. of Emergency Services			х
Salt Lake County Emergency Operations Center			Х

# **REVISION LOG**

Revision	Revision Date	Airport Approval Date	FAA Approval Date
Original Document	1 November 2004	1 November 2004	20 December 2004
Reissue/Reformat	1 April 2011	1 April 2011	5 April 2011
Revision 1	1 June 2014	1 June 2014	9 June 2014
Reissue/Reformat	24 Aug 2017	24 Aug 2017	30 Aug 2017
Revision 1	17 July 2018	17 July 2018	7 Aug 2018
Revision 2	7 Aug 2019	7 Aug 2019	7 Aug 2019
Revision 3	8 Dec 2020	8 Dec 2020	7 May 2021
Revision 4	5 April 2022	5 April 2022	31 May 2022
Revision 5	3 March 2023	23 March 2023	23 March 2023
Revision 6	28 April 2023	28 April 2023	8 May 2023

Original Date: <u>1 November 2004</u>

Federal Aviation Administration Northwest Mountain Region Airports Division APPROVED Mar 23 2023 Inspector

## **REISSUE LOG DESCRIPTION**

CHANGE	

#### **DESCRIPTION OF CHANGE**

Appendix B	Wildlife Hazard Management Plan changed 24 August 2017 Approved 4 October 2017
Appendix C	Airfield Marking Plan changed 24 August 2017 Approved 17 October 2017
Appendix C2	Airfield Sign Plan Page 7 change 24 August 2017 Approved 17 October 2017



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# **REVISION 1 LOG DESCRIPTION**

CHANGE	DESCRIPTION OF CHANGE
Section 313	Snow and Ice control plan updated 17 July 2018 Approved 7 Aug 2018
Appendix B	Wildlife Hazard Management plan changed 17 July 2018 Approved 7 Aug 2018

Original Date: <u>1 November 2004</u>



# **REVISION 2 LOG DESCRIPTION**

CHANGE	DESCRIPTION OF CHANGE
Distribution List	Change to Airport Chief and Airport police Name SLCPD Airport Division, Airport
	superintendent now change to Assistant Directors. Approved 7 Aug 2019
Section 303	Change in title of Operations Superintendent to Assistant Director Operations. Approved 7 Aug 2019
Section 313	Change from Passur to Service Management System provider, Change in title from Operations Superintendent to Assistant Director Operations. Approved 7 Aug 2019
Section 319	Change in title from Operations Superintendent to Assistant Director Operations Approved 7 Aug 2019
Section 329	Updated Personal List for Movement area Access. Approved 7 Aug 2019
Section 333	Change from Airport police to Salt Lake City Police Airport Division. Approved 7 Aug 2019
Appendix C	Airfield Sign Plan. Approved 7 Aug 2019



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# **REVISION 3 LOG DESCRIPTION**

CHANGE	DESCRIPTION OF CHANGE
ACM Title Page	Updated the Executive Directors name and signature. Picture changed. Approved 7 May 2021.
Table of Contents	Section Attachment 313 page numbers updated. Section Attachments 313-1-4 and 339- 1 changed from OpsNet to PASSUR SLC Communicator web page, page numbers updated accordingly. Section 313 section attachment page numbers updated to reflect a spacing correction that changed the page numbers. Approved 7 May 2021.
Distribution List	Change of title from Airport Operations Assistant Directors to Assistant Operations Directors. Added AeroMexico. Removed Air Canada. Removed "formerly ASIG" from Menzies. Approved 7 May 2021.
Section 301	Removed the training record tracking from and placed the updated tracking form on 303-5. This change combined pages 301-2 and 301-3. Approved 7 May 2021.
Section 303	303-2 Lines of succession and Attachment 303-1 title changes from Assistant Director of Operations to Assistant Operations Director. Attachment 303-2 added the Operations training record tracking form. Approved 7 May 2021.
Section 305	305-2 Maintenance of paved areas updated to detail current work order process. 305-3 Taxiway W removed. Approved 7 May 2021.
Section 311	311-4 Removed description of reflectors on taxiway H as a lighting system has taken its place. Location of Airport beacon updated. Approved 7 May 2021.
Section 313	Airport Service Management System changed to PASSUR SLC Communicator web page where it appears multiple times throughout the section. Airport Operations Assistant Directors title changed to Assistant Operations Directors where it appears multiple times throughout the section. Added "Runway Condition Code Values" next to the abbreviation RwyCC where it first appears in the section 313-2. 313-11 Snow Control Center paragraph updated to show new location and available equipment. 313-15 updated attachment page numbers that changed with spacing correction. 313-29 Updated attachment page numbers that changed with spacing correction. 313-12 Spots 20 and 21 ramp access was removed from priority 2 as they no longer exist. F-4 changed from priority 1 from priority 2. Updated Attachment 313-1-4 to PASSUR SLC Communicator web page snapshot. Approved 7 May 2021.
Section 315	315-1 updated Index E determination based on A330-300 from B767-400. Approved 7 May 2021.
Section 317	317-3, Attachment 317-1 "Red 9" changed to "Red 7". The asterisk and correlating information was removed, "Red 7" and "Red 8" are now used as backup rigs and both apparatus are now equipped with AFFF. Approved 7 May 2021.

Original Date: <u>1 November 2004</u>

Section 319	319-4 title changes from Assistant Director of Operations to Assistant Operations Director, OpsNet changed to PASSUR SLC Communicator web page. 319-5 title changes from Assistant Director of Operations to Assistant Operations Director. 319-6 Reference to SLC ARFF Training Center changed to an FAA approved ARFF Training Facility due to decommission of onsite training center. Approved 7 May 2021.
Section 327	327-2 and 327-3 changes made to reflect current reporting and tracking procedures. Attachment 327-1 Self-Inspection checklist and Current 139 Work Order tracking form updated. Approved 7 May 2021.
Section 329	329-3 Safety area wording removed as it is part of the movement area and violation procedures added to underlined subject. 329-5-6 Paragraph 12 added to address runway incursion and surface incident procedures and disciplinary action. 329-11 Aircraft Movement Areas map updated. 329-12 title changed from Airport Operations Assistant Directors to Assistant Operations Directors. 329-12 and 329-13 Authorized personnel for movement area access updated. Approved 7 May 2021.
Section 339	339-1 changed PASSUR Communicator Airfield Condition Report web page to PASSUR SLC Communicator web page. 339-2 FAA NAMES web site corrected to read FAA NOTAM Manager web site. PASSUR OpsNet changed to PASSUR SLC Communicator web page. Approved 7 May 2021.
Appendix A	A1, A2, A3, and A5 maps updated. Approved 7 May 2021.
Appendix B	Wildlife Hazard Management Plan updated. Changes made to the prioritized list of actions. Approved 7 May 2021.
Appendix C	Current Airfield Sign Plan. Approved 7 May 2021.
AEP	Airport Emergency Plan revised. Approved 7 May 2021.

Revision Date: <u>3 March 2023</u>



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## **REVISION 4 LOG DESCRIPTION**

CHANGE **DESCRIPTION OF CHANGE** ACM Title Page Updated title page image, Salt Lake City International Airport Logo, and Executive Directors signature. Approved 31 May 2022. Table of Contents Attachment 339-1 removed on page iii. Approved 31 May 2022. Distribution List Updated to show access to Airport Certification Manual available through the Airport's website. Added Eurowings and Spirit Airlines. Revision log layout updated. Approved 31 May 2022. Section 305 305-2 Maintenance of paved areas updated to detail new work order process. Approved 31 May 2022. Section 311 311-3 reference to LAHSO operations for runways 14/32 & 17/35 removed, 311-4 Lighting discrepancy notification method to FAA Maintenance updated. 311-5 Airport beacon location updated. Approved 31 May 2022. Section 317 Attachment 317-1 ARFF equipment list updated. Approved 31 May 2022. Section 319 319-7 Notification procedures added to manage ARFF communication during unplanned ATCT closures. Approved 31 May 2022. Section 327 Updated to reflect current reporting and tracking procedures. Attachment 327-1 Self-Inspection checklist and current 139 work order tracking form updated. Approved 31 May 2022. Section 329 Updated training requirements and included tow personnel AMA training to receive a Tow Badge, speed on AMA removed, surface incident and runway incursion disciplinary actions updated, updated AMA map with current layout, LOA personnel list removed and mention of a list of qualified employees that have access to the movement area maintained by an Airport Operations Manager – Airfield. Approved 31 May 2022. Section 339 References to PASSUR removed including attachment 339-1. Approved 31 May 2022. Appendix A A1, A2, A3, A4, and A5 cover pages and maps updated. Approved 31 May 2022. Appendix C C2 cover page and page 4 updated. Approved 31 May 2022.

Original Date: <u>1 November 2004</u>



## **REVISION 5 LOG DESCRIPTION**

CHANGE

#### **DESCRIPTION OF CHANGE**

Table of Contents All	Section attachments page numbers updated for Section 313 on page iii.
Distribution List All	Updated to show that flash drives can be used to distribute electronic copies of the manual.
Section 205 Subpart C All	C-4, Airport Certification and Safety Inspector address updated.
Section 305 All	305-3 Runway 14/32 and 16L/34R runway lengths revised.
Section 311 All	311-3 Hold position marking for Runway 14/32 distance from centerline corrected. ILS Surface Painted Holding Position Signs added to markings denoting ILS critical areas.
Section 313 All	Removed references to Saab friction testers. 313-5 page numbers updated for attachments. 313-8 added Weathernet to SIC list. 313-10 Triggers for initiating snow removal revised. 313-15 NOTAM name change updated. 313-21 removed reference to use PASSUR to report conditions. 313-24 removed first paragraph of 5.3 regarding friction assessment reports. 313-25 removed Airport operates two Saab friction testers and NOTAM to be issued for Saabs out of service. Revised paragraph on when to conduct friction tests. Removed Saab name from reference to calibrating friction testers. 313-27 Added apron to list of airfield surfaces being maintained in a safe operating condition. 313-28 5.10 removed reference to input field conditions to PASSUR. 313-29 page numbers updated for attachments. 313-31 Airport owned snow removal assets list updated.
Section 317 All	Attachment 317-1 ARFF Equipment list updated to include model year of vehicles, agent capacity and discharge rates also updated, Red 7 removed.
Section 329 All	329-6 runway incursion and surface incident procedures and disciplinary action paragraphs revised. 329-11 Updated AMA map.
Appendix A	A1, A2, A3, A4, and A5 cover pages and maps updated.
Appendix C2	Page 10 updated to show removal of sign 54 K8 directional sign.

Original Date: <u>1 November 2004</u>



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# **REVISION 6 LOG DESCRIPTION**

CHANGE	DESCRIPTION OF CHANGE
Section 309 All	Hold short line distances table removed. Taxiway safety areas updated to show which taxiways are group V and which are group IV. Revised paragraph 2 and removed paragraph 6 under required conditions of safety areas

Original Date:	1 November 2004

Federal Aviation Administration	
Northwest Mountain Region Airports Division	
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# SUBPART A - GENERAL

#### Section 139.1 – APPLICABILITY

- (a) This part prescribes rules governing the certification and operation of airports in any State of the United States, the District of Columbia, or any territory or possession of the United States serving any—
  - (1) Scheduled passenger-carrying operations of an air carrier operating aircraft configured for more than 9 passenger seats, as determined by the regulations under which the operation is conducted or the aircraft type certificate issued by a competent civil aviation authority; and
  - (2) Unscheduled passenger-carrying operations of an air carrier operating aircraft configured for at least 31 passenger seats, as determined by the regulations under which the operation is conducted or the aircraft type certificate issued by a competent civil aviation authority.
- (b) This part applies to those portions of a joint-use or shared-use airport that are within the authority of a person serving passenger-carrying operations defined in paragraphs (a)(1) and (a)(2) of this section.
- (c) This part does not apply to-
  - (1) Airports serving scheduled air carrier operations only by reason of being designated as an alternate airport;
  - (2) Airports operated by the United States;
  - (3) Airports located in the State of Alaska that only serve scheduled operations of small air carrier aircraft and do not serve scheduled or unscheduled operations of large air carrier aircraft;
  - (4) Airports located in the State of Alaska during period of time when not serving operations of large air carrier aircraft; or
  - (5) Heliports.

#### Section 139.3 – DELEGATION OF AUTHORITY

The authority of the Administrator to issue, deny, and revoke Airport Operating Certificates is delegated to the Associate Administrator for Airports, Director of Airports Safety and Standards, and Regional Airports Division Managers.

#### Section 139.5 – DEFINITIONS

The following are definitions of terms used in this part:

**AFFF** means aqueous film forming foam agent.

<u>Air carrier aircraft</u> means an aircraft that is being operated by an air carrier and is categorized as either a large air carrier aircraft if designed for at least 31 passenger seats or a small air carrier aircraft if designed for more than 9 passenger seats but less than 31 passenger seats, as determined by the aircraft type certificate issued by a competent civil aviation authority.

Original Date: 1 November 2004

<u>Air carrier operation</u> means the takeoff or landing of an air carrier aircraft and includes the period of time from 15 minutes before until 15 minutes after the takeoff or landing.

<u>Airport</u> means an area of land or other hard surface, excluding water that is used or intended to be used for the landing and takeoff of aircraft, including any buildings and facilities.

<u>Airport Operating Certificate</u> means a certificate, issued under this part, for operation of a Class I, II, III, or IV airport.

<u>Average daily departures</u> means the average number of scheduled departures per day of air carrier aircraft computed on the basis of the busiest 3 consecutive calendar months of the immediately preceding 12 consecutive calendar months. However, if the average daily departures are expected to increase, then "average daily departures" may be determined by planned rather than current activity, in a manner authorized by the Administrator.

**<u>Certificate holder</u>** means the holder of an Airport Operating Certificate issued under this part.

<u>Class I airport</u> means an airport certificated to serve scheduled operations of large air carrier aircraft that can also serve unscheduled passenger operations of large air carrier aircraft and/or scheduled operations of small air carrier aircraft.

<u>Class II airport</u> means an airport certificated to serve scheduled operations of small air carrier aircraft and the unscheduled passenger operations of large air carrier aircraft. A Class II airport cannot serve scheduled large air carrier aircraft.

<u>Class III airport</u> means an airport certificated to serve scheduled operations of small air carrier aircraft. A Class III airport cannot serve scheduled or unscheduled large air carrier aircraft.

<u>Class IV airport</u> means an airport certificated to serve unscheduled passenger operations of large air carrier aircraft. A Class IV airport cannot serve scheduled large or small air carrier aircraft.

<u>Clean agent</u> means an electrically non-conducting volatile or gaseous fire extinguishing agent that does not leave a residue upon evaporation and has been shown to provide extinguishing action equivalent to halon 1211 under test protocols of FAA Technical Report DOT/FAA/AR-95/87.

<u>Heliport</u> means an airport, or an area of an airport, used or intended to be used for the landing and takeoff of helicopters.

**Index** means the type of aircraft rescue and firefighting equipment and quantity of fire extinguishing agent that the certificate holder must provide in accordance with Section 139.315.

<u>Joint-use airport</u> means an airport owned by the Department of Defense, at which both military and civilian aircraft make shared use of the airfield.

Original Date: <u>1 November 2004</u>

Revision Date: 24 August 2017

<u>Movement area</u> means the runways, taxiways, and other areas of an airport that are used for taxiing, takeoff, and landing of aircraft, exclusive of loading ramps and aircraft parking areas.

<u>Regional Airports Division Manager</u> means the airports division manager for the FAA region in which the airport is located.

<u>Safety area</u> means a defined area comprised of either a runway or taxiway and the surrounding surfaces that is prepared or suitable for reducing the risk of damage to aircraft in the event of an undershoot, overshoot, or excursion from a runway or the unintentional departure from a taxiway.

<u>Scheduled operation</u> means any common carriage passenger-carrying operation for compensation or hire conducted by an air carrier for which the air carrier or its representatives offers in advance the departure location, departure time, and arrival location. It does not include any operation that is conducted as a supplemental operation under 14 CFR part 121 or public charter operations under 14 CFR part 380.

<u>Shared-use airport</u> means a U.S. Government-owned airport that is co-located with an airport specified under Section 139.1(a) and at which portions of the movement areas and safety areas are shared by both parties.

<u>Unscheduled operation</u> means any common carriage passenger-carrying operation for compensation or hire, using aircraft designed for at least 31 passenger seats, conducted by an air carrier for which the departure time, departure location, and arrival location are specifically negotiated with the customer or the customer's representative. It includes any passenger-carrying supplemental operation conducted under 14 CFR part

121 and any passenger-carrying public charter operation conducted under 14 CFR part 380.

<u>Wildlife hazard</u> means a potential for a damaging aircraft collision with wildlife on or near an airport. As used in this part, "wildlife" includes feral animals and domestic animals out of the control of their owners.

**NOTE:** Special Statutory Requirement to Operate To or From a Part 139 Airport. Each air carrier that provides—in an aircraft designed for more than 9 passenger seats— regularly scheduled charter air transportation for which the public is provided in advance a schedule containing the departure location, departure time and arrival location of the flight, must operate to and from an airport certificated under Part 139 of this chapter in accordance with 49 U.S.C. 41104(b). That statutory provision contains stand-alone requirements for such air carriers and special exceptions for operations in Alaska and outside the United States. Certain operations by air carriers that conduct public charter operations under 14 CFR part 380 are covered by the statutory requirements to operate to and from part 139 airports. See 49 U.S.C. 41104(b).

#### Section 139.7 – METHODS AND PROCEDURES FOR COMPLIANCE

Certificate holders must comply with requirements prescribed by subparts C and D of this part in a manner authorized by the Administrator. FAA Advisory Circulars contain methods and procedures for compliance with this part that are acceptable to the Administrator.

Original Date: <u>1 November 2004</u>

# SUBPART B - CERTIFICATION

#### Section 139.101 – GENERAL REQUIREMENTS

- (a) Except as otherwise authorized by the Administrator, no person may operate an airport specified under § 139.1 of this part without an Airport Operating Certificate or in violation of that certificate, the applicable provisions, or the approved Airport Certification Manual.
- (b) Each certificate holder must adopt and comply with an Airport Certification Manual as required under § 139.203.
- (c) Persons required to have an Airport Operating Certificate under this part must submit their Airport Certification Manual to the FAA for approval, in accordance with the following schedule:
  - (1) Class I airports 6 months after June 9, 2004
  - (2) Class II, III, and IV airports 12 months after June 9, 2004

#### **PURPOSE**

This manual provides direction and lines of responsibility in the day-to-day operation of the Salt Lake City International Airport (herein referred to as "SLC" or "Airport"). It details operating procedures for both routine matters and unusual circumstances or emergencies that may arise. The contents of this manual comply with the Federal Aviation Administration rules and regulations Title 14 CFR Part 139 effective June 9, 2004.

#### AIRPORT INFORMATION

Under this regulation, SLC operates as a **Class I** airport with scheduled air carrier service with over 30 passenger seats, unscheduled passenger operations of large air carrier aircraft, and scheduled operations of small air carrier aircraft. SLC is owned by Salt Lake City Corporation and operated by the Department of Airports.

#### **MAILING ADDRESS**

Salt Lake City Department of Airports P.O. Box 145550 Salt Lake City, UT 84114-5550

#### Section 139.111 – EXEMPTIONS

- (a) An applicant or a certificate holder may petition the Administrator under 14 CFR Part 11, General Rulemaking Procedures, of this chapter for an exemption from any requirement of this part.
- (b) Under 49 U.S.C. 44706(c), the Administrator may exempt an applicant or a certificate holder that enplanes annually less than one-quarter of 1 percent of the total number of passengers enplaned at all air carrier airports from all, or part, of the aircraft rescue and firefighting equipment requirements of this part on the grounds that compliance with those requirements, is, or would be, unreasonably costly, burdensome, or impractical.
  - (1) Each petition filed under this paragraph must—
    - (i) Be submitted in writing at least 120 days before the proposed effective date of the exemption;
    - (ii) Set forth the text of §§ 139.317 or 139.319 from which the exemption is sought;
    - (iii) Explain the interest of the certificate holder in the action requested, including the nature and extent of relief sought; and
    - (iv) Contain information, views, or arguments that demonstrate that the requirements of §§ 139.317 or 139.319 would be unreasonably costly, burdensome, or impractical.
  - (2) Information, views, or arguments provided under paragraph (b)(1) of the

section must include the following information pertaining to the airport for which the Airport Operating Certificate is held:

- (i) An itemized cost to comply with the requirement from which the exemption is sought;
- (ii) Current staffing levels;
- (iii) The current annual financial report, such as a single audit report or FAA Form 5100-127, Operating and Financial Summary;
- (iv) Annual passenger enplanement data for the previous 12 calendar months;
- (v) The type and frequency of air carrier operations served; (vi) A
- history of air carrier service;

(vii) Anticipated changes to air carrier service.

- (c) Each petition filed under this section must be submitted in duplicate to the-
  - (1) Regional Airports Division Manager and

(2) U.S. Department of Transportation's Docket Management System, as specified under 14 CFR part 11.

#### **EXEMPTIONS**

Salt Lake City International Airport does not have exemptions.

#### Section 139.113 – DEVIATIONS

In emergency conditions requiring immediate action for the protection of life or property, the certificate holder may deviate from any requirement of subpart D of this part, or the Airport Certification Manual, to the extent required to meet that emergency. Each certificate holder who deviates from a requirement under this section must, within 14 days after the emergency, notify the Regional Airports Division Manager of the nature, extent, and duration of the deviation. When requested by the Regional Airports Division Manager, the certificate holder must provide this notification in writing.

#### **DEVIATIONS**

In an emergency condition requiring immediate action for the protection of life or property, the Airport may deviate from operational requirements of Title 14 CFR Part 139, Subpart D, or the Airport Certification Manual, to the extent required to meet that emergency.

#### REPORTING

In the event of a deviation, the Airport shall, within 14 days after the emergency, notify the FAA Regional Airports Division Manager of the nature, extent, and duration of the deviation, as specified in this section. The Airport shall provide this notification in writing.

# Section 139.115 – FALSIFICATION, REPRODUCTION, OR ALTERATION OF APPLICATIONS, CERTIFICATES, REPORTS, OR RECORDS.

- (a) No person shall make or cause to be made:
  - (1) Any fraudulent or intentionally false statement on any application for a certificate or approval under this part.
  - (2) Any fraudulent or intentionally false entry in any record or report that is required to be made, kept, or used to show compliance with any requirement under this part.
  - (3) Any reproduction, for a fraudulent purpose, of any certificate or approval issued under this part.
  - (4) Any alteration, for a fraudulent purpose, of any certificate or approval issued under this part.
- (b) The commission by any owner, operator, or other person acting on behalf of a certificate holder of an act prohibited under paragraph (a) of this section is a basis for suspending or revoking any certificate or approval issued under this part and held by that certificate holder and any other certificate issued under this title and held by the person committing the act.

## SUBPART C - AIRPORT CERTIFICATION MANUAL

#### Section 139.201 – GENERAL REQUIREMENTS

- (a) No person may operate an airport subject to this part unless that person adopts and complies with an Airport Certification Manual, as required under this part, that—
  - (1) Has been approved by the Administrator;
  - (2) Contains only those items authorized by the Administrator;
  - (3) Is in printed form and signed by the certificate holder acknowledging the certificate holder's responsibility to operate the airport in compliance with the Airport Certification Manual approved by the Administrator; and
  - (4) Is in a form that is easy to revise and organized in a manner helpful to the preparation, review, and approval processes, including a revision log. In addition, each page or attachment must include the date of the Administrator's initial approval or approval of the latest revision.
- (b) Each holder of an Airport Operating Certificate must—
  - (1) Keep its Airport Certification Manual current at all times;
  - (2) Maintain at least one complete and current copy of its approved Airport Certification Manual on the airport, which will be available for inspection by the Administrator; and
  - (3) Furnish the applicable portions of the approved Airport Certification Manual to airport personnel responsible for its implementation.
- (c) Each certificate holder must ensure that the Regional Airports Division Manager is provided a complete copy of its most current approved Airport Certification Manual, as specified under paragraph (b)(2) of this section, including any amendments approved under § 139.205.
- (d) FAA Advisory Circulars contain methods and procedures for the development of Airport Certification Manuals that are acceptable to the Administrator.

#### COMPLIANCE

The Airport will—

- 1) Keep the Airport Certification Manual (ACM) current at all times. The Executive Director is responsible for maintaining the ACM.
- 2) Maintain at least one complete and current copy of the approved ACM at the airport, which will be available for inspection by the FAA. This copy will be maintained in the Operations Division offices.

Original Date: <u>1 November 2004</u>



- 3) Furnish the applicable portions of the FAA-approved ACM to airport personnel responsible for its implementation (see Distribution List).
- 4) Ensure the FAA Regional Airports Division is provided a complete copy of the most current ACM including any approved amendments.

#### Section 139.203 – CONTENTS OF AIRPORT CERTIFICATION MANUAL

- (a) Except as otherwise authorized by the Administrator, each certificate holder must include in the Airport Certification Manual a description of operating procedures, facilities and equipment, responsibility assignments, and any other information needed by personnel concerned with operating the airport in order to comply with applicable provisions of subpart D of this part and paragraph (b) of this section.
- (b) Except as otherwise authorized by the Administrator, the certificate holder must include in the Airport Certification Manual the following elements, as appropriate for its class:
  - (1) Lines of succession of airport operational responsibility.
  - (2) Each current exemption issued to the airport from the requirements of this part.
  - (3) Any limitations imposed by the Administrator.
  - (4) A grid map or other means of identifying locations and terrain features on and around the airport that are significant to emergency operations.
  - (5) The location of each obstruction required to be lighted or marked within the airport's area of authority.
  - (6) A description of each movement area available for air carriers and its safety areas, and each road described in § 139.319(k) that serves it.
  - (7) Procedures for avoidance of interruption or failure during construction work of utilities serving facilities or NAVAIDS that support air carrier operations.
  - (8) A description of the system for maintaining records, as required under § 139.301.
  - (9) A description of personnel training, as required under § 139.303.
  - Procedures for maintaining the paved areas, as required under § 139.305. (11)
     Procedures for maintaining the unpaved areas, as required under § 139.307. (12)
     Procedures for maintaining the safety areas, as required under § 139.309.
  - (13) A plan showing the runway and taxiway identification system, including the location and inscription of signs, runway markings, and holding position markings, as required under § 139.311.
  - (14) A description of, and procedures for maintaining, the marking, signs, and lighting systems, as required under § 139.311.
  - (15) A snow and ice control plan, as required under § 139.313.
  - (16) A description of the facilities, equipment, personnel, and procedures for meeting the aircraft rescue and firefighting requirements, in accordance with §§ 139.315, 139.317 and 139.319.
  - (17) A description of any approved exemption to aircraft rescue and firefighting requirements, as authorized under § 139.111.
  - (18) Procedures for protecting persons and property during the storing, dispensing, and handling of fuel and other hazardous substances and materials, as required under § 139.321.

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- (19) A description of, and procedures for maintaining, the traffic and wind direction indicators, as required under § 139.323.
- (20) An emergency plan as required under § 139.325.
- (21) Procedures for conducting the self-inspection program, as required under § 139.327.
- (22) Procedures for controlling pedestrians and ground vehicles in movement areas and safety areas, as required under § 139.329.
- (23) Procedures for obstruction removal, marking, or lighting, as required under § 139.331.
- (24) Procedures for protection of NAVAIDS, as required under § 139.333. (25)A description of public protection, as required under § 139.335.
- Procedures for wildlife hazard management, as required under § 139.337. (27)
   Procedures for airport condition reporting, as required under § 139.339.
- (28) Procedures for identifying, marking, and lighting construction and other unserviceable areas, as required under § 139.341.
- (29) Any other item that the Administrator finds is necessary to ensure safety in air transportation.

#### Section 139.205 – AMENDMENT OF AIRPORT CERTIFICATION MANUAL

- (a) Under Section 139.3, the Regional Airports Division Manager may amend any Airport Certification Manual approved under this part, either— (1) Upon application by the certificate holder or
  - (2) On the Regional Airports Division Manager's own initiative, if the Regional Airports Division Manager determines that safety in air transportation requires the amendment.
- (b) A certificate holder must submit in writing a proposed amendment to its Airport Certification Manual to the Regional Airports Division Manager at least 30 days before the proposed effective date of the amendment, unless a shorter filing period is allowed by the Regional Airports Division Manager.
- (c) At any time within 30 days after receiving a notice of refusal to approve the application for amendment, the certificate holder may petition the Associate Administrator for Airports to reconsider the refusal to amend.
- (d) In the case of amendments initiated by the FAA, the Regional Airports Division Manager notifies the certificate holder of the proposed amendment, in writing, fixing a reasonable period (but not less than 7 days) within which the certificate holder may submit written information, views, and arguments on the amendment. After considering all relevant material presented, the Regional Airports Division Manager notifies the certificate holder within 30 days of any amendment adopted or rescinds the notice. The amendment becomes effective not less than 30 days after the certificate holder receives notice of it, except that, prior to the effective date, the certificate holder may petition the Associate Administrator for Airports to reconsider the amendment, in which case its effective date is stayed pending a decision by the Associate Administrator for Airports.

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(e) Notwithstanding the provisions of paragraph (d) of this section, if the Regional Airports Division Manager finds there is an emergency requiring immediate action with respect to safety in air transportation, the Regional Airports Division Manager may issue an amendment without stay on the date the certificate holder receives notice of it. In such a case, the Regional Airports Division Manager incorporates the finding of the emergency and a brief statement of the reasons for the finding in the notice of the amendment. Within 30 days after the issuance of such an emergency amendment, the certificate holder may petition the Associate Administrator for Airports to consider either the finding of an emergency, the amendment itself, or both. This petition does not automatically stay the effectiveness of the emergency amendment.

#### COMPLIANCE

The following procedure is in effect for amendments to the Airport Certification Manual. 1) At least two copies of the amendment, in color if applicable, will be submitted to:

Airport Certification and Safety Inspector 2200 S. 216<sup>th</sup> Street Des Moines, WA 98198

- 2) Amendments to the ACM will be submitted at least 30 days prior to the proposed effective date. They will be submitted as needed to maintain currency.
- 3) The ACM Page Amendment Log will be completed and submitted with each amendment.
- 4) Each page of the amendment, including the Page Amendment Log, will have the date of the amendment and the original approval date of the ACM.
- 5) Upon FAA approval, all printed copies of the manual will be updated. The electronic copy of the ACM on the Airport's Intranet will be updated and notifications of the update will be made to users of the manual. Electronic copies of the approved amendment will be made for those on the Distribution List that do not have access to the Airport's Intranet and distributed as needed.



# SUBPART D - OPERATIONS

- Section 303 Personnel
- Section 305 Paved Areas
- Section 307 Unpaved Areas
- Section 309 Safety Areas
- Section 311 Marking, Signs and Lighting
- Section 313 Snow and Ice Control
- Section 315 Aircraft Rescue and Firefighting Index Determination
- Section 317 Aircraft Rescue and Firefighting Equipment and Agents
- Section 319 Aircraft Rescue and Firefighting Operational Requirements
- Section 321 Handling and Storing Hazardous Substances and Materials
- Section 323 Traffic and Wind Direction Indicators
- Section 325 Airport Emergency Plan
- Section 327 Self Inspection Program
- Section 329 Pedestrians and Ground Vehicles
- Section 331 Obstructions
- Section 333 Protection of NAVAIDS
- Section 335 Public Protection
- Section 337 Wildlife Hazard Management
- Section 339 Airport Condition Reporting
- Section 341 Identifying, Marking and Lighting Construction and Other Unserviceable Areas
- Section 343 Non-complying Conditions

# SECTION 301 - RECORDS

#### Section 139.301 - RECORDS

In a manner authorized by the Administrator, each certificate holder must-

- (a) Furnish upon request by the Administrator all records required to be maintained under this part.
- (b) Maintain records required under this part as follows:
  - (1) <u>Personnel training.</u> Twenty-four consecutive calendar months for personnel training records, as required under §§ 139.303 and 139.327.
  - (2) <u>Emergency personnel training</u> Twenty-four consecutive calendar months for aircraft rescue and firefighting and emergency medical service personnel training records, as required under § 139.319.
  - (3) <u>Airport fueling agent inspection</u>. Twelve consecutive calendar months for records of inspection of airport fueling agents, as required under § 139.321.
  - (4) <u>Fueling personnel training</u>. Twelve consecutive calendar months for training records of fueling personnel, as required under § 139.321.
  - (5) <u>Self-inspection</u>. Twelve consecutive calendar months for self-inspection records, as required under § 139.327.
  - (6) <u>Movement areas and safety areas training</u>. Twenty-four consecutive calendar months for records of training given to pedestrians and ground vehicle operators with access to movement areas and safety areas, as required under § 139.329.

(7) <u>Accident and incident</u>. Twelve consecutive calendar months for each accident or incident in movement areas and safety areas involving an air carrier aircraft and/or ground vehicle, as required under § 139.329.

- (8) <u>Airport condition</u>. Twelve consecutive calendar months for records of airport condition information dissemination, as required under § 139.339.
- (c) Make and maintain any additional records required by the Administrator, this part, and the Airport Certification Manual.

#### **GENERAL**

The Salt Lake City Department of Airports maintains the specified records in accordance with the various sections listed above. Records are maintained on Excel spreadsheets, computer records, hard copies, or a combination of these. Details of each record will be found in the section requiring such record.

#### FURNISH RECORDS

Upon request of the Administrator, the Airport will furnish records listed under this section.

Original Date: <u>1 November 2004</u>

Revision Date: 27 November 2020

FAA Approval:

#### LIST OF REQUIRED RECORDS

The Airport will maintain the following records:

- 1) **Personnel Training** 24 consecutive calendar months for personnel training records under Sections 303 and 327.
- 2) **Emergency Personnel Training** 24 consecutive calendar months for ARFF and emergency medical service personnel training records under Section 319.
- 3) Airport Fueling Agent Supervisor and Employee Training 12 consecutive calendar months for confirmation of training of fueling personnel under Section 321.
- 4) **Self-Inspection** 12 consecutive calendar months for self-inspection records under Section 327.
- 5) Movement Areas and Safety Training 24 consecutive calendar months, after termination of employee's access to movement and safety areas, for records of training given to pedestrians and ground vehicle operators under Section 329.
- Accident and Incident 12 consecutive calendar months for each accident or incident in movement areas or safety areas involving air carrier aircraft and/or ground vehicles under Section 329.
- 7) **Airport Condition** 12 consecutive calendar months for records of airport condition information dissemination under Section 339.

#### ADDITIONAL RECORDS

The Airport will make and maintain any additional records required by the Administrator.



## **SECTION 303 - PERSONNEL**

#### Section 139.303 – PERSONNEL

In a manner authorized by the Administrator, each certificate holder must-

- (a) Provide sufficient and qualified personnel to comply with the requirements of its Airport Certification Manual and the requirements of this part.
- (b) Equip personnel with sufficient resources needed to comply with the requirements of this part.
- (c) Train all persons who access movement areas and safety areas and perform duties in compliance with the requirements of the Airport Certification Manual and requirements of this part. This training must be completed prior to the initial performance of such duties and at least once every 12 consecutive calendar months. The curriculum for initial and recurrent training must include at least the following areas:
  - (1) Airport familiarization, including airport marking, lighting, and signs system.
  - (2) Procedures for access to, and operation in, movement areas and safety areas, as specified under § 139.329.
  - (3) Airport communications, including radio communication between the air traffic control tower and personnel, use of the common traffic advisory frequency if there is no air traffic control tower or the tower is not in operation, and procedures for reporting unsafe airport conditions.
  - (4) Duties required under the Airport Certification Manual and the requirements of this part.
  - (5) Any additional subject areas required under § 139.319, 139.321, 139.327, 139.329, 139.337, and 139.339, as appropriate.
- (d) Make a record of all training completed after June 9, 2004, by each individual in compliance with this section that includes, at a minimum, a description and date of training received. Such records must be maintained for 24 consecutive calendar months after completion of training.
- (e) As appropriate, comply with the following training requirements of this part:
  - (1) § 139.319, Aircraft rescue and firefighting; Operational requirements;
  - (2) § 139.321, Handling and storage of hazardous substances and materials;
  - (3) § 139.327, Self-inspection program
  - (4) § 139.329, Pedestrians and Ground Vehicles
  - (5) § 139.337, Wildlife hazard management, and
  - (6) § 139.339, Airport condition reporting.
- (f) Use an independent organization, or designee, to comply with the requirements of its Airport Certification Manual and the requirements of this part only if—

   (1) Such an arrangement is authorized by the Administrator;

(2) A description of responsibilities and duties that will be assumed by an independent organization or designee is specified in the Airport Certification Manual; and

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(3) The independent organization or designee prepares records required under this part in sufficient detail to assure the certificate holder and the Administrator of adequate compliance with the Airport Certification Manual and the requirements of this part.

#### LINES OF SUCCESSION OF OPERATIONAL RESPONSIBILITY

The operational line of authority for the Salt Lake City Department of Airports is:

- 1) Executive Director of Airports
- 2) Director of Operations
- 3) Assistant Operations Director
- 4) Airport Operations Manager-Airfield

#### PERSONNEL REQUIREMENTS

The Airport will comply with the following personnel requirements:

- 1) Maintain sufficient qualified personnel to comply with the requirements of the ACM and the requirements of Title 14 CFR Part 139.
- 2) Equip personnel with sufficient resources needed to comply with the requirements of Title 14 CFR Part 139.
- 3) Train all personnel who access the movement areas and safety areas and perform duties in compliance with the requirements of the ACM and Part 139. This training shall be completed before initial performance of duties. Recurrent training shall be completed at least once every 12 consecutive calendar months thereafter. A table of personnel requiring training is included as Attachment 303-1. The curriculum for initial and recurrent training shall include at least the following areas:
  - (a) Airport familiarization, including airport marking, lighting and sign systems;
  - (b) Procedures for access to, and operation in, movement areas and safety areas under Section 329;
  - (c) Airport communications, including company radio and applicable ground and tower frequencies. Unsafe airport conditions will be reported to the ATCT and Airport Operations personnel for correction.
  - (d) Duties required under the Airport Certification Manual and the requirements of Part 139;
  - (e) Any additional subject areas required under Part 139 Sections 319, 321, 327, and 339, as appropriate.
- 4) Make a record of all training completed by each individual specific to their assigned job description and responsibilities to maintain compliance with this section including, at a

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minimum, a description and date of training received. An example of the tracking form for Operations is included as Attachment 303-2. Such records shall be maintained for 24 consecutive calendar months after completion of training.

5) As appropriate, comply with the following training requirements of Part 139: (a)

Section 319 – Aircraft Rescue and Firefighting: Operational Requirements

- (b) Section 321 Handling and Storage of Hazardous Substances and Materials
- (c) Section 327 Self-Inspection Program
- (d) Section 329 Pedestrian and Ground Vehicles
- (e) Section 337 Wildlife Hazard Management
- (f) Section 339 Airport Condition Reporting

Training records will be maintained by the division responsible for the specific training, in accordance with the guidelines of this paragraph. The Director of each division is responsible for the proper maintenance of the initial and recurrent training and re-training records.



Original Date: <u>1 November 2004</u>

# ATTACHMENT 303-1

Title	303(c) ACM Duties and Access to AMA	319(1)(2) ARFF	319(i)(4) Emergency Medical Services	321(b)(6) Hazardous Materials	325(g)(3) Emergency Plan	327(b)(3) Self Inspection	329(e) Pedestrians and Ground Vehicles	337(f)(7) Wildlife Plan
Assistant Operations Director	Х				Х		Х	
Airport Ops Manager-Airfield	Х				Х	Х	Х	Х
Airport Ops Specialist-Airfield	Х				Х	Х	Х	Х
Airport Firefighter	Х	Х	Х	Х	Х		Х	
Airport Control Center	Х				Х			
Airfield Maintenance	Х				Х		Х	
	~							
Airfield Electrician	X				Х		Х	
					Х		X X	
Airfield Electrician	Х				X X			
Airfield Electrician Airport Engineer	X X						Х	
Airfield Electrician Airport Engineer Airport Division Police	X X X				x		Х	

# ATTACHMENT 303-2

#### Part 139 Training for Operations Tracking Form

		Salt Lak	e City Depart Airfield	ment of A employee				sion				
Salt Loke City Department of Airports		Airfield start date	Initial training	Spring training				Fall training				Comment
Name	Title			2017	2018	2019	2020	2017	2018	2019	2020	
	Assistant Operations Director											
	Airfield Operations Manager											
	Airfield Operations Manager											
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# SECTION 305- PAVED AREAS

#### Section 139.305 – PAVED AREAS

- (a) In a manner authorized by the Administrator, each certificate holder must maintain and promptly repair the pavement of, each runway, taxiway, loading ramp, and parking area on the airport that is available for air carrier use as follows:
  - (1) The pavement edges must not exceed 3 inches difference in elevation between abutting pavement sections and between pavement and abutting shoulders.
  - (2) The pavement must have no hole exceeding 3 inches in depth nor any hole the slope of which from any point in the hole to the nearest point at the lip of the hole is 45 degrees or greater, as measured from the pavement surface plane, unless, in either case, the entire area of the hole can be covered by a 5-inch diameter circle.
  - (3) The pavement must be free of cracks and surface variations that could impair directional control of air carrier aircraft, including any pavement crack or surface deterioration that produces loose aggregate or other contaminates.
  - (4) Except as provided in paragraph (b) of this section, mud, dirt, sand, loose aggregate, debris, foreign objects, rubber deposits, and other contaminants must be removed promptly and as completely as practicable.
  - (5) Except as provided in paragraph (b) of this section, any chemical solvent that is used to clean any pavement area must be removed as soon as possible, consistent with the instructions of the manufacturer of the solvent.
  - (6) The pavement must be sufficiently drained and free of depressions to prevent ponding that obscures markings or impairs safe aircraft operations.
- (b) Paragraphs (a)(4) and (a)(5) of this section do not apply to snow and ice accumulations and their control, including the associated use of materials, such as sand and deicing solutions.
- (c) FAA Advisory Circulars contain methods and procedures for the maintenance and configuration of paved areas that are acceptable to the Administrator.

#### **REQUIRED CONDITIONS OF PAVED AREAS**

Airport pavement areas available to air carriers, including aprons available for air carrier operations, shall be promptly repaired, and maintained as follows:

- 1) Pavement edges shall not exceed 3 inches difference in elevation between abutting pavement sections and between pavement and abutting areas.
- 2) Pavement shall have no holes exceeding 3 inches in depth, nor any hole the slope of which from any point in the hole to the nearest point at the lip of the hole is 45 degrees or greater as measured from the pavement surface plan, unless, in either case, the entire area of the hole can be covered by a 5" diameter circle.

Original Date: <u>1 November 2004</u>



- 3) The pavement shall be free of cracks and surface variations that could impair directional control of an air carrier aircraft. Any pavement crack or surface deterioration that produces loose aggregate or other contaminants shall be promptly repaired.
- 4) Mud, dirt, sand, loose aggregate, debris, foreign objects, rubber deposits, and other contaminants shall be removed promptly and as completely as practicable, except the associated use of materials such as sand and deicing solutions for snow and ice control.
- 5) Any chemical solvent that is used to clean any pavement area shall be removed as soon as possible, consistent with the instructions of the manufacturer of the solvent, except for the associated use of deicing solutions for snow and ice control.
- 6) Pavement shall be sufficiently drained and free of depressions to prevent ponding that obscures markings or impairs safe aircraft operations.

#### MAINTENANCE OF PAVED AREAS

- 1) Corrective action shall be initiated by Airport Operations and Maintenance personnel as soon as practical when any unsatisfactory conditions are found in the paved areas. Airport Operations personnel are responsible for ensuring the correction of any unsatisfactory conditions on paved areas. If the Airport Operations Manager- Airfield or his/her designee determines that an uncorrected condition of a paved area is unsafe for aircraft operations, a NOTAM will be issued, and the affected area will be closed to air carrier operations until the unsafe condition is corrected.
- 2) Any pavement discrepancies noted during the daily inspection period that require a closure, and/or a NOTAM will be annotated and flagged in the work order system by Airfield personnel.
- 3) All other discrepancies noted during subsequent routine inspections by Airfield Specialists and Airfield Managers will be directly entered into the Airport-wide work order system, and the affected entity will be advised with direct communication via company radio or telephone. Emergency findings will be dispatched to a Maintenance Supervisor via company radio or telephone at the time of the report and forwarded through the system to the section responsible for correction of the discrepancy. Maintenance will acknowledge receipt of the finding and take action to resolve the discrepancy. When the discrepancy is resolved and the finding has been completed, Maintenance personnel will update the status of the finding within the work order system. The status of any finding may be observed at any time through a query within the Airport-wide work order system. All findings that require a NOTAM will be flagged in the system for increased emphasis.
- 4) If the finding cannot be corrected in a timely manner, it will continue to be monitored and its priority raised as needed. If emergency repairs are required, Airport Maintenance will be dispatched, and corrective action will be taken.



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5) A NOTAM will be issued on any potentially hazardous discrepancy that cannot be immediately corrected.

#### PAVED AREAS AVAILABLE FOR AIR CARRIERS

Runway	Length	Width	Surface Type	A.L.S.
14/32	4,893'	150′	Asphalt, Grooved	HIRL, PAPI
17/35	9,596'	150'	Asphalt, Grooved	HIRL, CL, MALSR, TDZ, PAPI
16L/34R	12,002'	150'	Asphalt, Grooved	HIRL, CL, ALSF-II, TDZ, PAPI
16R/34L	12,000'	150'	Concrete, Grooved	HIRL, CL, ALSF-II, TDZ, PAPI

Air carrier movement areas at Salt Lake City include the following:

All taxiways are 75 feet wide and consist of a variety of asphalt and concrete.

- The following taxiways are west of Runway 16L/34R: A1 through A11, A, B, E, F, F1 through F4, U, V, G, H, Y, and H1 through H13.
- The following taxiways are east of Runway 16L/34R: J, L, L1, M, N, P, Q, R, S, K1 through K9, and K.

A vicinity map can be found in Appendix A1 for reference.

Original Date: <u>1 November 2004</u>



# SECTION 307 - UNPAVED AREAS

#### Section 139.307 – UNPAVED AREAS

- (a) In a manner authorized by the Administrator, each certificate holder must maintain, and promptly repair the pavement of, each gravel, turf, or other unpaved runway, taxiway, or loading ramp and parking area on the airport that is available for air carrier use as follows:
  - (1) No slope from the edge of the full-strength surfaces downward to the existing terrain must be steeper than 2:1.
  - (2) The full-strength surfaces must have adequate crown or grade to assure sufficient drainage to prevent ponding.
  - (3) The full-strength surfaces must be adequately compacted and sufficiently stable to prevent rutting by aircraft or the loosening or build-up of surface material, which could impair directional control of aircraft or drainage.
  - (4) The full-strength surfaces must have no holes or depressions that exceed 3 inches in depth and are of a breadth capable of impairing directional control or causing damage to an aircraft.
  - (5) Debris and foreign objects must be promptly removed from the surface.
- (b) FAA Advisory Circulars contain methods and procedures for the maintenance and configuration of unpaved areas that are acceptable to the Administrator.

Salt Lake City International Airport does not have unpaved runways or taxiways.

## SECTION 309 - SAFETY AREAS

#### Section 139.309 – SAFETY AREAS

- (a) In a manner authorized by the Administrator, each certificate holder must provide and maintain, for each runway and taxiway that is available for air carrier use, a safety area of at least the dimensions that—
  - (1) Existed on December 31, 1987, if the runway or taxiway had a safety area on December 31, 1987, and if no reconstruction or significant expansion of the runway or taxiway was begun on or after January 1m 1988; or
  - (2) Are authorized by the Administrator at the time the construction, reconstruction, or expansion began if construction, reconstruction or significant expansion of the runway or taxiway began on or after January 1, 1988.
- (b) Each certificate holder must maintain its safety areas as follows:
  - (1) Each safety area must be cleared and graded, and have no potentially hazardous ruts, humps, depressions, or other surface variations.
  - (2) Each safety area must be drained by grading or storm sewers to prevent water accumulation.
  - (3) Each safety area must be capable under dry conditions of supporting snow removal and aircraft rescue and firefighting equipment and of supporting the occasional passage of aircraft without causing major damage to the aircraft.
  - (4) No objects may be located in any safety area, except for objects that need to be located in a safety area because of their function. These objects must be constructed, to the extent practical, on frangible mounted structures of the lowest practical height with the frangible point no higher than 3 inches above grade.
- (c) FAA Advisory Circulars contain methods and procedures for the configuration and maintenance of safety areas acceptable to the Administrator.

#### **SAFETY AREA DIMENSIONS**

Runway Safety Area dimensions meet FAA requirements set forth in AC 150/5300-13, Airport Design. Runways 17-35, 16L-34R, and 16R-34L each have a cleared and graded 500-foot runway safety area which extends 1000-feet beyond each runway end. Runway 14-32 has a cleared and graded 300-foot runway safety area which extends 600-feet beyond each runway end. Runway hold-short lines are located at different distances outside the safety areas on all runways to protect runway approach and instrument operation protection zones and/or areas.

Taxiway safety areas are 107 feet from centerline.

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Taxiway safety areas that are 85.5 feet from centerline are the following:

- Taxiway K
- Taxiways K1-9
- Taxiway P between runways 17/35 and 14/32
- Taxiway Q between runways 17/35 and 14/32
- Taxiway Y between taxiways H3 and H4

#### **REQUIRED CONDITIONS OF SAFETY AREAS**

Safety area conditions are maintained as follows:

- 1) Each safety area shall be cleared and graded, and shall be maintained free of potentially hazardous ruts, humps, depressions, or other surface variations from the normal grade.
- 2) Each safety area shall be drained by grading and storm sewers to prevent water accumulation.
- 3) Each safety area shall be capable under dry conditions of supporting snow removal equipment, aircraft rescue and firefighting equipment and the occasional passage of aircraft without causing major damage. Manhole or duct access covers are constructed of material of sufficient thickness and strength to support equipment and aircraft.
- 4) No object shall be located in any safety area, except for objects that need to be located in the safety area because of their function. These objects shall be constructed, to the extent practical, on frangible mounted structures of the lowest practical height and maintained so the frangible point is no higher than 3 inches above grade.
- 5) Safety areas shall conform to dimensions acceptable to the FAA if any runways or taxiways are constructed, reconstructed, or extended.

#### MAINTENANCE OF SAFETY AREAS

- 1) Maintenance of the storm sewer system lines consists of periodic cleaning by means of high-pressure water. The catch basin is cleaned of sand and silt as needed.
- 2) All safety areas will be inspected periodically in accordance with FAR 139 standards by Airport Operations.
- 3) Discrepancies noted during the Airport Operations Manager-Airfield's daily inspection will be listed on the "FAR Part 139 Self-Inspection Checklist" report form (Attachment 327-1).
- 4) All hazardous discrepancies which cannot be immediately corrected will be NOTAMed in accordance with the provisions of FAR 139.339.
- 5) It shall be the responsibility of the Airport Operations Manager-Airfield to conduct a final inspection of repairs and authorize a return to service.
- 6) Perimeter roads are maintained by the Airport's Airfield Maintenance department and are kept clean, accessible, and in good repair.

Original Date: <u>1 November 2004</u>

# SECTION 311 - MARKING, SIGNS AND LIGHTING

#### Section 139.311 – MARKING, SIGNS AND LIGHTING

- (a) <u>Marking</u>. Each certificate holder must provide and maintain marking systems for air carrier operations on the airport that are authorized by the Administrator and consist of at least the following:
  - (1) Runway markings meeting the specifications for takeoff and landing minimums for each runway.
  - (2) A taxiway centerline.
  - (3) Taxiway edge markings, as appropriate.
  - (4) Holding position markings.
  - (5) Instrument landing system (ILS) critical area markings.
- (b) Signs.
  - (1) Each certificate holder must provide and maintain sign systems for air carrier operations on the airport that are authorized by the Administrator and consist of at least the following:
    - (i) Signs identifying taxiing routes on the movement area.
    - (ii) Holding position signs.
    - (iii) Instrument landing system (ILS) critical area signs.
  - (2) Unless otherwise authorized by the Administrator, the signs required by paragraph(b)(1) of this section must be internally illuminated at each Class I, II, and IV airport.
  - (3) Unless otherwise authorized by the Administrator, the signs required by paragraphs
     (b)(1)(ii) and (b)(1)(iii) of this section must be internally illuminated at each Class III airport.
- (c) <u>Lighting</u>. Each certificate holder must provide and maintain lighting systems for air carrier operations when the airport is open at night, during conditions below visual flight rules (VFR) minimums, or in Alaska, during periods in which a prominent unlighted object cannot be seen from a distance of 3 statute miles or the sun is more than six degrees below the horizon. These lighting systems must be authorized by the Administrator and consist of at least the following:
  - (1) Runway lighting that meets the specifications for takeoff and landing minimums, as authorized by the Administrator, for each runway.
  - (2) One of the following taxiway lighting systems:
    - (i) Centerline lights
    - (ii) Centerline reflectors
    - (iii) Edge lights
    - (iv) Edge reflectors
  - (3) An airport beacon.
  - (4) Approach lighting that meets the specifications for takeoff and landing minimums, as authorized by the Administrator, for each runway, unless provided and/or maintained by an entity other than the certificate holder.
  - (5) Obstruction marking and lighting, as appropriate, on each object within its authority that has been determined by the FAA to be an obstruction.

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- (d) <u>Maintenance</u>. Each certificate holder must properly maintain each marking, sign, or lighting system installed and operated on the airport. As used in this section, to "properly maintain" includes cleaning, replacing, or repairing any faded, missing, or nonfunctional item; keeping each item unobscured and clearly visible; and ensuring that each item provides an accurate reference to the user.
- (e) <u>Lighting interference</u>. Each certificate holder must ensure that all lighting on the airport, including that for aprons, vehicle parking areas, roadways, fuel storage areas, and buildings, is adequately adjusted or shielded to prevent interference with air traffic control and aircraft operations.
- (f) <u>Standards</u>. FAA Advisory Circulars contain methods and procedures for the equipment, material, installation, and maintenance of marking, sign, and lighting systems listed in this section that are acceptable to the Administrator.
- (g) <u>Implementation</u>. The sign systems required under paragraph (b)(3) of this section must be implemented by each holder of a Class III Airport Operating Certificate not later than 36 consecutive calendar months after June 9, 2004.

#### MARKINGS

The Salt Lake City Department of Airports will provide and maintain marking systems in accordance with Part 139.311(a) and AC 150/5340-1, *Standards for Airport Markings,* current edition.

#### 1) Runways/Taxiways

- (a) Runway markings meet the specifications for takeoff and landing minimums for each runway. Runways 17/35, 16L/34R, and 16R/34L are precision runways. Runway 14/32 is a non-precision runway.
- (b) Taxiway markings include centerline and edge markings, holding position markings and ILS critical area markings.

#### 2) Holding Position Markings

(a) The holding position markings are located at distances farther from the runway than the designated safety area at each runway entry point except as noted below. Distances are as follows:

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Runway	Distance from Runway Centerline
Runway 14-32	250 feet except on west side of Runway 14 at
	Taxiway Q which is 229 feet
Runway 17-35	292 feet
Runway 16L-34R	292 feet
Runway 16R-34L	322 feet

This table refers to a minimum distance. There are intersections where the distance is greater. All intersections are being resurveyed and updated measurements will be provided to the FAA by 7/1/2023.

- 3) Instrument Landing System (ILS) critical areas have been identified by ILS Holding Position Markings and ILS Surface Painted Holding Position Signs where applicable.
- 4) Holding position signs are located on both sides of Runways 14-32 and 17-35 as well as holding position markings where their safety areas converge.

The Airport has developed a Marking Plan in accordance with FAR Part 139 and AC 150/5340-1, *Standards for Airport Markings*, current edition. The Plan is included under separate cover as Appendix C-1.

#### **AIRFIELD SIGNS**

The Airport will provide and maintain a sign system for air carrier operations in accordance with Part 139.311(b). The signs will meet standards outlined in the most current editions of AC 150/5340-18, *Standards for Airport Sign Systems*, and AC

150/5345-44, *Specification for Runway and Taxiway Signs*. The Airport's current Sign Plan developed in accordance with FAR 139 and AC 150/5340-18 is included as Appendix C-2.

#### AIRFIELD LIGHTING

The Airport will provide and maintain lighting systems for air carrier operations in accordance with Part 139.311(c) and AC 150/5340-30, *Design and Installation Details for Airport Visual Aids*, current edition, to meet the specifications for the lowest instrument approach minimums authorized for each runway.

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#### 1) <u>Runways</u>

Runway 14-32	HIRL, PAPI
Runway 17-35	HIRL, CL, MALSR, TDZ, PAPI
Runway 16L-34R	HIRL, CL, ALSF-II, TDZ, PAPI
Runway 16R-34L	HIRL, CL, ALSF-II, TDZ, PAPI

#### 2) <u>Taxiways</u>

Variable intensity taxiway edge lighting is installed on all taxiways available for air carrier operations. All SMGCS routes on the movement area have centerline lighting as specified by AC 150/5340-30, *Design and Installation Details for Airport Visual Aids*.

#### 3) Airport Beacon

The Airport is equipped with a rotating beacon consisting of a green and clear lens. The beacon is located on top of the Airport's Ramp Control Tower which is attached to the A Concourse.

#### 4) NAVAIDS and Visual Aids.

- (a) PAPI's for Runways 17 and 16L are maintained by the FAA; all other PAPI's are maintained by the Airport Airfield Electricians.
- (b) Approach lighting systems for all runways are maintained by local FAA Maintenance personnel. These systems are checked nightly by Airport Operations personnel. A report is generated by the work order system and emailed to the FAA each morning following the inspection to assist them in scheduling their repairs.

#### 5) Obstruction Lighting

Objects which are considered obstructions under Part 77 are identified and lighted as determined by AC 150/5345-43, *Specification for Obstruction Lighting Equipment*, current edition.

#### 6) Airfield Emergency Generators

To ensure a constant source of power for airfield lighting, each of the two electrical vaults contain a battery system that can sustain lights for 90 minutes and a diesel generator as secondary power sources to commercial power for all runways and taxiways. An uninterruptible power source (UPS) is tied to critical lighting systems.

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#### MAINTENANCE

The Salt Lake City Department of Airports is responsible for maintaining runway edge lights, centerline lights and touchdown lights (TDZ), taxiway edge lights and centerline lights, and reflectors in all movement areas. The Department of Airports also maintains the Airport beacon which is located on top of the Airport's Ramp Control Tower. The approach lighting systems are the sole responsibility of the FAA for operation and maintenance. Each marking, sign, and lighting system will be maintained unobscured, clearly visible, and shall provide an accurate reference to airport users.

- 1) The Salt Lake City Department of Airports has developed a maintenance program and inspects the airfield lighting daily. Reports are forwarded to the Airport Maintenance Division that has developed a maintenance program responsive to subsection (c) of this section. Damaged lights will be repaired as soon as practical.
- 2) Each lighting system will be maintained at least to the minimum operational criteria outlined in tables within Appendix A of AC 150/5340-26, *Maintenance of Airport Visual Aid Facilities*, current edition.
- 3) Airfield lighting electricians are all licensed by the State of Utah as either Journeyman or Master Electricians. They are all trained to fully comply with the FAA specifications as outlined in the applicable Advisory Circulars.
- 4) When applicable, equipment and installation specifications in Advisory Circulars are followed for equipment, material, installation, and maintenance of lighting systems on the Airport.

#### LIGHTING INTERFERENCE

All other lighting on the airport for ramps, parking areas, roadways, fuel storage areas, and buildings is adequately adjusted and shielded to prevent interference with air traffic control and aircraft operations.

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# **SECTION 313 – SNOW AND ICE CONTROL**

#### Section 139.313 – SNOW AND ICE CONTROL

- (a) As determined by the Administrator, each certificate holder whose airport is located where snow and icing conditions occur must prepare, maintain, and carry out a snow and ice control plan in a manner authorized by the Administrator.
- (b) The snow and ice control plan required by this section must include, at a minimum, instructions and procedures for—
  - (1) Prompt removal or control, as completely as practical, of snow, ice, and slush on each movement area;
  - (2) Positioning snow off the movement area surfaces so all air carrier aircraft propellers, engine pods, rotors, and wing tips will clear any snowdrift and snowbank as the aircraft's landing gear traverses any portion of the movement area;
  - (3) Selection and application of authorized materials for snow and ice control to ensure that they adhere to snow and ice sufficiently to minimize engine ingestion;
  - (4) Timely commencement of snow and ice control operations; and
  - (5) Prompt notification, in accordance with § 139.339, of all air carriers using the airport when any portion of the movement area normally available to them is less than satisfactorily cleared for safe operation by their aircraft.
- (c) FAA Advisory Circulars contain methods and procedures for snow and ice control equipment, materials, and removal that are acceptable to the Administrator.

#### SNOW AND ICE CONTROL PLAN

Snowfall at Salt Lake City International Airport averages approximately 60 inches annually. With guidance from AC 150/5200-30, *Airport Field Condition Assessments and Winter Operations Safety*, current edition, the Airport's Snow and Ice Control Plan defines the procedures in use at the Salt Lake City International Airport for the safe and prompt removal or control of snow and ice from runways, taxiways, ramps, roadways, and other areas that might be affected by measurable snow and ice accumulation.

The Airport Operations Manager-Airfield will notify appropriate personnel of forecasted conditions and coordinate an <u>expected time</u> that plowing will begin. This information will also be coordinated with airline personnel, tower supervisors and other interested personnel through the Snow Desk and/or the Airport Operations Manager-Airfield via PASSUR SLC Communicator web page. Approximately 200 individuals airport-wide that are associated with the Airport and airlines have been setup and trained on the use of PASSUR SLC Communicator web page and receipt of airfield updates through that service online. Each individual also has the option of receiving emailed notifications upon update

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of airfield conditions of interest to them through the PASSUR SLC Communicator web page.

Airlines will be made aware when a firm time to begin plowing has been established and appropriate NOTAMs issued. The intended runway to be closed and the estimated duration of plowing will be given through the PASSUR SLC Communicator web page. Condition reports, including the most recent Runway Condition Code values (RwyCC) that are available, if applicable, will be issued as NOTAMs through the Digital NOTAM system. Condition Report NOTAMs will be issued at runway opening or as deemed prudent by the Airport Operations Manager-Airfield at the Snow Desk. This information will also be disseminated via the PASSUR SLC Communicator web page to all air carriers and other concerned entities. Actual existing conditions will be reported to the extent possible and updated as soon and as often as is practical.

During snow storms, FAA maintenance has tracked vehicles which they use to maintain clear areas around the navigational equipment located on and off the airfield. If snow begins to stick on the airfield signs, Operations personnel clean them, using brooms and squeegees. If the depth of the snow, or drifted snow, affects the visibility of airfield signs and lights, the airfield electricians, equipped with shovels and a small plow-equipped tracked vehicle, maintain the required clearance area. Operations and Airfield Maintenance personnel work together to keep the airfield safe for operations and airfield electricians will repair or replace any lights or signs damaged during the event.

The Airport Operations Manager-Airfield has the authority to initiate snow removal operations.

The Snow and Ice Control Plan follows as Attachment 313-1.

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# ATTACHMENT 313-1

Snow and Ice Control Plan

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### **Snow and Ice Control Plan**

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#### Introduction

The purpose of this plan is to define the procedures in use at the Salt Lake City International Airport for the safe and prompt removal or control of snow and ice from runways, taxiways, ramps, roadways, and other areas that might be affected by measurable snow and ice accumulation.

With guidance from Advisory Circular 150/5200-30 – *Airport Field Condition Assessments and Winter Operations Safety* current edition, this plan is designed to provide overall direction for the safe and prompt removal or control of snow and ice as practical. This plan is written to integrate with other airport plans, procedures, and agreements.

Salt Lake City International Airport has three main commercial air carrier runways. When possible, the goal is to maintain two open runways during snow removal operations, unless, during reduced air traffic demand, closing two runways has no impact on air traffic flow.

#### Chapter 1 – Pre-Season Actions

#### 1.1 Airport Preparation

#### **Airport Management Meetings**

<u>Pre-season Meeting</u>. This meeting will determine if post season objectives were met, and determine their effectiveness. The Assistant Operations Director will typically initiate this meeting during the month of September to discuss equipment and materials inventory, repair needs, personnel staffing, budget, training, previous year issues, and any other topics associated with snow and ice control.

#### **Personnel Training**

All Operations and Maintenance personnel receive annual recurrent snow removal training. Training for airport personnel is conducted by an Airport Operations Manager-Airfield, and Airfield Maintenance Managers. Training records are maintained by the Airport Operations and Maintenance Divisions as appropriate. Training takes places as follows:

**Operations** Personnel

- Procedural training
- Aircraft Movement Area ("Red Badge") refresher
- Incursion prevention
- Markings and signs
- ATC communications

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- Runway Safety Areas
- Low visibility operations
- Airfield map exercise

#### Maintenance Personnel

- Procedural training
- Aircraft Movement Area ("Red Badge") refresher
- Incursion prevention
- Markings and signs
- ATC communications
- Runway Safety Areas
- Low visibility operations
- Airfield map exercise
- Equipment operation refresher training

#### **Equipment Preparation**

A minimum of 30 days prior to the winter season, the Airport Vehicle Maintenance Shop will inspect and prepare each piece of snow removal equipment. Required fluids, replacement parts and snow removal components will be inventoried and stockpiled.

#### 1.2 Snow and Ice Control Committee (SIC) Meetings

Salt Lake City International Airport has developed a Snow and Ice Control Committee (SICC) to provide feedback and make recommendations for snow and ice removal operations. Also, the SICC may make suggestions regarding the Snow and Ice Control Plan (SICP) updates for the Salt Lake City International Airport. The SICC is chaired by the Assistant Operations Director, and includes the following members:

#### Airport Members

- Airfield Operations
- Landside & Terminal Operations
- Airport Maintenance
- Other airport ancillary service divisions, as appropriate

#### Federal, Local and Tenant Members

- Federal Aviation Administration
- Air Traffic Control
- NAV/COM, as appropriate
- Airline Representatives

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- Weathernet
- Fixed Base Operators (FBO's)
- Flight School Representatives
- Other allied and affiliated personnel as appropriate

Tenants and other members that are not able to participate in the SICC or attend scheduled meetings will be provided with minutes from each meeting and will be kept apprised of all changes appropriate to their role.

During the month of August, the Airport will commence notification of all tenants, airport users, and all members of the SICC to begin reviewing the SICP and provide comments to be discussed during the winter season kick-off meeting that will be held prior to November 1<sup>st</sup>.

The following topics will be discussed in the SICC:

#### Airport Snow Removal Program

- Areas designated as Priority I.
- Any new airfield infrastructure.
- Clearing operations and follow-up airfield assessments.
- Potentials for pilot or vehicular runway incursions or incidents.
- Staffing requirements and qualifications (training).
- Update the training program.
- Streamline the decision making process.
- Response times to keep runways, taxiways, and ramp areas operational.
- Communications, terminology, frequencies, and procedures.
- Monitoring and updating of runway surface conditions.
- Issuance of NOTAMS, Field Condition Reports and dissemination.
- Equipment inventory.
- Changes to contract services for snow removal.

#### Air Carrier Ground Deicing/Anti-Icing Programs.

- Assess all air carrier deicing programs by reviewing airport surface flow strategies.
- Review ground time and takeoff clearances post deice.
- Analyze and adjust aircraft deice plans.
- Planning taxi routes to minimize ground times.
- Determining airport deicing crew needs.
- Verifying communications protocols.
- Requirements for containment/collection of deicing/anti-icing fluids.

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#### Chapter 2 – Post Event/Season Actions

#### 2.1 Post Event

Between November and April, when needed, the Assistant Operations Director will host a weekly snow meeting after the Tuesday morning Tenant User Meeting and invite airport users and Air Traffic Control representatives to discuss any issues that have arisen from the last event, and attempt to resolve any outstanding issues. Status updates on equipment and materials on hand should also be given. Before or after a significant event, or if special circumstances dictate, a separate snow meeting will be scheduled if needed. During the winter season, an agenda item regarding snow operations will be added to the weekly Tenant Users Meeting held on Tuesday mornings.

#### 2.2 Post Season

Post Season Department Actions. The following actions are taken by departments during the post-season:

#### Airport Maintenance

- Inspect and repair all snow equipment
- Replace broom cassettes, plow blades, etc.
- Prepare equipment for summer storage

#### Airport Operations

- Calibrate friction tester vehicles
- Arrange for any required maintenance of Operations vehicles •
- Conduct a post-season special inspection of the Aircraft Movement Area • to ensure FAR 139 compliance

#### Airport Management

- Review and update SICP
- Schedule pre-season SICC meetings

#### Aircraft Operators and Airport Users

• Report any changes in winter operations procedures

Airport Management Post Season Meeting. Typically in May, the Assistant Operations Director will review the SICC minutes and their recommendations, and make necessary procedural changes to the SICP. The SICP will be updated as applicable and appropriate.

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#### Chapter 3 – Snow Removal Action Criteria

#### 3.1 Activating Snow Removal Personnel

Airport Operations Managers-Airfield are on a "snow schedule" during the months of November through April. This schedule ensures that there are three Airport Operations Managers-Airfield on duty during snow and ice control activities. Operations personnel that are not currently on duty when a Snow Alert Callout is initiated are notified via telephone to report for duty. Maintenance personnel that are on Snow Alert Status are notified to report for duty via an automated telephone notification system. This notification system generates reports after the notifications are complete to ensure that all personnel required to respond are notified.

#### Weather Forecasting

Airport Operations Managers-Airfield and Airfield Maintenance Supervisors monitor current and forecasted weather conditions on a regular basis. Weather is monitored via news reports, various media outlets, private weather forecast services, internet weather sites. When the forecasted probability of plowable snow is deemed medium confidence level or greater, Airfield Maintenance Supervisors have delegated authority to place Airfield Maintenance personnel on standby. Airport Operations Managers-Airfield have delegated authority to place Operations personnel on standby. Salt Lake City International Airport has inpavement surface monitoring equipment that provides data to any computer connected to the Airport LAN. This provides real-time pavement temperature conditions.

#### **Chain of Command**

The Assistant Operations Director is the oversight authority for all snow and ice control activities. During day-to-day snow and ice control activities, authority is designated to the Airport Operations Managers-Airfield. There are several divisions within the Salt Lake City Department of Airports that work together to complete snow and ice control procedures during an event.

#### **Triggers for Initiating Snow Removal Operations**

Snow Removal Operations will commence when any of the following situations occur.

- Snow and ice control operations should begin as soon as practicable when accumulation begins.
- Any time an Airport Operations Manager-Airfield believes that snow removal operations should be commenced.

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#### **3.2** Personnel Responsibilities

#### Airport Operations Manager-Airfield

- Monitor airfield conditions on a continuous basis.
- Inspect airfield conditions on a regular basis.
- Hold over and call out additional Airport Operations Managers-Airfield and Airport Operations Specialists for snow removal.
- Coordinate with Airfield Maintenance Supervisors for snow removal operations if weather conditions warrant.

#### Airfield Maintenance Senior Supervisors

- Initiate callout of maintenance personnel for snow removal.
- Hold over maintenance personnel.

#### 3.3 Snow Control Center (SCC)

The SCC at Salt Lake City International Airport is located on the 5<sup>th</sup> floor of the Airport Ramp Control Tower. The SCC contains a telephone, multiple computers and multiple radios, both Airport and VHF type. The SCC is responsible for maintaining the snow event log and field condition reports as appropriate. NOTAM's will be issued by Airport Operations Managers-Airfield as needed. The SCC is staffed during all events by an Airport Operations Manager-Airfield or an Airport Operations Specialist. In the event that the SCC becomes unserviceable for any reason, the SCC can be operated from the Airport Operations Manager-Airfield's vehicle on the field, which contains multiple Airport and VHF radios. All managers have an iPad equipped with internet capabilities to record events and activity.

#### 3.4 Airfield Clearing Priorities

Airfield clearing priorities are determined in the following manner:

Each runway and its associated taxiways are considered a "complex". Salt Lake City International Airport is committed to the ability to clear one runway complex at a time in accordance with Table 3-1. Clearing of a runway complex includes clearing the runway surface, end taxiways, and two high-speed exit taxiways on each runway complex. High speed taxiways are chosen based on the current air traffic flow direction, as well as anticipated changes in said flow after consultation with FAA Air Traffic Control.

As new airfield areas are constructed and opened, surface priorities are subject to change.

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#### Priority 1

- Runway 16R/34L and Taxiways A-1, A-4, A-5, A-7, A-8 and A-11
- Runway 16L/34R and Taxiways H-1,H-3, H-4, H-8,H-9,H-10,and H-13
- Taxiway H
- Taxiway G
- Taxiway Y
- Taxiway A
- Taxiway B
- Taxiways E and F, F-1, F-2, F-3, and F-4
- Air Carrier Terminal Ramp Areas
- ARFF Station Ramp Areas
- Taxiway Q (Station 11 response access)
- Taxiway K-5 (Station 11 response access)
- Mutual Aid Access Roads with Gates 7G, 11, 39 and 48A

#### Priority 2

- RWY 17/35 and K Connector Taxiways
- Remaining A Taxiways
- Remaining H Taxiways
- Taxiway S
- Taxiway R
- Taxiway M
- Taxiways L and L-1
- Taxiway P
- Taxiway K
- Cargo Ramps
- De-ice Pads at Taxiway L, Runway 34R, Runway 16L, and Runway 34L

#### **Priority 3**

- Runway 14/32
- Taxiway N
- East Ramps
- T-Hangar and Shade Hangar Area
- All Remaining Emergency Access Roads
- Airport Perimeter Roads

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#### **3.5 Airfield Clearance Times**

Sufficient and qualified personnel are assigned to work shifts to provide the necessary level of snow removal capability so as to ensure runways, taxiways, and ramp areas are cleared and maintained in an acceptable manner.

Annual Airplane Operations (includes cargo operations)	Clearance Time <sup>1</sup> (hour)
40,000 or more	1/2
10,000 – but less than 40,000	1
6,000 – but less than 10,000	1 ½
Less than 6,000	2

Table 3-1. Snow	V Clearance	<b>Times for</b>	Commercial	Service Airports
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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)]

Footnote 1: These airports should have sufficient equipment to clear 1 inch (2.54 cm) of falling snow weighing up to 25  $lb/ft^3$  (400 kg/m<sup>3</sup>) from Priority 1 areas within the recommended clearance times.

Salt Lake City International Airport maintains appropriate equipment levels and staffing to comply with the above table (Table 3-1).

#### 3.6 Snow Equipment List

A list of airport-owned snow equipment is included as an attachment in Chapter 6 – Attachments.

#### 3.7 Storage of Snow and Ice Control Equipment

All airport-owned equipment is stored inside temperature controlled equipment bays. Ramp plow blades, loader buckets, extra plow blades, and other associated equipment may be stored outside.

#### 3.8 Definitions:

<u>Approved Chemicals</u>. A chemical, either solid or liquid, that meets a generic SAE or MIL specification.

<u>Ash</u>. A grayish-white to black solid residue of combustion normally originating from pulverized particulate matter ejected by volcanic eruption.

<u>Compacted Snow</u>. Snow that has been compressed and consolidated into a solid form that resists further compression such that an airplane will remain on its surface without displacing any of it. If a chunk of compressed snow can be picked up by hand, it will hold together or can be broken into smaller chunks rather than falling away as individual snow particles.

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**NOTE**: A layer of compacted snow over ice must be reported as compacted snow only.

**Example**: When operating on the surface, significant rutting or compaction will not occur. Compacted snow may include a mixture of snow and embedded ice; if it is more ice than compacted snow, then it should be reports as either ice or wet ice, as applicable.

<u>Contaminant</u>. A deposit such as frost, any snow, slush, ice, or water on an aerodrome pavement where the effects could be detrimental to the friction characteristics of the pavement surface.

<u>Contaminated Runway</u>. For purposes of generating a runway condition code and airplane performance, a runway is considered contaminated when more than 25 percent of the runway surface area (within the reported length and the width being used) is covered by frost, ice, and any depth of snow, slush, or water.

When runway contaminants exist, but overall coverage is 25 percent or less, the contaminants will still be reported. However, a runway condition code will not be generated.

While mud, ash, sand, oil, and rubber are reportable contaminants, there is no associated airplane performance data available and no depth or Runway Condition Code will be reported.

**Exception**: Rubber is not subject to the 25 percent rule, and will be reported as Slippery When Wet when the pavement evaluation/friction deterioration indicated the averaged Mu value on the wet pavement surface is below the Minimum Friction Level classification specified in Table 3-2 of FAA Advisory Circular 150/5320-12.

Dry (Pavement). Describes a surface that is neither wet nor contaminated.

<u>Dry Runway</u>. A runway is dry when it is neither wet, nor contaminated. For purposes of condition reporting and airplane performance, a runway can be considered dry when no more than 25 percent of the runway surface area within the reported length and the width being used is covered by:

Visible moisture or dampness, or frost, slush, snow (any type), or ice.

A FICON NOTAM must not be originated for the sole purpose of reporting a dry runway. A dry surface must be reported only when there is need to report

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conditions on the remainder of the surface.

<u>Dry Snow</u>. Snow that has insufficient free water to cause cohesion between individual particles. This generally occurs at temperatures well below 32° F (0° C). If, when making a snowball, it falls apart, the snow is considered dry.

<u>Eutectic Temperature/Composition</u>. A deicing chemical melts ice by lowering the freezing point. The extent of this freezing point depression depends on the chemical and water in the system. The limit of freezing point depression, equivalent to the lowest temperature that the chemical will melt ice, occurs with a specific amount of chemical. This temperature is called the eutectic temperature, and the amount of chemical is the eutectic composition. Collectively, they are referred to as the eutectic point.

FICON (Field Condition Report). A Notice to Air Missions (NOTAM) generated to reflect Runway Condition Codes, vehicle braking action, and pavement surface conditions on runways, taxiways, and aprons.

<u>Fluid Deicer/Anti-Icers</u>. The approved specification is SAE AMS 1435, Fluid, Generic Deicing/ Anti-icing, Runways and Taxiways.

<u>Frost</u>. Frost consists of ice crystals formed from airborne moisture that condenses on a surface whose temperature is below freezing. Frost differs from ice in that the frost crystals grow independently and therefore have a more granular texture.

**NOTE:** Heavy frost that has noticeable depth may have friction qualities similar to ice and downgrading the runway condition code accordingly should be considered. If driving a vehicle over the frost does not result in tire tracks down to bare pavement, the frost should be considered to have sufficient depth to consider a downgrade of the runway condition code.

<u>Generic Solids</u>. The approved specification is SAE AMS 1431, Compound, Solid Runway and Taxiway Deicing/Anti-Icing.

<u>Ice</u>. The solid form of frozen water to include ice that is textured (i.e., rough or scarified ice.

A layer of ice over compacted snow must be reported as ice only.

<u>Layered Contaminant</u>. A contaminant consisting of two overlapping contaminants. The list of layered contaminants has been identified in the RCAM and include:

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- Dry Snow over Compacted Snow
- Wet Snow over Compacted Snow
- Slush over Ice
- Water over Compacted Snow
- Dry Snow over Ice
- Wet Snow over Ice.

Mud. Wet, sticky, soft earth material.

Multiple Contaminants. A combination of contaminants (as identified in the RCAM) observed on paved surfaces. When reporting multiple contaminants, only the two most prevalent / hazardous contaminants are reported. When reporting on runways, up to two contaminant types may be reported for each runway third. The reported contaminants may consist of a single <u>and</u> layered contaminant, two single contaminants, or two layered contaminants. The report of "multiple contaminants" represent contaminants which are located adjacent to each other, not to be confused with a "layered contaminant" which is overlapping. For example:

- Single contaminant and Layered contaminant.
   "Wet" and "Wet Snow over Compacted Snow"
- Single contaminant and Single contaminant.
   "Wet Snow" <u>and</u> "Slush"
- Layered contaminant and Layered contaminate.
   "Dry Snow over Compacted Snow" and "Dry Snow over Ice"

<u>Oil</u>. A viscous liquid, derived from petroleum or synthetic material, especially for use as a fuel or lubricant.

#### Runway (Primary and Secondary).

Primary. Runway(s) being actively used or expected to be used under the existing or anticipated adverse meteorological conditions, where the majority of the takeoff and landing operations will take place.

Secondary. Runway(s) that supports a primary runway and is less operationally critical. Takeoff and landing operations on such a runway are generally less frequent than on a primary runway. Snow removal operations on these secondary runways should not occur until Priority 1 surfaces are satisfactorily cleared and serviceable.

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<u>Runway Condition Assessment Matrix (RCAM)</u>. The tool by which an airport operator will assess a runway surface when contaminants are present.

<u>Runway Condition Code (RwyCC)</u>. Runway Condition Codes describe runway conditions based on defined contaminants for each runway third. Use of RwyCCs harmonizes with ICAO Annex 14, providing a standardized "shorthand" format (E.G.: 4/3/2) for reporting RwyCC (which replaces Mu values) are used by pilots to determine landing performance calculations.

Sand. A sedimentary material, finer than a granule and coarser than silt.

<u>Slush</u>. Snow that has water content exceeding a freely drained condition such that it takes on fluid properties (e.g., flowing and splashing). Water will drain from slush when a handful is picked up. This type of water-saturated snow will be displaced with a splatter by a heel and toe slap-down motion against the ground.

Slush over Ice. See individual definitions for each contaminant.

<u>Slippery When Wet Runway</u>. A wet runway where the surface friction characteristics would indicate diminished braking action as compared to a normal wet runway.

Slippery When Wet is only reported when a pavement maintenance evaluation indicates the averaged Mu value on the wet pavement surface is below the Minimum Friction Level classification specified in Table 3-2 of FAA Advisory Circular 150/5320-12. Some contributing factors that can create this condition include: Rubber buildup, groove failures/wear, pavement macro/micro textures.

<u>Water</u>. The liquid state of water. For purposes of condition reporting and airplane performance, water is greater than 1/8-inch (3mm) in depth.

<u>Wet Runway</u>. A runway is wet when it is neither dry nor contaminated. For purposes of condition reporting and airplane performance, a runway can be considered wet when more than 25 percent of the runway surface area within the reported length and the width being used is covered by any visible dampness or water that is 1/8-inch or less in depth.

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

<u>Wet Snow</u>. 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.

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#### **Chapter 4 – Snow Clearing Operations and Ice Prevention**

#### 4.1 Snow Clearing Principles

#### **Ramp and Terminal**

Airfield Maintenance personnel assigned to the ramp snow removal element are primarily responsible for snow and ice control on all ramp areas. It is generally understood that all areas within twenty five feet (25') of buildings and aircraft are the responsibility of the tenant or airline that uses said ramp area. Several tenants use contract personnel to clear their ramp areas. All personnel contracted by tenants are required to have appropriate Salt Lake City International Airport identification media, and have attended Air Operations Area Driver Training. Additional training for those personnel is at the discretion of the tenant contracting these services, and records are maintained by the tenants.

#### **Runways and Taxiways**

The goal of snow removal operations at Salt Lake City International Airport is to maintain all runway and taxiway surfaces in a "no worse than wet" condition where practical, and when conditions permit. Equipment used for runway and taxiway snow clearing is divided into teams known as "elements." One runway and taxiway element is referred to as "Snow Command One" and the other element is "Snow Command Two." The ramp clearing element may be referred to as "Snow Command Ramp." Each element is under the control of an Airfield Maintenance Supervisor, in concert with an Airport Operations Manager-Airfield, except for the ramp snow removal element, which is under the control of an Airfield Maintenance Supervisor and an Airport Operations Specialist. Each element that is assigned to runway and taxiway clearing operations has a senior equipment operator in the front vehicle, which is referred to as the "lead plow." The lead plow driver will set the speed for the element, direct turn-arounds, and plow blade directions. Behind each lead plow driver is a series of snowplow operators, sand and chemical truck operators, and high speed runway blower operators. Typically, the runway and taxiway snow removal element operates in a staggered "close wing" formation. Under normal circumstances, only one runway element at a time will perform clearing operations on a runway. If one element has completed their assigned runway complex, members of that element may assist the other runway element with taxiway and high speed exit clearing operations.

#### Sign Cleaning Procedure

Airport Operations Specialists are tasked with ensuring that all airfield signs are cleared of any contamination. Contamination is removed using squeegees and brooms. Airport Operations Specialists may also use shovels if necessary. If snow

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becomes excessive, Airport Electricians will clear out areas in front of each sign with a track–driven "snow cat" type vehicle.

#### Safety Areas, Blast Pads, Deicing Pads, Special Circumstance Areas

If snow conditions require, blast pads may be cleared using a pickup truck with a front mounted snowplow. Due to the spacing of approach lighting systems within the blast pads, runway snow removal equipment cannot clear these areas. All deicing pads are the responsibility of the ramp snow removal element.

#### Snowbanks

See Attachment 313-1-1.

#### NAVAIDS

Whenever possible, snow will not be removed in such a way as to interfere with NAVAID or weather observation equipment. When clearing operations in NAVAID areas is required, the activity is coordinated with FAA NAV/COM technicians who will usually accomplish said removal. **See Attachment 313-1-2**.

#### 4.2 Controlling Snow Drifts

At Salt Lake City International Airport, drifting snow is typically not an issue.

#### 4.3 Snow Disposal

During a snow event, snow will be removed from the ramps and stockpiled in designated snow storage areas. As soon as practical, snow is hauled away from the storage area. Snow hauling takes place on a continuous basis until snow stockpiles are removed from storage areas that may obstruct pilot vision.

#### 4.4 Methods for Ice Control and Removal – Chemicals

Salt Lake City International Airport utilizes a combination of solid and liquid chemicals to control and remove ice on runway and taxiway surfaces. Chemicals are applied via solid and liquid chemical applicator vehicles specifically designed for that task.

All chemicals used by the Salt Lake City International Airport meet all specifications as indicated in AC 150/5200-30, *Airport Field Condition Assessments and Winter Operations Safety*, current edition. Potassium acetate, sodium acetate and sodium formate chemicals are used at Salt Lake City International Airport.

#### 4.5 Sand

Sand is used in conjunction with solid chemical application. Sand used at the Salt Lake City International Airport meets FAA gradient standards as listed in ASTM E 11-81.

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#### 4.6 Surface Incident/Runway Incursion Mitigation Procedures

Each year prior to the start of the snow removal season, Airfield Maintenance personnel conduct "Snow School" training that includes refresher training sessions. During these sessions, reviews of past surface incidents are made. At the same time, Airport Operations personnel also review previous surface incidents and determine if they can be prevented in the future. Preventative measures in place at Salt Lake City International Airport to reduce the number of surface incidents and incursions include:

- Annual Movement Area Driver Refresher Training
- Airfield Map exercise
- Situational awareness training
- Communications training
- Assigning an Airport Operations Manager-Airfield and Airfield Maintenance Senior Supervisor to each runway snow removal element

Each vehicle that operates on the Aircraft Movement Area during snow removal is lighted and marked in accordance with AC 150/5210-5, *Painting, Marking and Lighting of Vehicles Used at an Airport,* current edition. Additionally, each vehicle is equipped with an aviation band radio capable of communicating with the FAA Control Tower as necessary.

#### **Radio Communication**

During snow operations, the Airport Operations Manager-Airfield assigned to each runway snow element is the main communicator with the FAA Control Tower. Each vehicle in the snow removal element is equipped with a radio capable of monitoring and communicating with the FAA Control Tower. Each vehicle operator monitors both Airport Maintenance frequencies and FAA frequencies assigned to snow removal operations.

#### **Failed Radio Communication**

In the event that the snow removal element loses radio communication with the FAA Control Tower, the Airport Operations Manager-Airfield, Airfield Maintenance Senior Supervisor, and numerous personnel have portable cellular telephones that allow them to contact the FAA Control Tower. Since each vehicle is equipped with a radio, it is unlikely that all vehicles will suffer a simultaneous radio failure.

#### Low Visibility and Whiteout Conditions

All Airport personnel involved in airfield snow removal operations receive low visibility and whiteout procedure training that includes the following:

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- Stop your vehicle in a safe location
- Advise the supervisor and/or Air Traffic Control of the situation
- Ensure all vehicle lighting is turned on to increase visibility
- Remain in the vehicle at all times

Once all equipment and personnel are accounted for and are together, coordination will be made by the Airport Operations Manager-Airfield to keep the equipment in a safe location or remove it from the Aircraft Movement Area.

#### **Driver Fatigue**

Whenever possible, equipment operators are limited to twelve hours on-duty time. During the on-duty time, breaks are given whenever possible to help reduce fatigue and help prevent injury.

#### Chapter 5 – Surface Assessment and Reporting

#### 5.1 Conducting Surface Assessments

Field Condition NOTAMS will be issued as necessary. Updates will normally be issued any time reported field conditions change. Updates will include runway, taxiway and ramp conditions as that information becomes available. All PASSUR SLC Communicator web page users will be notified of the updates critical to their operations based on their notification requests.

Runway conditions are reported as follows:

- Percentage of contaminant coverage
- Depth of contaminant coverage
- Length and width of areas plowed
- Application of chemicals
- RwyCC from Runway Condition Assessment Matrix

It is standard practice to update the condition report at the following intervals:

- Upon commencement of snow removal activities
- Prior to a runway opening following snow and ice control measures
- When conditions change on the field

Runway, taxiway, and ramp condition reports are issued as often as necessary to ensure the accuracy of information that is disseminated. Condition reports are issued as soon as practical during rapidly changing conditions.

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#### 5.2 Applying the Runway Condition Assessment Matrix (RCAM)

#### **Determining Runway Conditions**

The Airport Operations Manager – Airfield will determine and report, based on observation, the type of contaminant present on surfaces from the approved contaminant list.

Step 1: Runway Condition Code (RwyCC) Applicability:

If 25 percent or less of the overall runway length and width or cleared width is covered with contaminants, RwyCCs must not be applied, or reported. Operations will simply report the contaminant percentage, type and depth for each third of the runway, to include any associated treatments or improvements.

If the overall runway length and width coverage or cleared width is greater than 25 percent, RwyCCs must be assigned, and reported, informing airplane operators of the contaminant present, and associated codes for each third of the runway. (The reported codes, will serve as a trigger for all airplane operators to conduct a takeoff and/or landing performance assessment).

Step 2: Apply Assessment Criteria:

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

Step 3: Validating Runway Condition Codes:

If the observations by Airport Operations determine that RwyCCs assigned accurately reflect the runway conditions and performance, no further action is necessary, and the RwyCCs generated may be disseminated.

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Assessment Criteria		Downgrade Assessment Criteria		
Runway Condition Description	Code	Mu (µ) <sup>1</sup>	Vehicle Deceleration or Directional Control Observation	Pilot Reported Braking Action
• Dry	6			
Erost     Wet (Includes Damp and 1/8 inch depth or less of water)      //8 inch (3mm) depth or less of:     Slush     Dry Snow     Wet Snow	5	40 or Higher	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	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	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	Braking deceleration OR directional control is between <u>Medium</u> and Poor.	Medium to Poor
* 23L.*	1	10 21	Braking deceleration is significantly reduced for the wheel braking effort applied OR directional control is significantly reduced.	Poor
Wet Ice     Slush over Ice     Water over Compacted Snow     Dry Snow or Wet Snow over Ice	0	20 or Lower	Braking deceleration is minimal to non-existent for the wheel braking effort applied OR directional control is uncertain.	Nil

#### Table 5-1 Runway Condition Assessment Matrix (RCAM)

<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 codition 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.

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#### **Downgrade Assessment Criteria**

When observations indicate a more slippery condition than generated by the RCAM, Airport Operations 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 negative 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. At these temperatures, Airport Operations should exercise a heightened awareness of airfield conditions, and should downgrade the RwyCC if appropriate.

#### **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 that a code 3 can only be applied to those runway conditions listed under code 0 and 1 in the RCAM.
- 4. Airport Operations 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.
  - a. 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.
  - b. 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.

#### 5.3 Runway Friction Surveys, Equipment, and Procedures

Friction values, though not specifically reported, will be considered in decision making processes to determine appropriate actions when:

• Compacted snow and/or ice are present on the center portion of the

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runway, and friction values are 40 or below on any zone of the runway.

- Values rise above 40 on all zones of any active runway that previously had a friction value of below 40.
- Values go below 40 for any zone of any active runway that previously had Mu values above 40.

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

The following pavement contamination conditions are acceptable while conducting friction assessments using continuous friction measurement equipment:

- Ice or wet ice
- Compacted snow at any depth
- Dry snow of one inch or less
- Wet snow or slush 1/8 inch or less in depth

#### When to Conduct

The Airport Operations Manager-Airfield may, at his or her discretion, conduct runway friction assessments whenever they deem it necessary.

#### How to Conduct

Procedures used to conduct runway friction assessments are as follows:

- Friction measurements will be taken approximately ten feet laterally from the runway centerline.
- Measurements will be taken in the direction of landing and departing air traffic.
- Measurements are taken in one pass whenever conditions permit.

#### Calibration

Friction Tester vehicles are calibrated at intervals that are specified by the manufacturer, and as required. Airport Operations Managers-Airfield or their designees are responsible for the calibration.

#### 5.4 Taxiway and Apron Assessments

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.

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#### 5.5 Surface Condition Reporting

Airport Operations personnel will carefully monitor changing airfield conditions and disseminate information about those conditions via PASSUR SLC Communicator web page and the NOTAM System in a timely manner to airport users.

**Runway:** Runway condition reports will occur when contaminants are present on a runway surface via the Federal NOTAM System. Condition Reports and RwyCCs will be updated as necessary whenever conditions change, such as a contaminant type, depth, percentage or treatment/width change.

**Taxiway and Apron:** Taxiway and apron condition reports will occur when contaminants are present on these surfaces via the Federal NOTAM System.

NOTAMS will be updated as necessary whenever conditions change, such as a contaminant type, depth, percentage or treatment/width change.

Any significant change in weather or surface conditions noted during continuous monitoring may be considered as a trigger to re-evaluate affected surfaces, and to make appropriate notifications.

Re-evaluation of airport surfaces by an Airport Operations Manager-Airfield should be considered/accomplished any time a change to the surface conditions occurs, which could be any of, but not limited to, the following:

- active snow event
- plowing/brooming/deicing/sanding
- rapidly rising or falling temperatures
- rapidly changing conditions

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 a need to report conditions on the remainder of the surface. (For example: snow is present on the first two thirds of the runway.)

#### 5.6 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.

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#### 5.7 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 *Measurement, Construction, and Maintenance of Skid-Resistant Airport Pavement Surfaces,* 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 to 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.

#### 5.8.1 Requirements for Closures

Runways will be closed when conditions are reported at RwyCC 0. The runway will remain closed until it has been deemed safe for takeoff and landing operations of aircraft.

Runways will be closed upon receipt of one NIL braking action by Air Traffic Control. Runways will remain closed until the Airport Operations Manager-Airfield is satisfied that a NIL condition no longer exists.

The Air Traffic Control Tower will suspend operations when previous reports have indicated GOOD, GOOD-TO-MEDIUM or MEDIUM braking action and two consecutive POOR reports are received. They will afford priority for Airport Operations to conduct a surface assessment on the affected runway. An assessment must be completed prior to the next aircraft operation on that runway.

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, taxilane, or apron) 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.

#### 5.9 Continuous Monitoring and Deteriorating Conditions

Continuous monitoring procedures are implemented when weather conditions

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indicate it is necessary. All Airport Operations personnel are responsible for continuous monitoring of their assigned areas for changing conditions and reporting to the SCC.

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 and aprons to ensure braking does not become NIL.

Including, but not limited to:

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

# 5.10 Surface Conditions Not Being Monitored/Reported

Salt Lake City International Airport assesses runway conditions on a continuous basis during snow and ice control operations. Airport Operations Managers-Airfield that are assigned to the runway snow removal elements monitor the conditions continuously. Additionally, Airport Operations Specialists that are on the field will report field conditions to the SCC via radio or telephone.

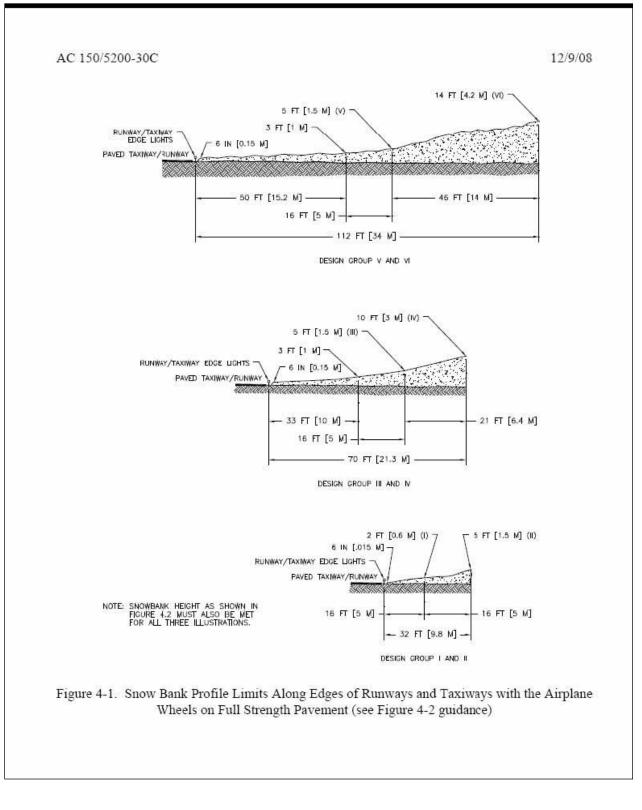
# **Chapter 6 - Attachments**

313-1-1 Pg D-313-29
313-1-2NAVAID Snow Clearance Area Pg D-313-30
313-1-3 List of Airport Owned Snow Removal Assets Pg D-313-31
313-1-4PASSUR SLC Communicator Web Page Pg D-313-37
313-1-5Letter of Agreement between Airport and ATCT Pg D-313-39 for Snow Removal Operations

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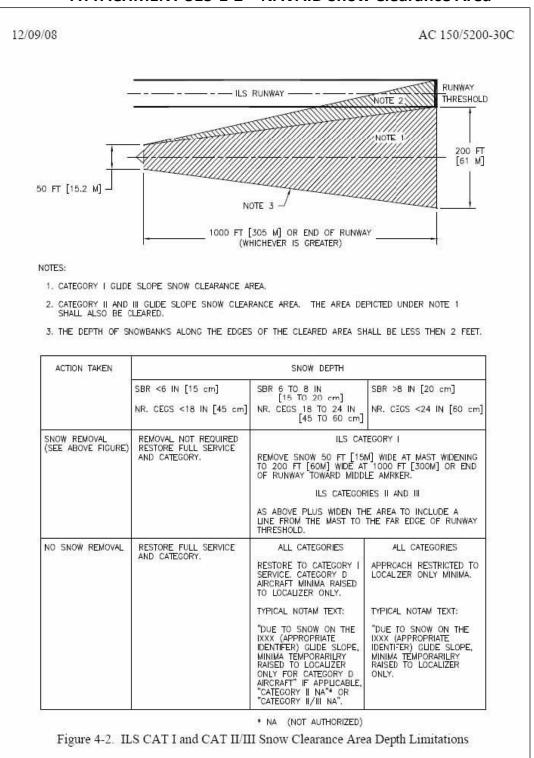


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# ATTACHMENT 313-1-1 – Snowbank Profile Limits

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### ATTACHMENT 313-1-2 – NAVAID Snow Clearance Area

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# ATTACHMENT 313-1-3 – Airport Owned Snow Removal Assets SLC DEPARTMENT OF AIRPORTS WINTER EQUIPMENT MARCH 2023

EQUIPMENT NUMBER	YEAR, MAKE, MODEL	DEPARTMENT	METER	ACQ. DATE	
CLASS: eBlower4wd - Equipment Heavy Snow Blower 4 Wheel Drive					
382314	2008 Oshkosh Snow Blower	MaintAir2	620	06/30/2008	
382334	2009 Oshkosh Snow Blower	MaintAirFd	899	03/19/2009	
382335	2009 Oshkosh Snow Blower	MaintAirFd	1,035	03/19/2009	
382336	2009 Oshkosh Snow Blower	MaintAirFd	1,018	04/10/2009	
382432	2010 Oshkosh Snow Blower	MaintAirFd	843	02/05/2010	
382524	2011 Oshkosh Snow Blower	MaintAirFd	547	03/29/2011	
382675	2015 Oshkosh Snow Blower	MaintAirFd		10/26/2015	
382778	2016 Oshkosh Snow Blower	MaintAirFd	346	06/01/2017	
381497	1994 Schmidt Snow Blower	MaintAirFd	1.373	01/01/1994	
381594	1995 Kodiak Northwes Snow Blower	MaintAirFd	1,011		
381595	1995 Kodiak Northwes Snow Blower	MaintAirFd	,	01/01/1995	
381596	1995 Kodiak Northwes Snow Blower	MaintAirFd	1,341		
381597	1995 Kodiak Northwes Snow Blower	MaintAirFd	1,267		
381751	1998 Stewart Stevens Snow Blower	MaintAir3	763	01/01/1998	
382027	2004 Kodiak Northwes Snow Blower	MaintAirFd	309	01/01/2004	
Distinct Count of Equipment: 15		Mainty and G	000	01/01/2004	
CLASS: eBroomRway - Equipment I	Heavy Runway Broom				
422296	2008 MB Runway Broom	MaintAirFd	777	04/16/2008	
422297	2008 MB Runway Broom	MaintAir2		04/15/2008	
422298	2008 MB Runway Broom	MaintAirEd		04/16/2008	
422337	2009 MB Runway Broom	MaintAirFd		02/26/2009	
422338	2009 MB Runway Broom	MaintAirFd		03/11/2009	
422330			1.241		
	2009 MB Runway Broom	MaintAirFd MaintAirEd	,		
422340	2009 MB Runway Broom	MaintAirFd MaintAirEd		05/04/2009	
422341	2009 MB Runway Broom	MaintAirFd		04/02/2009	
422342	2009 MB Runway Broom	MaintAirFd		04/29/2009	
422343	2009 MB Runway Broom	MaintAirFd	,	04/29/2009	
422433	2010 MB Runway Broom	MaintAirFd		03/15/2010	
422434	2010 MB Runway Broom	MaintAirFd		03/26/2010	
422435	2010 MB Runway Broom	MaintAirFd	,	04/01/2010	
422516	2010 MB Runway Broom	MaintAirFd		01/04/2011	
422517	2010 MB Runway Broom	MaintAirFd		01/04/2011	
422572	2013 MB Runway Broom	MaintAirFd		04/01/2013	
422573	2013 MB Runway Broom	MaintAirFd		04/01/2013	
422674	2015 MB Runway Broom	MaintAirFd		10/19/2015	
422698	2016 MB Runway Broom	MaintAirFd	363		
422854	2019 MB Runway Broom	MaintAirFd	262	04/08/2019	
Distinct Count of Equipment: 20					
CLASS: eGrader4wd - Equipment H					
902089	2006 Volvo Grader	MaintAirFd	3,574	11/23/2005	
902090	2006 Volvo Grader	MaintAirFd	5,280	12/09/2005	
901561	1995 Dresser Grader	MaintAir2	3,530	01/01/1995	
Distinct Count of Equipment: 3					
CLASS: eLoader4wd - Equipment H	leavy Loader 4 Wheel Drive				
862676	2015 John Deere Loader	MaintAirFd	472	10/26/2015	
862750	2016 Kawaski Loader	MaintAirFd	1,314	12/01/2016	
861556	1995 Kawaski Loader	MaintAirFd		01/01/1995	
861742	1998 Kawaski Loader	MaintAirFd		01/01/1998	
861743	1998 Kawaski Loader	MaintAir2		01/01/1998	
861857	1999 Kawaski Loader	MaintAirFd		01/01/2000	
862038	2003 Kawaski Loader	MaintAirFd	4,566		
862039	2003 Kawaski Loader	MaintAirFd	3,791		
862087	2005 Kawaski Loader	MaintAirFd	,	01/01/2005	

Original Date: <u>15 April 2011</u>

FAA Approval:

Federal Aviation Administration Northwest Mountain Region Airports Division APPROVED Mar 23 2023

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# SALT LAKE CITY INTERNATIONAL AIRPORT CERTIFICATION MANUAL Page D-313-32

862088	2005 Kawaski Loader	MaintAirFd	3 177	01/01/2005
862691	2015 Kawaski Loader	MaintAirFd		12/01/2015
862692	2015 Kawaski Loader	MaintAirFd		12/01/2015
862693	2015 Kawaski Loader	MaintAirFd		12/01/2015
862694	2015 Kawaski Loader	MaintAirFd		12/01/2015
	f Equipment: 14		.,020	12/01/2010
CLASS: eMiscE	Eqzzz - Equipment Heavy Misc. Equipment			
721771	1998 Tucker Snow Cat	MaintElec	310	01/01/1998
Distinct Count o	f Equipment: 1			
	erAcc - Equipment Heavy Sander Accessory			
362220	2006 Swenson Sander 12 Ft.	MaintAirFd	1	04/14/2006
362389	2009 Swenson Sander 12 Ft.	MaintAirFd	1	04/15/2009
362390	2009 Swenson Sander 12 Ft.	MaintAirFd	0	04/16/2009
362477	2010 Swenson Sander 8 Ft.	MaintCentr		06/24/2010
362478	2010 Swenson Sander 8 Ft.	MaintAirFd	0	06/24/2010
362479	2010 Swenson Sander 10 Ft.	MaintAirFd	0	06/24/2010
362480	2010 Swenson Sander 12 Ft.	MaintAirFd	1	06/24/2010
362481	2010 Swenson Sander 12 Ft.	MaintAirFd	1	06/24/2010
362616	2014 Swenson Sander 12 Ft.	MaintAirFd	0	06/14/2014
362683	2016 Western Sander	MaintAirFd	0	07/01/2015
362684	2016 Western Sander	MaintAirFd	0	07/01/2015
362723	2016 Henderson FRS Sander 14'	MaintAirFd	0	06/16/2016
362762	2016 Swenson Sander 14 Ft.	MaintAirFd	0	04/26/2017
362798	2017 Western Sander 8 Ft.	MaintCentr	1	12/20/2017
362861	2019 Monroe Sander 17 Ft.	MaintAirFd	0	07/26/2019
362862	2019 Swenson Sander 14 Ft.	MaintAirFd	0	08/09/2019
363068	2022 Western Sander 8 Ft.	MaintAir2	0	05/26/2022
363106	2022 Western Sander	MaintAirFd	0	11/21/2022
361540	1991 Henderson Chief Sander 8 Ft.	MaintAirFd	1	01/01/1992
361607	1995 Henderson Chief Sander	MaintAirFd	1	01/01/1995
361609	1995 Henderson Chief Sander 12 Ft.	MaintAirFd	1	01/01/1995
361661	1997 Henderson Chief Sander 10 Ft.	MaintCentr	1	01/01/1997
361663	1997 Henderson Chief Sander	MaintAir2	1	01/01/1997
361664	1997 Henderson Chief Sander 10 Ft.	MaintAirFd	1	01/01/1997
361755	1998 Henderson Chief Sander 12 Ft.	MaintAirFd	1	01/01/1998
361829	1999 Warren Sander 8 Ft.	MaintAirFd	1	01/01/1999
361850	2000 Warren Sander	MaintAirFd	1	01/01/2000
362009	2003 Swenson Sander 12 Ft.	MaintAirFd	1	01/01/2003
362010	2003 Swenson Sander 12 Ft.	MaintAirFd	1	
362159	2004 Monroe Sander 15 Ft.	MaintAirFd	1	01/01/2004
Distinct Count o	f Equipment: 30			
01.4.00				
	PIAcc - Equipment Heavy Snow Plow Accessory			44/00/0005
322191	2006 Henke Snow Plow G	MaintAirFd		11/23/2005
322196	2006 Henke Snow Plow G	MaintAirFd		11/23/2005
322221	2006 Wausau Snow Plow 2009 Wausau Snow Plow RW	MaintAirFd	1	06/23/2006
322375		MaintAirFd	1	01/28/2009
322376	2009 Wausau Snow Plow RW	MaintAirFd	1	01/28/2009
322382	2009 Wausau Snow Plow RW	MaintAirFd	1	03/27/2009
322383	2009 Wausau Snow Plow RW	MaintAirFd	0	03/27/2009
322384	2009 Wausau Snow Plow RW	MaintAirFd	0	03/27/2009
322385	2009 Wausau Snow Plow RW	MaintAirFd	0	03/27/2009
322391	2009 Wausau Snow Plow	MaintAirFd MaintAirFd	1	04/15/2009
322392	2009 Wausau Snow Plow	MaintAirFd	0	04/16/2009
322396	2009 Wausau Snow Plow	MaintAirFd	0	05/21/2009
322397	2009 Wausau Snow Plow	MaintAirFd	0	05/11/2009
322398	2009 Wausau Snow Plow	MaintAirFd	0	05/21/2009
322482	2010 Wausau Snow Plow L	MaintAirFd	1	06/28/2010
322483	2010 Wausau Snow Plow L	MaintAirFd	0	06/28/2010
322487	2010 Arctic Snow Plow L	MaintAir2	0	07/30/2010

Original Date: <u>15 April 2011</u>

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Federal Aviation Administration Northwest Mountain Region Airports Division APPROVED Mar 23 2023 Inspector

322529	2011 Wausau Snow Plow	MaintAirFd	0	06/29/2011
322530	2011 Wausau Snow Plow	MaintAirFd	0	06/29/2011
322585	2013 Henke Snow Plow L	MaintAirFd	0	08/12/2013
322586	2013 Henke Snow Plow L	MaintAirFd	0	08/12/2013
322587	2013 Henke Snow Plow L	MaintAirFd	0	08/12/2013
322610	2014 Wausau Snow Plow RW	MaintAirFd	0	06/01/2014
322611	2014 Wausau Show Plow RW	MaintAirFd	0	06/01/2014
			-	
322615	2013 Wausau Snow Plow	MaintAirFd	0	06/01/2014
322687	2015 Henke Snow Plow L	MaintAirFd	0	12/12/2015
322688	2015 Henke Snow Plow L	MaintAirFd	0	12/12/2015
322689	2015 Henke Snow Plow L	MaintAirFd	0	12/12/2015
322690	2015 Henke Snow Plow L	MaintAirFd	0	12/12/2015
322793	2018 Wausau Snow Plow RW	MaintAirFd	0	06/01/2018
322852	2018 Henke Snow Plow	MaintAirFd	0	01/31/2019
322858	2019 Wausau Snow Plow RW	MaintAirFd	0	05/02/2019
322863	2019 Henke Snow Plow	MaintAirFd	0	08/09/2019
322955	2020 Wausau Snow Plow RW	MaintAirFd	0	04/27/2020
323055	2022 Wausau Snow Plow RW	MaintAirFd	0	03/04/2022
323067	2022 Western Snow Plow	MaintAir2	0	05/26/2022
323105	2022 Western Snow Plow	MaintAirFd	0	11/21/2022
542673	2015 Schulte Snow Blower	MaintAirFd	0	10/15/2015
321518	1970 Unknown Snow Plow	MaintAirFd	1	01/01/1993
321523	1970 Meyer Snow Plow	MaintAir2	1	01/01/1991
321558	1995 Wausau Snow Plow L	MaintAirEd	1	01/01/1995
321562	1995 Root Spring Snow Plow G	MaintAirFd	1	01/01/1995
321602	1995 Wausau Snow Plow RW	MaintAirFd	1	01/01/1995
	1995 Wausau Show Plow RW	MaintAirFd		
321612			1	01/01/1995
321613	1995 Wausau Snow Plow RW	MaintAirFd	1	01/01/1995
321614	1995 Wausau Snow Plow RW	MaintAir2	1	01/01/1995
321615	1995 Wausau Snow Plow RW	MaintAirFd	1	01/01/1995
321616	1995 Wausau Snow Plow RW	MaintAirFd	1	01/01/1995
321673	1996 Wausau Snow Plow	MaintCentr	1	01/01/1997
321674	1996 Wausau Snow Plow	MaintAirFd	1	01/01/1997
321757	1998 Wausau Snow Plow RW	MaintAirFd	1	01/01/1998
321758	1998 Wausau Snow Plow RW	MaintAirFd	1	01/01/1998
321759	1998 Wausau Snow Plow RW	MaintAirFd	1	01/01/1998
321769	1997 Wausau Snow Plow L	MaintAirFd	1	01/01/1998
321770	1997 Wausau Snow Plow L	MaintAir2	1	01/01/1998
322064	2003 Henke Snow Plow L	MaintAirFd	1	01/01/2004
322065	2003 Henke Snow Plow L	MaintAirFd	1	01/01/2004
322130	2005 Wausau Snow Plow L	MaintAirFd	1	01/01/2005
322131	2005 Wausau Snow Plow L	MaintAirFd	1	01/01/2005
322158	2004 Wausau Snow Plow	MaintAirFd	1	01/01/2004
322488	2010 Arctic Snow Plow L	MaintAirFd	0	07/30/2010
Distinct Count of Equipment: 61		Maine an a	U	01/00/2010
Distinct Obditt of Equipment. Of				
	T ( ())			
CLASS: eTractr4wd - Equipment He				
741999	2002 John Deere Field Tractor	MaintAir2	2,520	01/01/2003
Distinct Count of Equipment: 1				
CLASS: hDumpBd10w - Heavy Ver	iicle Dump Bed 10 Wheel			
342116	2006 International Dump Truck 10 W	MaintAirFd	4,670	01/31/2006
342329	2009 International Dump Truck 10 W	MaintAirFd	4,020	09/08/2008
342519	2012 International Dump Truck 10 W	MaintAirFd	813	04/06/2011
342594	2013 International Dump Truck 10 W	MaintAirFd	950	10/30/2013
342634	2015 Mack GU713	MaintAirFd		07/15/2015
342636	2016 International Dump Truck 10 W	MaintAirFd		04/27/2015
342695	2015 Mack GU713	MaintAirFd		06/01/2016
342797	2018 International HX620	MaintAirFd		01/31/2018
341991	2003 Mack Dump Truck 10 W	MaintAirFd		01/01/2003
341992	2003 Mack Dump Truck 10 W	MaintAirFd	4,993 6,397	
	2005 Mack Dump Truck 10 W	MaintAirFd		01/01/2003
342107		maint/IIFU	4,000	01/01/2004

Original Date: <u>15 April 2011</u>

FAA Approval:

Federal Aviation Administration Northwest Mountain Region Airports Division APPROVED Mar 23 2023 Inspector

# SALT LAKE CITY INTERNATIONAL AIRPORT CERTIFICATION MANUAL Page D-313-34

342330	2009 International Dump Truck 10 W	MaintAirFd	3,574	04/15/2009
342520	2012 International Dump Truck 10 W	MaintAirFd	2,021	04/06/2011
Distinct Count of Equipment: 13				
CLASS: hDumpBd4wd - Heavy Veh	•		4 4 6 6	04/00/0000
462344	2009 International Fifth Wheel AWD	MaintAirFd	1,136	
462345	2009 International Fifth Wheel AWD	MaintAirFd		01/09/2009
462346	2009 International Fifth Wheel AWD	MaintAirFd		01/09/2009
462347 462595	2009 International Fifth Wheel AWD 2014 International Fifth Wheel AWD	MaintAirFd MaintAirFd		01/09/2009 06/25/2014
462595	2014 International Fifth Wheel AWD	MaintAirFd		06/25/2014
462656	2015 International Fifth Wheel AWD	MaintAirFd		06/09/2014
462810	2018 International Fifth Wheel AWD	MaintAirFd		05/01/2018
462857	2020 International Fifth Wheel AWD	MaintAirFd		04/23/2019
462958	2021 International Fifth Wheel AWD	MaintAirFd		05/04/2020
461570	1995 Mack Fifth Wheel AWD	MaintAirFd		01/01/1995
461571	1995 Mack Sprayer	MaintAirFd	,	01/01/1995
461572	1995 Mack Fifth Wheel AWD	MaintAirFd	,	01/01/1995
461573	1995 Mack Fifth Wheel AWD	MaintAirFd		01/01/1995
461574	1995 Mack Fifth Wheel AWD	MaintAir2	,	01/01/1995
462029	2004 International Fifth Wheel AWD	MaintAirFd		01/01/2004
462030	2004 International Fifth Wheel AWD	MaintAirFd		01/01/2004
462031	2004 International Fifth Wheel AWD	MaintAirFd	,	01/01/2004
462032	2004 International Fifth Wheel AWD	MaintAirFd		01/01/2004
Distinct Count of Equipment: 19		Maint an a	1,020	01/01/2001
CLASS: hDumpBd6wd - Heavy Veh	icle Dump Bed 6 Wheel			
222315	2008 International Dump Truck 6 Wh	MaintCentr	2,916	03/13/2008
222316	2008 International Dump Truck 6 Wh	MaintAirFd	1,776	03/13/2008
222331	2009 International Dump Truck 6 Wh	MaintAir2	1,102	10/09/2008
222332	2009 International Dump Truck 6 Wh	MaintAirFd	1,591	10/09/2008
222333	2009 International Dump Truck 6 Wh	MaintAirFd	1,517	10/09/2008
222900	2019 Caterpillar 730 Haul Truck	MaintAirFd	645	11/15/2019
222901	2019 Caterpillar 730 Haul Truck	MaintAirFd	618	11/15/2019
Distinct Count of Equipment: 7				
CLASS: hGlyRec10W - Heavy Vehic		Disco	000	40/05/0047
502791	2018 Mack Durasucker	PlanDeice	600	10/25/2017
502115 Distinct Count of Equipment: 2	2005 Sterling GVR	MaintAirFd	863	08/26/2004
Distinct Count of Equipment: 2				
CLASS: hTanker10w - Heavy Vehic	e Tanker 10 Wheel			
262588	2013 International De-icer Flusher	MaintAirFd	1 552	09/04/2013
262593	2013 International De-icer Flusher	MaintAirFd	1,286	
261207	1984 Mack De-icer Flusher	MaintAirFd	598	01/01/1986
261598	1995 Mack De-icer Flusher	MaintAirFd		01/01/1995
Distinct Count of Equipment: 4			_,	
CLASS: hUtilty4wd - Heavy Vehicle	Utility 4 Wheel Drive			
182308	2008 Chevrolet Kodiak	MaintAirFd	48,340	03/31/2008
Distinct Count of Equipment: 1				
CLASS: nMiscEqAcc - Non Motive N				
991394	1991 SR Sprayer Sprayer	MaintAirFd	0	01/01/1992
Distinct Count of Equipment: 1				
CLASS: sATVzzz4wd - Small Equip		NA 1 11 11	0.000	00/00/0044
542613	2014 Kubota Utility	MaintJanit		06/30/2014
542849	2018 John Deere XUV865M	MaintAir2		01/07/2019
742444	2010 Club Car ATV	MaintAirFd MaintContr		08/16/2010
742445 Distinct Count of Equipment: 4	2010 Club Car ATV	MaintCentr	76	08/16/2010
Distinct Count of Equipment: 4				

Original Date: <u>15 April 2011</u>

FAA Approval: \_

Federal Aviation Administration Northwest Mountain Region Airports Division APPROVED Mar 23 2023 Inspector

622999 Distinct Count of Equipment:	Equipment Loader 4 Wheel Drive 2020 Caterpillar Skidsteer	MaintAirFd	688	10/26/2020
Distinct Count of Equipment.	I			
CLASS: sMiscEqzzz - Small E	Equipment Misc. Equipment			
513	2022 Powersmart Snow Blower	OpsFBO	0	01/01/2023
Distinct Count of Equipment:	1			
CLASS: sSnowPIAcc - Small	Equipment Snow Plow Accessory			
322192	2006 Boss Snow Plow	MaintAirFd	1	12/01/2005
322195	2006 Boss Snow Plow	MaintAirFd	0	12/06/2005
322227	2006 Boss Snow Plow	MaintAirFd	1	10/11/2006
322228	2006 Boss Snow Plow	MaintAirFd	1	10/11/2006
322229	2006 Boss Snow Plow	MaintAirFd	1	10/11/2006
322254	2006 Boss Snow Plow	MaintAirFd	1	12/27/2006
322255	2006 Boss Snow Plow	MaintAir2	1	12/27/2006
322447	2010 Boss Snow Plow	MaintAirFd	1	11/10/2009
322556	2002 Western Snow Plow	MaintCentr	0	01/00/1900
322560	2013 Boss Snow Plow	MaintAirFd	0	10/01/2013
322561	2013 Boss Snow Plow	MaintFacil	0	10/01/2013
322564	2007 Boss Snow Plow	MaintCentr	0	10/01/2007
322568	2010 Western Snow Plow	MaintAirFd	0	10/01/2010
322582	2013 Western Snow Plow	MaintCentr	0	06/28/2013
322597	2014 Buyers Scoop Dogg	MaintCentr	0	01/27/2014
322681	2016 Western Snow Plow	MaintAirFd	0	10/28/2015
322682	2016 Western Snow Plow	MaintAirFd	0	01/01/2016
322697	2016 Western Snow Plow	MaintAirFd	0	01/27/2016
322758	2017 Western Snow Plow	MaintVeh	0	02/09/2017
322789	2017 Western Snow Plow	MaintFacil	0	03/28/2017
322838	2018 Western Snow Plow	MaintAirFd	0	10/30/2018
322839	2018 Western Snow Plow	MaintAirFd	0	10/30/2018
322908	2019 Western Snow Plow	MaintAirFd	0	12/02/2019
322971	2020 Caterpillar Snow Plow	MaintAirFd	0	07/31/2020
323000	2020 Caterpillar Snow Plow	MaintAirFd	0	10/26/2020
323021	2020 Western Snow Plow	MaintAirFd	0	01/26/2021
323022	2020 Western Snow Plow	MaintAirFd	0	01/25/2021
323023	2020 Western Snow Plow	MaintAirFd	0	02/01/2021
323051	2018 Western Snow Plow	MaintCentr	0	01/27/2022
323100	2022 Western Snow Plow	MaintCentr	0	09/12/2022
500	1996 Yard Machine Snowthrower	OpsPolice	0	01/00/1900
503	1999 Murray Snow Blower	MaintAir2	0	01/01/1999
505	2014 Craftsman Snow Blower	MaintCentr	0	01/01/2014
506	2014 Troy Built Snow Blower	MaintCentr	0	01/01/2014
508	2013 Toro Power Broom	MaintAirFd	0	01/01/2013
509	2013 Toro Power Broom	MaintAirFd	0	01/01/2013
510	2013 Toro Power Broom	MaintAirFd	0	01/01/2013
511	2013 Toro Power Broom	MaintAirFd	0	01/01/2013
512	2016 Ariens Snow Blower	MaintElec	0	01/01/2017
515	2007 Honda Snowthrower	MaintAirFd	0	11/08/2006
516	2007 Honda Snowthrower	MaintAirFd	0	11/08/2006
322664	2015 Western Snow Plow	MaintFacil	0	07/14/2015
Distinct Count of Equipment:				
CLASS: sTractorUt - Small Ed	quipment Tractor Utility			
742701	2016 Kubota B2650	MaintAirFd	160	04/22/2016
742773	2017 Kubota B2650	MaintAirFd	261	06/15/2017
742833	2018 Kubota B2650	MaintAirFd	192	10/10/2018
742872	2019 Kubota B2650	MaintAirFd	129	09/04/2019
Distinct Count of Equipment:	4			

Original Date: <u>15 April 2011</u>

Federal Aviation Administration Northwest Mountain Region Airports Division APPROVED

Mar 23 2023

CLASS: vAutoSe2wd - Vehicle Light Automobile Sedan 2 Wheel Drive 102013 2004 Saab Friction Tester 102014 2004 Saab Friction Tester Distinct Count of Equipment: 2

 OpsAirfild
 27,216
 01/01/2004

 OpsAirfild
 27,344
 11/01/2003

Total Distinct Count of Equipment: 246

Original Date: <u>15 April 2011</u>

Revision Date: <u>3 March 2023</u>

FAA Approval: \_

Northwest Mountain Region Airports Division APPROVED Mar 23 2023

Inspector

Federal Aviation Administration

# ATTACHMENT 313-1-4 – PASSUR SLC Communicator Web Page

SLC Communicator		
Construction Documents Portal Terminal Info Ma		A33L Internet O HOME PASSUR.
SLC Chat		
		Send
Airport Status	Runway Configuration A:34L	Active NOTAMs
SLC Airport is: Open Airfield Ops Mgr on Duty: John Smith (801) 575-2460 Term/Landside Ops Mgr on Terminal Supervisor (801) Duty: 647-5159		Updated 22May 11202 ISLC 02/270 SLC APRON AIR CARRIER APN ACCESS 13 CLSD TO ACFT WINGSPAN MORE THAN 171FT 2002091440-2012312359
Airport Control Center: (801) 575-2401 Airport Police - Non- Emergency: (801) 575-2401	Arrivals 34L	ISLC 03/023 SLC OBST CRANE (ASN 2019-ANM-317-NRA) 404701N1115911W (0.5NM SW SLC) 4426FT (200FT AGL) FLAGGED AND LGTD 1903061631-2012312359
Snow Desk is: Closed Snow Desk: Snow Alert Status is:		ISLC 04/035 SLC APRON AIR CARRIER APN ACCESS 22 CLSD 2004091558-2008312359
Low Visibility Operations are: Not in effect Airport EOC is: Closed	$1 \times 1$	ISLC 04/036 SLC APRON AIR CARRIER APN ACCESS 23 CLSD 2004091559-2008312359
Airport EOC: Airport EOC: National Terrorism Advisory	-~0.55	ISLC 04/037 SLC APRON AIR CARRIER APN ACCESS 22 TXL CLSD 2004091600-2008312359
System: No Current Alerts Update #3 at 22May20 1403L/2003Z by bhaacke-	Runways (RWY NOTAMs)	ISLC 04/038 SLC APRON AIR CARRIER APN ACCESS 23 TXL CLSD 2004091601-2008312359
AIN Status Green 🗮	16L-34R	ISLC 04/121 SLC NAV NON ADS-B ACFT NA 2004291200-
Taxiways (TWY NOTAMs)	16R-34L	2009292359
Updated 22May 1757Z ISLC 05/036 SLC TWY E BTN TWY G AND AIR CARRIER APN ACCESS 10 CLSD 2005041435-2007202359	17-35 Updated 22May 05402 ISLC 05/162 SLC RWY 17/35 SAFETY AREA NOT STD SE SIDE 2005181728-2007012359 Show RCAM Codes and Definitions	ISLC 05/008 SLC OBST TOWER (ASN UNKNOWN) 404702N1115717W (0.92NM SSE APCH END RWY 17) UNKNOWN (60FT AGL) NOT LGTD 2005020357- 2006302359
ISLC 05/051 SLC TWY E BTN TWY G AND AIR CARRIER APN ACCESS 10 WIP CONST 2005051350-2007202359	Important Airport Information	ISLC 05/033 SLC APRON AIR CARRIER APN ACCESS 8 CLSD 2005041329-2007202359
ISLC 05/139 SLC TWY K BTN FIXED BASE OPR PRKG APN ACCESS 30 AND TWY K4 CLSD 2005151600- 2006052359	Other Weather Information	ISLC 05/034 SLC APRON AIR CARRIER APN ACCESS 9 CLSD 2005041329-2007202359
ISLC 05/144 SLC TWY K3 CLSD 2005152044-2006052359	Salt Lake City Airport Date: Friday, 5/22/2020 Time Issued: 1000	ISLC 05/036 SLC TWY E BTN TWY G AND AIR CARRIER APN ACCESS 10 CLSD 2005041435-2007202359
ISLC 12/188 SLC TWY E BTN TWY F2 AND TWY B CLSD TO ACFT WINGSPAN MORE THAN 171FT 1912181624- 2008312359	Alerts:	ISLC 05/037 SLC APRON AIR CARRIER APN ACCESS 7 CLSD 2005041438-2007202359
RVR =	<ul> <li>Strong winds this afternoon/evening with rain overnight/early Saturday.</li> </ul>	ISLC 05/051 SLC TWY E BTN TWY G AND AIR CARRIER APN ACCESS 10 WIP CONST 2005051350-2007202359
Rwy         ID         MP         RO         E         C           16L         >6000         >6000         0         0         0           34R         >6000         >6000         >6000         0         0           16R         >6000         >6000         0         0         0	24-Hour Weather Discussion: Likely staying dry all afternoon with strong NW winds increasing. Sustained near/above 23 mph and gusts of 30- 35 mph are expected late in the day/evening. Gusty showers	ISLC 05/053 SLC OBST CRANE (ASN UNKNOWN) 404647N1115711W (1.10NM ESE SLC) UNKNOWN (200FT AGL) FLAGGED AND LGTD 2005051554-2006052359
34L         >6000         >6000         0         0           17         >6000         >6000         0         0           35         >6000         >6000         0         0           Taken at 22May 2029Z	move in after 1800 as a cold front starts pushing in. Erratic gusts of 40+ mph are possible as the initial surface front moves through this evening. Then as the night continues, rain/rain showers become more likely near 2200, continuing	ISLC 05/070 SLC OBST CRANE (ASN UNKNOWN) 404656N1115856W (.63NM NW APCH END RWY 34R) UNKNOWN (110FT AGL) FLAGGED DLY 1200-2359 2005081200-2006082359
Diversions Enroute: 1 Ground: 0 From SLC: 0	into the early morning hours and mostly ending by 0600 Saturday. A few claps of thunder are possible through the	ISLC 05/138 SLC APRON AIR CARRIER APN ACCESS 20 TXL E 600FT CLSD 2005151409-2006012359
AC         Time           Flight         Status         Tail         Type         Origin         ATA         ATA           UPS9703         Enroute         B752         KGEG         07:46	middle of the night from any weak/embedded thunderstorms. There are hints of reduced vsby/cigs occurring between 0000-0600, with vsby down to 1 mile and cigs near 1000' under rain.	ISLC 05/139 SLC TWY K BTN FIXED BASE OPR PRKG APN ACCESS 30 AND TWY K4 CLSD 2005151600- 2006052359

Original Date: <u>15 April 2011</u>

FAA Approval: \_

Federal Aviation Administration Northwest Mountain Region Airports Division APPROVED

Mar 23 2023

UPS9703	Enroute	B752	KGEG	07.46	
0F33103	Linoute	07.52	ROLO	07.40	

#### Aprons (APRON NOTA

Updated 22May 0547Z ISLC 02/270 SLC APRON AIR CARRIER APN ACCESS 13 CLSD TO ACFT WINGSPAN MORE THAN 171FT 2002091440-2012312359

ISLC 04/035 SLC APRON AIR CARRIER APN ACCESS 22 CLSD 2004091558-2008312359

ISLC 04/036 SLC APRON AIR CARRIER APN ACCESS 23 CLSD 2004091559-2008312359

ISLC 04/037 SLC APRON AIR CARRIER APN ACCESS 22 TXL CLSD 2004091600-2008312359

ISLC 04/038 SLC APRON AIR CARRIER APN ACCESS 23 TXL CLSD 2004091601-2008312359

ISLC 05/033 SLC APRON AIR CARRIER APN ACCESS 8 CLSD 2005041329-2007202359

ISLC 05/034 SLC APRON AIR CARRIER APN ACCESS 9 CLSD 2005041329-2007202359

SLC 05/037 SLC APRON AIR CARRIER APN ACCESS 7

CLSD 2005041438-2007202359 ISLC 05/138 SLC APRON AIR CARRIER APN ACCESS 20

TXL E 600FT CLSD 2005151409-2006012359

ISLC 12/159 SLC APRON AIR CARRIER APN SPOT 21 TXL WIP CONST ADJ S SIDE LGTD AND BARRICADED 1712151643-2012012359

ISLC 12/160 SLC APRON AIR CARRIER APN SPOT 20 TXL WIP CONST ADJ N EDGE LGTD AND BARRICADED 1712151644-2012012359

#### Aerodrome (AD NOTAMs)

Obstructions (OBST NOTAMs)

#### Updated 21May 0553Z

ISLC 03/023 SLC OBST CRANE (ASN 2019-ANM-317-NRA) 404701N1115911W (0.5NM SW SLC) 4426FT (200FT AGL) FLAGGED AND LGTD 1903061631-2012312359

ISLC 05/008 SLC OBST TOWER (ASN UNKNOWN) 404702N1115717W (0.92NM SSE APCH END RWY 17) UNKNOWN (60FT AGL) NOT LGTD 2005020357-2006302359

ISLC 05/053 SLC OBST CRANE (ASN UNKNOWN) 404647N1115711W (1.10NM ESE SLC) UNKNOWN (200FT AGL) FLAGGED AND LGTD 2005051554-2006052359

ISLC 05/070 SLC OBST CRANE (ASN UNKNOWN) 404656N1115856W (.63NM NW APCH END RWY 34R) UNKNOWN (110FT AGL) FLAGGED DLY 1200-2359 2005081200-2006082359

ISLC 05/170 SLC OBST POWER LINE (ASN UNKNOWN) 404602N1120024W (2NM SW SLC) 4384FT (153FT AGL) NOT LGTD 2005200211-2006040211

ISLC 07/130 SLC OBST CRANE (ASN UNKNOWN) 404724N1115915W (1.7NM SSE APCH END RWY 16R) UNKNOWN (180FT AGL) FLAGGED AND LGTD 1807132044-2012012359

ISLC 07/131 SLC OBST CRANE (ASN UNKNOWN) 404724N1115921W (1.14NM SSE APCH END RWY 16R) UNKNOWN (180FT AGL) FLAGGED AND LGTD 1807132047-2012012359

ISLC 11/096 SLC OBST CRANE (ASN UNKNOWN) 404723N1115912W (1.2NM SSE APCH END RWY 16R) UNKNOWN (200FT AGL) FLAGGED AND LGTD 1811141906-2012012359 under rain. Salt Lake City Airport Forecast:

Noon Fri to 6pm Fri: Dry. High temperature near 72. Winds: S 5-12 quickly turning NW 6-16, becoming 18-28 G33 late in the afternoon.

6pm Fri to 12am Sat: Gusty rain showers early with rain/rain showers expected closer to 2200. Temperature dropping to near 44. Winds: NW 18-26 G35 early becoming 7-17 mph by midnight.

12am Sat to 6am Sat: Rain/rain showers. Low temperature near 38. Winds: NW 5-15 G22 and lessening to 3-12 mph by 0600.

Long Range Planning Outlook:

Likely drying out around sunrise Saturday morning and staying dry through the day with much cooler temps in place. It may become a bit breezy through the day but gusts likely stay under 20 mph. Dry conditions are expected through the weekend and much of next week as temps slowly rebound initially, then increase mid/late next week to more summerlike temps.

#### Construction Activity Passenger Loading Bridges Elevator/Escalator Status Baggage System Status Terminal/Landside Notices

eice Pads

2006052359

ISLC 05/144 SLC TWY K3 CLSD 2005152044-2006052359 ISLC 05/162 SLC RWY 17/35 SAFETY AREA NOT STD SE SIDE 2005181728-2007012359

ISLC 05/170 SLC OBST POWER LINE (ASN UNKNOWN) 404602N1120024W (2NM SW SLC) 4384FT (153FT AGL) NOT LGTD 2005200211-2006040211

ISLC 05/174 SLC NAV ILS RWY 16R U/S 2005261400-2005261900

ISLC 05/175 SLC NAV ILS RWY 34L U/S 2005261400-2005261900

ISLC 07/130 SLC OBST CRANE (ASN UNKNOWN) 404724N1115915W (1.7NM SSE APCH END RWY 16R) UNKNOWN (180FT AGL) FLAGGED AND LGTD 1807132044-2012012359

ISLC 07/131 SLC OBST CRANE (ASN UNKNOWN) 404724N1115921W (1.14NM SSE APCH END RWY 16R) UNKNOWN (180FT AGL) FLAGGED AND LGTD 1807132047-2012012359

ISLC 11/096 SLC OBST CRANE (ASN UNKNOWN) 404723N1115912W (1.2NM SSE APCH END RWY 16R) UNKNOWN (200FT AGL) FLAGGED AND LGTD 1811141906-2012012359

ISLC 12/159 SLC APRON AIR CARRIER APN SPOT 21 TXL WIP CONST ADJ S SIDE LGTD AND BARRICADED 1712151643-2012012359

ISLC 12/160 SLC APRON AIR CARRIER APN SPOT 20 TXL WIP CONST ADJ N EDGE LGTD AND BARRICADED 1712151644-2012012359

ISLC 12/188 SLC TWY E BTN TWY F2 AND TWY B CLSD TO ACFT WINGSPAN MORE THAN 171FT 1912181624-2008312359

#### Automated Weather Information

1554 WIND from 330 at 10KT TEMP=21C DP=1C

KSLC 221954Z 33010KT 10SM FEW095 BKN130 BKN200 21/01 A2974 RMK AO2 SLP024 VIRGA

1400->1600 WIND from 300 at 11KT 1600->1900 WIND from 320 at 15KT GUSTING 25KT

1900->2100 WIND from 330 at 22KT GUSTING 33KT 2100->0000 WIND from 330 at 15KT GUSTING 24KT LIGHT RAIN SHOWERS

0000->0600 WIND from 340 at 10KT LIGHT RAIN MIST 0600->1100 WIND from 270 at 10KT LIGHT RAIN 1100->2000 WIND from 320 at 8KT SHOWERS IN VICINITY

KSLC 221734Z 2218/2324 30011KT P6SM BKN120 FM222000 32015Q25KT P6SM FEW050 SCT070 BKN100 FM222300 33022G33KT P6SM BKN070 OVC100 FM230100 33015Q24KT P6SM -SHRA BKN035 OVC060 FM230400 34010KT 4SM -RA BR BKN018 OVC030 FM231000 27010KT P6SM -RA BKN025 OVC040 FM231500 32008KT P6SM VCSH BKN040 OVC060

#### Safety and FOD Notices

Updated 03May 1534Z by rjunge-Operations personnel are out enforcing seat belts rules. Please ensure you are wearing a seatbelt when in marked vehicle roads.

Prevent FOD damage by taking the time to clean your areas.

#### Wildlife Activity

Updated 16Nov 22282 by mbengtzen-RMB Please report all bird strikes and any wildlife concerns to Airport Operations at 801-575-2401. General Aviation(U42/UV(3LC)

Original Date: <u>15 April 2011</u>

Revision Date: <u>3 March 2023</u>

FAA Approval: \_

Federal Aviation Administration Northwest Mountain Region Airports Division APPROVED

Mar 23 2023

# ATTACHMENT 313-1-5 – Letter of Agreement between Airport and ATCT Snow Removal Operations

Salt Lake City Airport Traffic Control Tower and Salt Lake City Department of Airports

#### LETTER OF AGREEMENT

EFFECTIVE: 1 October 2016

SUBJECT: Snow Removal Operations

1. **PURPOSE:** To establish responsibilities and procedures for coordination of snow removal operations at Salt Lake City International Airport (SLCIA).

2. **SCOPE:** The procedures outlined herein are for use in the conduct of snow removal operations on SLCIA. The guidance in this agreement does not supersede procedures and responsibilities in other Salt Lake City Air Traffic Control Tower (ATCT) and Salt Lake City Department of Airports (SLCDA) agreements and FAA directives.

3. **CANCELLATION:** This Letter of Agreement cancels the Letter of Agreement between Salt Lake City Airport Traffic Control Tower and Salt Lake City Department of Airports dated July 7, 2012.

4. **SAFETY MANAGEMENT REVIEW:** This change to local procedures does not represent significant new safety concerns. (See SRMRR 12-009).

#### 5. RESPONSIBILITIES:

A. SLCDA must:

- (1) Coordinate snow removal operations with ATCT via the ATCT/SLCDA "OPS" landline, direct radio communications, or commercial telephone as needed.
- (2) Initiate continuous monitoring procedures for runways and other pavement surfaces when weather conditions indicate the possibility of changing surface conditions or a potential need for snow removal operations.
- (3) Monitor braking action reports and begin coordination for runway/taxiway inspections and/or snow removal operations as needed. Provide a runway condition report following all inspections.
- (4) Close runways, taxiways, and/or ramp areas when surface conditions warrant.
- (5) Notify ATCT upon receiving information regarding the damage or failure of any navigational aid (PAPI, ALS, etc.).
- (6) Coordinate the operation or deactivation of Surface Movement Guidance Control System (SMGCS) lighting (stop bars) to assist in snow removal operations and movement of snow removal equipment.

Reference Number: SLC-311

Original Date: <u>15 April 2011</u>

Revision Date: <u>3 March 2023</u>

FAA Approval: \_\_\_\_

APPROVED Mar 23 2023

Federal Aviation Administration Northwest Mountain Region Airports Division

- (7) Schedule an annual winter operations meeting for all airport users, SLCDA and ATCT, prior to the snow season, to discuss snow removal operations.
- (8) Conduct weekly winter operations update meetings during the snow season to discuss any concerns that may have arisen from recent snow removal operations.

#### B. ATCT must:

- (1) Coordinate snow removal activity with SLCDA Snow Command.
- (2) Relay "GOOD-TO-MEDIUM", "MEDIUM", "MEDIUM-TO-POOR", "POOR", or "NIL" braking action reports to the SLCDA Airport Operations Manager immediately upon receipt.
- (3) When appropriate, include within the ATIS broadcast that Braking Action Advisories are in effect and the current Runway Condition Codes (RwyCC) when any one or more RwyCC values are less than 6.

#### EXAMPLE:

"Runway one six right condition code two, two, three at one zero one eight Zulu"

- (4) Suspend operations to a runway following two consecutive "POOR" braking action reports when previous reports indicated "GOOD", "GOOD-TO-MEDIUM" or "MEDIUM" for that runway.
- (5) When a runway's operations have been suspended due to two consecutive "POOR" braking action reports, provide priority for SLCDA to conduct a runway surface assessment. The assessment must be completed prior to the next aircraft operation on that runway.
- (6) Suspend operations to a runway when a braking action report of "NIL" is received for that runway. Operations may not resume on a runway with a "NIL" report until SLCDA ensures that the "NIL" condition no longer exists.
- (7) Provide pertinent traffic data to SLCDA when coordinating snow removal operations and/or runway or taxiway closures.
- (8) At the request of Snow Command, provide priority for snow removal equipment operating on taxiways.
- (9) Provide priority to snow removal equipment over standard aircraft taxi operations when the equipment is actively engaged in removing snow from that runway or taxiway.
- (10) Coordinate runway crossings with Snow Command when the equipment is actively engaged in removing snow from that runway.

Reference Number: SLC-311

Original Date: <u>15 April 2011</u>

Revision Date: <u>3 March 2023</u>

Federal Aviation Administration Northwest Mountain Region Airports Division APPROVED

FAA Approval:

Mar 23 2023

(11) Configure SMGCS lighting (stop bars) to accommodate snow removal operations.

(12) Attend both the annual and weekly winter operations meetings to discuss any problems concerning snow removal operations and to answer any questions that snow removal personnel may have about the operations.

#### 6. PROCEDURES:

A. SLCDA must:

(1) Coordinate with ATCT as soon as it is determined that snow removal operations will take place involving runway or taxiway closures. Give as much notice as possible for runway closures and provide an estimate of the duration of the closure.

**NOTE 1**: This information is crucial to air traffic management flow control decisions.

**NOTE 2**: Coordination for runway or taxiway closure times may be accomplished by any communications means available. However, actual opening or closing of any runway or taxiway must be accomplished via radio communications channels.

- (2) Provide ATCT with a 15 minute estimate when a runway is expected to be opened and update the time estimate 10 minutes later. When it is determined that a runway or taxiway cannot be opened as previously coordinated, immediately advise ATCT.
- (3) Advise ATCT of the surface condition when opening a movement area (runway or taxiway) following snow removal operations on that surface. Relay the Runway Condition Code (RwyCC) as determined using the Runway Condition Assessment Matrix (RCAM). Relay the RwyCC for each of the three runway zones (touchdown, midfield, and rollout).

**NOTE**: When all 3 runway segments are reporting a code of 6, notify ATCT that runway condition codes are no longer reportable.

- (4) Upon receiving a "NIL" braking action report, close the affected surface until an assessment can be accomplished and improvement in the friction can be determined.
- (5) When previous reports have indicated "GOOD", "GOOD-TO-MEDIUM" or "MEDIUM" braking actions, but are followed by two consecutive "POOR" braking action reports in succession, initiate an immediate assessment of the affected surface. The assessment must be completed before another aircraft operation is allowed on that surface.

Reference Number: SLC-311

Original Date: <u>15 April 2011</u>

Revision Date: <u>3 March 2023</u>

Federal Aviation Administration Northwest Mountain Region Airports Division APPROVED

FAA Approval:

Mar 23 2023

B. SLCDA Snow Command must:

- Use the call signs "AIRPORT SNOW COMMAND ONE" OR "AIRPORT SNOW COMMAND TWO" for runway and movement area snow removal operations.
- (2) Use the call sign "AIRPORT SNOW COMMAND RAMP" for ramp and nonmovement area snow removal operations.
- C. ATCT must:
  - (1) Provide a discrete frequency for AIRPORT SNOW COMMAND elements and assign a controller to assist and coordinate snow removal operations to the extent possible.
  - (2) Request braking action reports from the first three aircraft using a recently opened runway or taxiway and advise the SLCDA Airport Operations Manager of the results by radio and/or phone.
  - (3) Advise SLCDA personnel by radio or phone when braking action reports are received.

FOR Jill R. Story

Air Traffic Manager SLC ATCT/TRACON

Man

Maureen/Riley Executive Director Salt Lake City Department of Airports

Reference Number: SLC-311

Original Date: <u>15 April 2011</u>

Revision Date: <u>3 March 2023</u>

FAA Approval:

Federal Aviation Administration Northwest Mountain Region Airports Division APPROVED

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# SECTION 315 – ARFF INDEX DETERMINATION

### Section 139.315 – AIRCRAFT RESCUE AND FIREFIGHTING: INDEX DETERMINATION

- (a) An index is required by paragraph (c) of this section for each certificate holder. The Index is determined by a combination of—
  - (1) The length of air carrier aircraft and
  - (2) Average daily departures of air carrier aircraft.
- (b) For the purpose of Index determination, air carrier aircraft lengths are grouped as follows:
  - (1) Index A includes aircraft less than 90 feet in length.
  - (2) Index B includes aircraft at least 90 feet but less than 126 feet in length.
  - (3) Index C includes aircraft at least 126 feet but less than 159 feet in length.
  - (4) Index D includes aircraft at least 159 feet but less than 200 feet in length.
  - (5) Index E includes aircraft at least 200 feet in length.
- (c) Except as provided in §139.319(c), if there are five or more average daily departures of air carrier aircraft in a single Index group serving that airport, the longest aircraft with an average of five or more daily departures determines the Index required for the airport. When there are fewer than five average daily departures of the longest air carrier aircraft serving the airport, the Index required for the airport will be the next lower Index group than the Index group prescribed for the longest aircraft.
- (d) The minimum designated index must be Index A.
- (e) A holder of a Class III Airport Operating Certificate may comply with this section by providing a level of safety comparable to Index A that is approved by the Administrator. Such alternate compliance must be described in the ACM and must include:
  - (1) Pre-arranged firefighting and emergency medical response procedures, including agreements with responding services.
  - (2) Means for alerting firefighting and emergency medical response personnel.
     Type of rescue and firefighting equipment to be provided.
     Training of responding firefighting and emergency medical personnel on airport familiarization and communications.

#### **INDEX DESIGNATION**

The ARFF Index at Salt Lake City International Airport is determined as Index E, based on the potential for an average of five or more daily departures of Airbus A330-300 air carrier aircraft. This average may vary lower on a seasonal basis but the Airport will continue to staff and equip for the higher Index. Aircraft rescue and firefighting equipment and personnel appropriate to this Index are provided 24 hours per day.



# SECTION 317 – ARFF EQUIPMENT AND AGENTS

### Section 139.317 – AIRCRAFT RESCUE AND FIREFIGHTING: EQUIPMENT AND AGENTS

Unless otherwise authorized by the Administrator, the following rescue and firefighting equipment and agents are the minimum required for the Indexes referred to in §139.315:

- (a) <u>Index A</u>. One vehicle carrying at least—
  - (1) 500 pounds of sodium-based dry chemical, halon 1211, or clean agent; or
  - (2) 450 pounds of potassium-based dry chemical and water with a commensurate quantity of AFFF to total 100 gallons for simultaneous dry chemical and AFFF application.
- (b) Index B. Either of the following:
  - (2) One vehicle carrying at least 500 pounds of sodium-based dry chemical, halon 1211, or clean agent and 1,500 gallons of water and the commensurate quantity of AFFF for foam production.
  - (3) Two vehicles-
    - (i) One vehicle carrying the extinguishing agents as specified in paragraphs
       (a)(1) or (a)(2) of this section; and
    - One vehicle carrying an amount of water and the commensurate quantity of AFFF so the total quantity of water for foam production carried by both vehicles is at least 1,500 gallons.
- (c) Index C. Either of the following: (1)
  - Three vehicles—
    - (i) One vehicle carrying the extinguishing agents as specified in paragraph
       (a)(1) or (a)(2) of this section; and
    - (ii) Two vehicles carrying an amount of water and the commensurate quantity of AFFF so the total quantity of water for foam production carried by all three vehicles is at least 3,000 gallons.
  - (2) Two vehicles-
    - (i) One vehicle carrying the extinguishing agents as specified in paragraphs
       (b)(1) of this section; and
    - (ii) One vehicle carrying water and the commensurate quantity of AFFF so the total quantity of water for foam production carried by both vehicles is at least 3,000 gallons.
- (d) Index D. Three vehicles-
  - (1) One vehicle carrying the extinguishing agents as specified in paragraphs (a)(1) or (a)(2) of this section; and
  - (2) Two vehicles carrying an amount of water and the commensurate quantity of AFFF so the total quantity of water for foam production carried by all three vehicles is at least 4,000 gallons.

Original Date: <u>1 November 2004</u>



- (e) Index E. Three vehicles—
  - (1) One vehicle carrying the extinguishing agents as specified in paragraphs (a)(1) or (a)(2) of this section; and
  - (2) Two vehicles carrying an amount of water and the commensurate quantity of AFFF so the total quantity of water for foam production carried by all three vehicles is at least 6,000 gallons.
- (f) <u>Foam discharge capacity</u>. Each aircraft rescue and firefighting vehicle used to comply with Index B, C, D, or E requirements with a capacity of at least 500 gallons of water for foam production must be equipped with a turret. Vehicle turret discharge capacity must be as follows:
  - (1) Each vehicle with a minimum-rated vehicle water tank capacity of at least 500 gallons, but less than 2,000 gallons, must have a turret discharge rate of at least 500 gallons per minute, but not more than 1,000 gallons per minute.
  - (2) Each vehicle with a minimum-rated vehicle water tank capacity of at least 2,000 gallons must have a turret discharge rate of at least 600 gallons per minute, but not more than 1,200 gallons per minute.
- (g) <u>Agent discharge capacity</u>. Each aircraft rescue and firefighting vehicle that is required to carry dry chemical, halon 1211, or clean agent for compliance with the Index requirements of this section must meet one of the following minimum discharge rates for the equipment installed:

(1) Dry chemical, halon 1211, or clean agent through a hand line—5 pounds per second.

- (2) Dry chemical, halon 1211, or clean agent through a turret—16 pounds per second.
- (h) <u>Extinguishing agent substitutions</u>. Other extinguishing agent substitutions authorized by the Administrator may be made in amounts that provide equivalent firefighting capability.
- (i) <u>AFFF quantity requirements</u>. In addition to the quantity of water required, each vehicle required to carry AFFF must carry AFFF in an amount to mix with twice the water required to be carried by the vehicle.
- (j) <u>Methods and procedures</u>. FAA Advisory Circulars contain methods and procedures for ARFF equipment and extinguishing agents that are acceptable to the Administrator.
- (k) <u>Implementation</u>. Each holder of a Class II, III, or IV Airport Operating Certificate must implement the requirements of this section no later than 36 consecutive calendar months after June 9, 2004.

Aircraft rescue and firefighting vehicles, agent quantities, and discharge capabilities are listed in the ARFF Equipment Log, Attachment 317-1.



# Attachment 317-1

# SALT LAKE CITY INTERNATIONAL AIRPORT ARFF EQUIPMENT LIST

Equipment listed as #1, #2, and #3 fulfill Index E requirements. The other equipment listed can be used in addition to or as a substitute.

No.	Equipment	Agent	Capacity	Discharge Rate
#1	2017 Ford F550 1-Ton 4x4 "Red 1"	Water Foam Dry Chemical	300 Gallons 40 Gallons 500 Pounds	90 Gallons/min. 90 Gallons/min. 16 Pounds/sec.
	2016 Ford F550 1-Ton 4x4 "Red 2"	Water Foam Dry Chemical	300 Gallons 40 Gallons 500 Pounds	90 Gallons/min. 90 Gallons/min. 16 Pounds/sec.
	2012 Rosenbauer Panther 3000 w/HRET "Red 3"	Water Foam Halotron	3000 Gallons 400 Gallons 460 Pounds	1250 Gallons/min. 1250 Gallons/min. 5 Pounds/sec.
#2	2010 Rosenbauer Panther 3000 "Red 4"	Water Foam Halotron Dry Chemical	3000 Gallons 400 Gallons 460 Pounds 500 Pounds	1250 Gallons/min. 1250 Gallons/min. 5 Pounds/sec. 16 Pounds/sec.
	2004 Oshkosh Striker 3000 "Red 5"	Water Foam Halotron Dry Chemical	3000 Gallons 450 Gallons 460 Pounds 500 Pounds	1000 Gallons/min. 1000 Gallons/min. 7 Pounds/sec. 7 Pounds/sec.
#3	2021 Rosenbauer Panther 3000 w/HRET "Red 6"	Water Foam Halotron Dry Chemical	3000 Gallons 420 Gallons 460 Pounds 500 Pounds	1250 Gallons/min. 1250 Gallons/min. 5 Pounds/sec. 16 Pounds/sec.
	2004 Oshkosh Striker 3000 "Red 8"	Water Foam Halotron Dry Chemical	3000 Gallons 420 Gallons 460 Pounds 500 Pounds	1000 Gallons/min. 1000 Gallons/min. 7 Pounds/sec. 7 Pounds/sec.

Original Date: <u>1 November 2004</u>

Federal Aviation Administration Northwest Mountain Region Airports Division APPROVED

# SECTION 319 – ARFF OPERATIONAL REQUIREMENTS

### Section 139.319 – AIRCRAFT RESCUE AND FIREFIGHTING: OPERATIONAL REQUIREMENTS

- (a) <u>Rescue and firefighting capability</u>. Except as provided in paragraph (c) of this section, each certificate holder must provide on the airport, during air carrier operations at the airport, at least the rescue and firefighting capability specified for the Index required by § 139.317 in a manner authorized by the Administrator.
- (b) <u>Increase in Index</u>. Except as provided in paragraph (c) of this section, if an increase in the average daily departures or the length of air carrier aircraft results in an increase in the Index required by paragraph (a) of this section, the certificate holder must comply with the increased requirements.
- (c) <u>Reduction in rescue and firefighting</u>. During air carrier operations with only aircraft shorter than the Index aircraft group required by paragraph (a) of this section, the certificate holder may reduce the rescue and firefighting to a lower level corresponding to the Index group of the longest air carrier aircraft being operated.
- (d) <u>Procedures for reduction in capability</u>. Any reduction in the rescue and firefighting capability from the Index required by paragraph (a) of this section, in accordance with paragraph (c) of this section, must be subject to the following conditions:
  - (1) Procedures for, and the persons having the authority to implement, the reductions must be included in the Airport Certification Manual.
  - (2) A system and procedures for recall of the full aircraft rescue and firefighting capability must be included in the Airport Certification Manual.
  - (3) The reductions may not be implemented unless notification to air carriers is provided in the Airport/Facility Directory or Notices to Airmen (NOTAM), as appropriate, and by direct notification of local air carriers.
- (e) <u>Vehicle communications.</u> Each vehicle required under § 139.317 must be equipped with two-way voice radio communications that provide for contact with at least—
  - (1) All other required emergency vehicles;
  - (2) The air traffic control tower;
  - (3) The common traffic advisory frequency when an air traffic control tower is not in operation or there is no air traffic control tower, and
  - (4) Fire stations, as specified in the airport emergency plan.
- (f) <u>Vehicle marking and lighting.</u> Each vehicle required under § 139.317 must— (1) Have a flashing or rotating beacon and
  - (2) Be painted or marked in colors to enhance contrast with the background environment and optimize daytime and nighttime visibility and identification.
- (g) <u>Vehicle readiness.</u> Each vehicle required under § 139.317 must be maintained as follows:
   (1) The vehicle and its systems must be maintained so as to be operationally capable of performing the functions required by this subpart during all air carrier operations.

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- (2) If the airport is located in a geographical area subject to prolonged temperatures below 33 degrees Fahrenheit, the vehicles must be provided with cover or other means to ensure equipment operation and discharge under freezing conditions.
- (3) Any required vehicle that becomes inoperative to the extent that it cannot perform as required by paragraph (g)(1) of this section must be replaced immediately with equipment having at least equal capabilities. If replacement equipment is not available immediately, the certificate holder must so notify the Regional Airports Division Manager and each air carrier using the airport in accordance with § 139.339. If the required Index level of capability is not restored within 48 hours, the airport operator, unless otherwise authorized by the Administrator, must limit air carrier operations on the airport to those compatible with the Index corresponding to the remaining operative rescue and firefighting equipment.
- (h) Response requirements.
  - (1) With the aircraft rescue and firefighting equipment required under this part and the number of trained personnel that will assure an effective operation, each certificate holder must—
    - (i) Respond to each emergency during periods of air carrier operations; and
    - (ii) When requested by the Administrator, demonstrate compliance with the response requirements specified in this section.
  - (2) The response required by paragraph (h)(1)(ii) of this section must achieve the following performance criteria:
    - (i) Within 3 minutes from the time of the alarm, at least one required aircraft rescue and firefighting vehicle must reach the midpoint of the farthest runway serving air carrier aircraft from its assigned post or reach any other specified point of comparable distance on the movement area that is available to air carriers, and begin application of extinguishing agent.
    - (ii) Within 4 minutes from the time of alarm, all other required vehicles must reach the point specified in paragraph (h)(2)(i) of this section from their assigned posts and begin application of an extinguishing agent.
- (i) Personnel. Each certificate holder must ensure the following:
  - (1) All rescue and firefighting personnel are equipped in a manner authorized by the Administrator with protective clothing and equipment needed to perform their duties.
  - (2) All rescue and firefighting personnel are properly trained to perform their duties in a manner authorized by the Administrator. Such personnel must be trained prior to initial performance of rescue and firefighting duties and receive recurrent instruction every 12 consecutive calendar months. The curriculum for initial and recurrent training must include at least the following areas:
    - (i) Airport familiarization, including airport signs, marking, and lighting.
    - (ii) Aircraft familiarization.
    - (iii) Rescue and firefighting personnel safety.
    - (iv) Emergency communications systems on the airport, including fire alarms.
    - (v) Use of the fire hoses, nozzles, turrets, and other appliances required for compliance with this part.
    - (vi) Application of the types of extinguishing agents required for compliance with this part.
    - (vii) Emergency aircraft evacuation assistance.
    - (viii) Firefighting operations.
    - (ix) Adapting and using structural rescue and firefighting equipment for

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aircraft rescue and firefighting.

- (x) Aircraft cargo hazards, including hazardous materials/dangerous goods incidents.
- (xi) Familiarization with firefighters' duties under the airport emergency plan.
- (3) All rescue and firefighting personnel must participate in at least one live-fire drill prior to initial performance of rescue and firefighting duties and every 12 consecutive calendar months thereafter.
- (4) At least one individual, who has been trained and is current in basic emergency medical services, is available during air carrier operations. This individual must be trained prior to initial performance of emergency medical services. Training must be at a minimum 40 hours in length and cover the following topics:
  - (i) Bleeding
  - (ii) Cardiopulmonary resuscitation
  - (iii) Shock
  - (iv) Primary patient survey
  - (v) Injuries to the skull, spine, chest, and extremities
  - (vi) Internal injuries
  - (vii) Moving patients
  - (viii) Burns
  - (ix) Triage
- (5) A record is maintained of all training given to each individual under this section for 24 consecutive calendar months after completion of training. Such records must include, at a minimum, a description and date of training received.
- (6) Sufficient rescue and firefighting personnel are available during all air carrier operations to operate the vehicles, meet the response times, and meet the minimum agent discharge rates required by this part.
- (7) Procedures and equipment are established and maintained for alerting rescue and firefighting personnel by siren, alarm, or other means authorized by the Administrator to any existing or impending emergency requiring their assistance.
- (j) <u>Hazardous materials guidance</u>. Each aircraft rescue and firefighting vehicle responding to an emergency on the airport must be equipped with, or have available through a direct communications link, the "North American Emergency Response Guidebook" published by the U.S. Department of Transportation or similar response guidance to hazardous materials/dangerous goods incidents. Information on obtaining the "North American Emergency Response Guidebook" is available from the Regional Airports Division Manager.
- (k) <u>Emergency access roads.</u> Each certificate holder must ensure that roads designated for use as emergency access roads for aircraft rescue and firefighting vehicles are maintained in a condition that will support those vehicles during all-weather conditions.
- (I) <u>Methods and procedures.</u> FAA Advisory Circulars contain methods and procedures for aircraft rescue and firefighting and emergency medical equipment and training that are acceptable to the Administrator.
- (m) <u>Implementation</u>. Each holder of a Class II, III, or IV Airport Operating Certificate must implement the requirements of this section no later than 36 consecutive calendar months after June 9, 2004.

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The primary objective of airport rescue and firefighting is the saving of aircraft occupants' lives. All other considerations, such as preservation of aircraft wreckage, must be subordinate to the rescue operation. However, when rescue and firefighting operations are in the final stages, care should be exercised to avoid unduly disturbing any evidence that may aid in determining the cause of the aircraft accident. All airport firefighters have received this training, reference AC 150/5200-12, *First Responders Responsibility for Protecting Evidence at the Scene of an Aircraft Accident/Incident*, current edition.

Airport Fire services are provided through an agreement with the Salt Lake City Fire Department. Those services are outlined in a Memorandum of Understanding between the Salt Lake City Department of Airports and the Salt Lake City Fire Department.

# **ARFF OPERATIONS**

Fire apparatus are located in Fire Stations No. 11 and No. 12. Both are located on the airfield, are of permanent construction, and staffed 24 hours a day, 7 days a week with appropriately trained fire personnel to maintain our Airport Index.

If equipment from these stations is requested to assist outside agencies, the Airport Operations Manager-Airfield and the ARFF Battalion Chief are notified. The Airport will not send ARFF equipment off airport that will lower our Index response unless approved by the Assistant Operations Director or Director of Operations.

In the event a reduction in the rescue and firefighting capability results in a decrease from Index, notification to air carriers will be provided through an update to the PASSUR SLC Communicator web page and through the NOTAM system. The FAA Regional Administrator will also be notified of the reduction as soon as practical.

### VEHICLE COMMUNICATIONS

The ARFF vehicles are equipped with two-way voice radio communications equipment capable of communication with Air Traffic Control Tower (ATCT), Salt Lake City Fire Department, and Airport Operations/Maintenance. A Discrete Emergency Frequency (DEF) has been established at the airport.

### VEHICLE MARKING AND LIGHTING

All equipment is painted emergency yellow, red or green, and equipped with flashing or rotating beacons to contrast with background and optimize nighttime visibility.

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## **VEHICLE READINESS**

- 1) Each ARFF vehicle and its systems are maintained in an operational condition during all air carrier operations. Operational checks of the ARFF vehicles and their firefighting systems are conducted daily by the driver assigned to the apparatus. Scheduled service inspections and routine maintenance is performed by the Airport Vehicle Maintenance Division.
- 2) ARFF vehicles are housed in bays that are maintained to at least 60 degrees during winter weather in Fire Stations No. 11 and No. 12.
- 3) Maintenance or repairs which cannot be accomplished by the Airport Vehicle Maintenance personnel are completed by manufacturer's mechanics at the airport.
- 4) Any required vehicle that becomes inoperative must be replaced with equipment having similar capabilities in agent quantity, response time, discharge rate, and communications or the Index will be adjusted to meet the appropriate standard with the remaining equipment. If replacement equipment is not immediately available, the Assistant Operations Director shall notify the FAA Regional Director and each air carrier using the airport in accordance with Part 139.339. If the required Index level of capability is not restored within 48 hours, the Airport, unless otherwise authorized by the FAA, shall limit air carrier operations on the airport to those compatible with the Index corresponding to the remaining operative rescue and firefighting equipment.

# **RESPONSE REQUIREMENTS**

The Airport Fire Department will respond to each emergency and will demonstrate compliance with response requirements when requested by the FAA Administrator or his/her designated representative. Within three minutes from the time of an alarm, at least one required vehicle from its assigned post can reach the midpoint of the farthest runway serving scheduled or unscheduled air carrier service or reach another point of comparable distance on the movement area available to air carriers and begin application of foam, dry chemical, or Halon 1211. Within four minutes from the time of alarm, all other required vehicles can reach the same point from their assigned posts and begin application of agent.

### **PERSONNEL**

 All rescue and firefighting personnel are equipped with protective clothing and equipment needed to perform their duties. A full protective ensemble is used at Salt Lake City International Airport that meets or exceeds the National Fire Protection Association's 1971 Standard. This ensemble will include fire resistive gloves, trousers, jacket, helmet, a flameresistant hood of length to cover head and shoulders or helmet with flame resistant neck

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shield to cover the head and shoulders, each with a reflective full vision face shield, and standard fireman type boots with wool lining and steel innersole.

- 2) ARFF personnel receive initial and recurrent training (every 12 consecutive calendar months) in the following areas:
  - Airport familiarization
  - Aircraft familiarization
  - Rescue and firefighting personnel safety
  - Emergency communications systems on the airport, including fire alarms
  - Use of the fire hoses, nozzles, turrets, and other appliances
  - Application of the types of extinguishing agents required for compliance with this part
  - Emergency aircraft evacuation assistance
  - Firefighting operations
  - Adapting and using structural rescue and firefighting equipment for ARFF
  - Aircraft cargo hazards, including hazardous materials/dangerous good incidents
  - Familiarization with firefighters' duties under the Airport Emergency Plan
  - All ARFF personnel are certified by the State of Utah as Emergency Medical Technician Defibrillators (EMTD)

ARFF personnel are trained in the above subject areas following a site specific training curriculum. The appropriate Platoon Captain is responsible for maintaining the ARFF curriculum and records of all training given to each individual in his platoon.

- 3) All ARFF personnel are required to participate in an annual live-fire training drill at an FAA approved ARFF Training Facility.
- 4) At least one individual, who has been trained and is current in basic emergency medical services, is available during air carrier operations. This person is a member of the airport-based ARFF team. This individual has, prior to initial performance of emergency medical services, received a minimum of 40 hours training in the following topics:
  - Bleeding
  - Cardiopulmonary resuscitation
  - Shock
  - Primary patient survey
  - Injuries to the skull, spine, chest, and extremities
  - Internal injuries
  - Moving patients
  - Burns
  - Triage



- 5) Training records are the responsibility of each Platoon Captain. A quarterly summary will be maintained by the Airport Fire Marshal, for a minimum of 24 consecutive calendar months, along with a complete copy of the approved training curriculum. Medical training records are maintained by Salt Lake City Fire Department using the Fire Department Management computer program, which contains every firefighter's training history. A copy of the medical certificate is maintained by the Airport Fire Marshal.
- 6) Sufficient rescue and firefighting personnel are available 24-hours a day to operate the vehicles, meet response times, and meet the minimum agent discharge rates.
- 7) ARFF personnel are alerted of existing or impending aircraft emergencies by the following alerting system:
  - (a) Direct emergency telephone hotline between ATCT and the Airport Communication Control Center and the Airport Fire Stations. The Airport Control Center personnel will repeat the information via the Airport radio communications system, make all notifications and record all activities concerning the alert. This system is tested daily.
  - (b) In the event there is a reduction in ATCT services due to staffing constraints (ATC-0), ATCT will notify the Airport Communication Control Center that SLC ATC-0 is in effect. The Airport Control Center will then notify ARFF and the Airport Operations Manager-Airfield of the situation. Upon request, the Airport Operations Manager-Airfield will provide transportation for FAA Controllers to an alternate tower location. The Airport Control Center and/or the Airport Operations Manager-Airfield will monitor the UNICOM/Discreet Emergency Frequency (DEF) and the Airport Control Center will notify ARFF personnel directly via phone and/or company radio of any impending aircraft emergency. The Airport Operations Manager-Airfield will also issue a NOTAM to instruct which frequency to utilize if emergency response is needed by using the following format. (SLC AD AP ARFF MNT CTAF 134.875 YYMMDDHHMM – YYMMDDHHMM).

# HAZARDOUS MATERIALS GUIDANCE

Each ARFF vehicle is equipped with the "North American Emergency Response Guidebook" relating to dangerous goods/hazardous materials responses.

# EMERGENCY ACCESS ROADS

All weather emergency access roads are maintained to support ARFF equipment at Salt Lake City International Airport.

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# SECTION 321 – HANDLING /STORING HAZARDOUS SUBSTANCES AND MATERIALS

# Section 139.321 – HANDLING AND STORING OF HAZARDOUS SUBSTANCES AND MATERIALS

- (a) Each certificate holder who acts as a cargo handling agent must establish and maintain procedures for the protection of persons and property on the airport during the handling and storing of any material regulated by the Hazardous Materials Regulations (49 CFR 171 through 180) that is, or is intended to be, transported by air. These procedures must provide for at least the following:
  - (1) Designated personnel to receive and handle hazardous substances and materials.
  - (2) Assurance from the shipper that the cargo can be handled safely, including any special handling procedures required for safety.
  - (3) Special areas for storage of hazardous materials while on the airport.
- (b) Each certificate holder must establish and maintain standards authorized by the Administrator for protecting against fire and explosions in storing, dispensing, and otherwise handling fuel (other than articles and materials that are, or are intended to be, aircraft cargo) on the airport. These standards must cover facilities, procedures, and personnel training and must address at least the following:
  - (1) Bonding.
  - (2) Public protection.
  - (3) Control of access to storage areas.
  - (4) Fire safety in fuel farm and storage areas.
  - (5) Fire safety in mobile fuelers, fueling pits, and fueling cabinets.
  - (6) Training of fueling personnel in fire safety in accordance with paragraph (e) of this section. Such training at Class III airports must be completed within 12 consecutive calendar months after June 9, 2004.
  - (7) The fire code of the public body having jurisdiction over the airport.
- (c) Each certificate holder must, as a fueling agent, comply with, and require all other fueling agents operating on the airport to comply with, the standards established under paragraph (b) of this section and must perform reasonable surveillance of all fueling activities on the airport with respect to those standards.
- (d) Each certificate holder must inspect the physical facilities of each airport tenant fueling agent at least once every 3 consecutive months for compliance with paragraph (b) of this section and maintain a record of that inspection for at least 12 consecutive calendar months.
- (e) The training required in paragraph (b)(6) of this section must include at least the following:
  - (1) At least one supervisor with each fueling agent must have completed an aviation fuel training course in fire safety that is authorized by the Administrator. Such an individual must be trained prior to initial performance of duties, or enrolled in an authorized aviation fuel training course that will be completed within 90 days of initiating duties, and receive recurrent instruction at least every 24 consecutive calendar months.

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- (2) All other employees who fuel aircraft, accept fuel shipments, or otherwise handle fuel must receive at least initial on-the-job training and recurrent instruction every 24 consecutive calendar months in fire safety from the supervisor trained in accordance with paragraph (e)(1) of this section.
- (f) Each certificate holder must obtain a written confirmation once every 12 consecutive calendar months from each airport tenant fueling agent that the training required by paragraph (e) of this section has been accomplished. This written confirmation must be maintained for 12 consecutive calendar months.
- (g) Unless otherwise authorized by the Administrator, each certificate holder must require each tenant fueling agent to take immediate corrective action whenever the certificate holder becomes aware of noncompliance with a standard required by paragraph (b) of this section. The certificate holder must notify the appropriate FAA Regional Airports Division Manager immediately when noncompliance is discovered and corrective action cannot be accomplished within a reasonable period of time.
- (h) FAA Advisory Circulars contain methods and procedures for the handling and storage of hazardous substances and materials that are acceptable to the Administrator.

### **CARGO HANDLING AGENT**

The Airport does not act as a cargo handling agent.

### **AIRPORT FIRE SAFETY FUEL HANDLING**

The Airport complies with the current editions of the NFPA 407.

### **FUELING AGENTS**

All fueling agents are required by the Airport to comply with the current editions of the NFPA 407, and reasonable surveillance of all fueling activities on the airport is conducted by Airport **Operations Personnel.** 

### **INSPECTIONS OF FUELING FACILITIES**

Airport Operations conducts periodic inspections of the fueling agents for compliance with the Airport's fire safety standards at least once every three consecutive calendar months. Followup inspections will be conducted when unsatisfactory items are found. Inspection records are maintained for a minimum of 12 consecutive calendar months.

All fueling agents engaged in handling and dispensing aviation fuel are required to take immediate corrective action whenever notified of noncompliance with any of the current requirements of NFPA 407. If corrective action cannot be accomplished within a reasonable

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period of time, the Airport will notify the Airport's assigned Airport Certification Safety Inspector.

# TRAINING STANDARDS

- Each fueling agent will have a supervisor complete an aviation fuel training course in fire safety that is acceptable to the FAA. The supervisor will receive recurrent training at least once every 24 consecutive calendar months. If a new supervisor is hired, he/she will successfully complete an authorized aviation fuel training course within 90 days.
- All other employees at each fueling agent who fuel aircraft, accept fuel shipments, or handle fuel shall receive at least initial on-the-job training in fire safety and recurrent training every 24 consecutive calendar months from the supervisor who has been trained in the fuel training course in fire safety acceptable to the FAA.
- 3) All fueling agents engaged in handling and dispensing fuel at the airport shall submit written certification to the Executive Director of Airports or his/her designated representative once every 12 consecutive calendar months that the above training standards have been accomplished. Those records shall be maintained by the Airport for 12 consecutive calendar months.

# SECTION 323 - TRAFFIC AND WIND DIRECTION INDICATORS

### Section 139.323 – TRAFFIC AND WIND DIRECTION INDICATORS

In a manner authorized by the Administrator, each certificate holder must provide and maintain on its airport:

- (a) A wind cone that visually provides surface wind direction information to pilots. For each runway available for air carrier use, a supplemental wind cone must be installed at the end of the runway or at least at one point visible to the pilot while on final approach and prior to takeoff. If the airport is open for air carrier operations at night, the wind direction indicators, including the required supplemental indicators, must be lighted.
- (b) For airports serving any air carrier operation when there is no control tower operating, a segmented circle, a landing strip indicator and a traffic pattern indicator must be installed around a wind cone for each runway with a right-hand traffic pattern.
- (c) FAA Advisory Circulars contain methods and procedures for the installation, lighting, and maintenance of traffic and wind indicators that are acceptable to the Administrator.

### WIND DIRECTION INDICATORS

Salt Lake International Airport is under Control Tower direction 24 hours a day. Wind direction indicators are provided on the airfield at appropriate locations. The location of the wind direction indicators appear on the Vicinity Map, Appendix A-1.

### SEGMENTED CIRCLE

Salt Lake City International Airport does not have a segmented circle.

# MAINTENANCE

The wind indicating devices are part of the daily Airport Operations Manager-Airfield's Part 139 Self-Inspection Checklist (Attachment 327-1) and are maintained clearly visible and functional. Corrective action shall be initiated promptly when unsatisfactory conditions are found with the wind direction indicators.

# SECTION 325 - AIRPORT EMERGENCY PLAN

#### Section 139.325 – AIRPORT EMERGENCY PLAN

- (a) In a manner authorized by the Administrator, each certificate holder must develop and maintain an airport emergency plan designed to minimize the possibility and extent of personal injury and property damage on the airport in an emergency. The plan must—
  - (1) Include procedures for prompt response to all emergencies listed in paragraph(b) of this section, including a communications network;
  - (2) Contain sufficient detail to provide adequate guidance to each person who must implement these procedures; and
  - (3) To the extent practicable, provide for an emergency response for the largest air carrier aircraft in the Index group required under § 139.315.
- (b) The plan required by this section must contain instructions for response to-
  - (1) Aircraft incidents and accidents;
  - (2) Bomb incidents, including designation of parking areas for the aircraft involved;
  - (3) Structural fires;
  - (4) Fires at fuel farms or fuel storage areas;
  - (5) Natural disaster;
  - (6) Hazardous materials/dangerous goods incidents;
  - (7) Sabotage, hijack incidents, and other unlawful interference with operations;
  - (8) Failure of power for movement area lighting; and
  - (9) Water rescue situations, as appropriate.
- (c) The plan required by this section must address or include—
  - (1) To the extent practicable, provisions for medical services, including transportation and medical assistance for the maximum number of persons that can be carried on the largest air carrier aircraft that the airport reasonably can be expected to serve;
  - (2) The name, location, telephone number, and emergency capability of each hospital and other medical facility and the business address and telephone number of medical personnel on the airport or in the communities it serves who have agreed to provide medical assistance or transportation;
  - (3) The name, location, and telephone number of each rescue squad, ambulance service, military installation, and government agency on the airport or in the communities it serves that agrees to provide medical assistance or transportation;
  - (4) An inventory of surface vehicles and aircraft that the facilities, agencies, and personnel included in the plan under paragraphs (c)(2) and (3) of this section will provide to transport injured and deceased persons to locations on the airport and in the communities it serves;
  - (5) A list of each hangar or other building on the airport or in the communities it serves that will be used to accommodate uninjured, injured, and deceased persons;
  - (6) Plans for crowd control, including the name and location of each safety or security agency that agrees to provide assistance for the control of crowds in the event of an emergency on the airport; and

- (7) Procedures for removing disabled aircraft, including, to the extent practical, the name, location, and telephone numbers of agencies with aircraft removal responsibilities or capabilities.
- (d) The plan required by this section must provide for—
  - (d) The marshalling, transportation, and care of ambulatory injured and uninjured accident survivors;
  - (e) The removal of disabled aircraft;
  - (f) Emergency alarm or notification systems; and
  - (g) Coordination of airport and control tower functions relating to emergency actions, as appropriate.
- (e) The plan required by this section must contain procedures for notifying the facilities, agencies, and personnel who have responsibilities under the plan of the location of an aircraft accident, the number of persons involved in that accident, or any other information necessary to carry out their responsibilities, as soon as that information becomes available.
- (f) The plan required by this section must contain provisions, to the extent practicable, for the rescue of aircraft accident victims from significant bodies of water or marsh lands adjacent to the airport that are crossed by the approach and departure flight paths of air carriers. A body of water or marshland is significant if the area exceeds one-quarter square mile and cannot be traversed by conventional land rescue vehicles. To the extent practicable, the plan must provide for rescue vehicles with a combined capacity for handling the maximum number of persons that can be carried on board the largest air carrier aircraft in the Index group required under §139.315.
- (g) Each certificate holder must-
  - (1) Coordinate the plan with law enforcement agencies, rescue and firefighting agencies, medical personnel and organizations, the principal tenants at the airport, and all other persons who have responsibilities under the plan;
  - (2) To the extent practicable, provide for participating by all facilities, agencies, and personnel specified in paragraph (g)(1) of this section in the development of the plan;
  - (3) Ensure that all airport personnel having duties and responsibilities under the plan are familiar with their assignments and are properly trained; and
  - (4) At least once every 12 consecutive calendar months, review the plan with all of the parties with whom the plan is coordinated, as specified in paragraph (g)(1) of this section, to ensure that all parties know their responsibilities and that all of the information in the plan is current.
- (h) Each holder of a Class I Airport Operating Certificate must hold a full-scale emergency plan exercise at least once every 36 consecutive calendar months.
- (i) Each airport subject to applicable FAA and Transportation Security Administration security regulations must ensure that instructions for response to paragraphs (b)(2) and (b)(7) of this section in the airport emergency plan are consistent with its approved airport security program.

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- (j) FAA Advisory Circulars contain methods and procedures for the development of an airport emergency plan that are acceptable to the Administrator.
- (k) The emergency plan required by this section must be submitted by each holder of a Class II, III, or IV Airport Operating Certificate no later than 24 consecutive calendar months after June 9, 2004.

### AIRPORT EMERGENCY PLAN (AEP)

An Airport Emergency Plan is included as Appendix D. The Plan was developed and coordinated with law enforcement agencies, rescue and firefighting agencies, medical personnel and organizations, the principal tenants at the airport, and all other agencies/persons who have responsibilities under this plan.

### TRAINING OF AIRPORT PERSONNEL

All airport personnel that have duties and responsibilities under the AEP are properly trained and familiar with their assignments. A record of this training is included in Appendix D.

### ANNUAL REVIEW OF THE AEP

A review of the AEP is conducted at least once every 12 consecutive calendar months to ensure the AEP is current and all parties with whom the plan is coordinated are familiar with their responsibilities. All of the agencies involved in the AEP shall participate in the annual review meeting.

### TRIENNIAL FULL-SCALE EXERCISE OF THE AEP

A full-scale exercise of the AEP is conducted at least once every 36 consecutive calendar months. The full-scale exercise involves, to the extent practicable, all mutual aid participants and a reasonable amount of emergency equipment. The purpose of this exercise is to test the effectiveness of the AEP through a combined response of the Airport and mutual aid agencies to an air carrier accident at the airport, and to familiarize emergency personnel with their responsibilities in the plan.

# CONSISTENCY WITH SECURITY REGULATIONS

The AEP contains instruction for response to bomb incidents, including designation of parking areas for the aircraft involved; and sabotage, hijack incidents, and other unlawful interference with operations that are consistent with the approved airport security program.

# SECTION 327 - SELF-INSPECTION PROGRAM

#### Section 139.327 – SELF-INSPECTION PROGRAM

- (a) In a manner authorized by the Administrator, each certificate holder must inspect the airport
  - to assure compliance with this subpart according to the following schedule:
  - (1) Daily, except as otherwise required by the Airport Certification Manual;
  - (2) When required by any unusual condition, such as construction activities or meteorological conditions, that may affect safe air carrier operations; and
  - (3) Immediately after an accident or incident.
- (b) Each certificate holder must provide the following:
  - (1) Equipment for use in conducting safety inspections of the airport;
  - (2) Procedures, facilities, and equipment for reliable and rapid dissemination of information between the certificate holder's personnel and air carriers; and
  - (3) Procedures to ensure qualified personnel perform the inspections. Such procedures must ensure personnel are trained, as specified under Sec. 139.303, and receive initial and recurrent instruction every 12 consecutive calendar months in at least the following areas:
    - Airport familiarization, including airport signs, marking and lighting. (ii)
       Airport emergency plan.
    - (iii) Notice to Airmen (NOTAM) notification procedures.
    - (iv) Procedures for pedestrians and ground vehicles in movement areas and safety areas.
    - (v) Discrepancy reporting procedures; and
  - (4) A reporting system to ensure prompt correction of unsafe airport conditions noted during the inspection, including wildlife strikes.
- (c) Each certificate holder must--
  - (1) Prepare, and maintain for at least 12 consecutive calendar months, a record of each inspection prescribed by this section, showing the conditions found and all corrective actions taken.
  - (2) Prepare records of all training given after June 9, 2004 to each individual in compliance with this section that includes, at a minimum, a description and date of training received. Such records must be maintained for 24 consecutive calendar months after completion of training.
- (d) FAA Advisory Circulars contain methods and procedures for the conduct of airport selfinspections that are acceptable to the Administrator.



# FREQUENCY OF INSPECTION

1) Inspection of the aircraft movement area will be conducted, at least daily, checking for broken or damaged surfaces, paint markings, foreign objects, runway lights, taxiway edge lights, signs, obstruction lights on the movement areas and the airport beacon. During the winter months, SMGCS routes lighting will be inspected a minimum of weekly during good weather and daily when the forecast shows a possibility of low visibility weather, and as required during SMGCS operations. The Airport Operations Manager-Airfield is responsible for performing these inspections.

2) Additional inspections of the aircraft movement area and ramps shall be conducted whenever required by the following circumstances:

- (a) During and after construction activity;
- (b) During rapidly changing meteorological conditions;
- (c) Immediately after any incident or accident;
- (d) After any other unusual condition on the airport.

# **EQUIPMENT**

Airport Operations has four (4) four-wheel drive vehicles dedicated to the airfield for inspections, patrols, and emergency response. All vehicles are equipped with two-way radios for direct contact with the FAA ATCT, flashing or rotating yellow lights, and all appropriate FAA and Airport markings.

# **REPORTING**

Any Discrepancy observed during the Airport Operations Manager-Airfield's daily airfield inspections that requires a NOTAM will be annotated and flagged in the Airport's work order system. All discrepancies that require a NOTAM can be found in the work order system and on the daily report generated by the work order system (Attachment 327-1). All other discrepancies noted during subsequent routine inspections by airfield personnel will be directly entered into the Airport's work order system and monitored by airfield personnel. Emergency findings will be dispatched to Maintenance via company radio or telephone at the time of the report and forwarded through the system to the department responsible for correction of the discrepancy. Maintenance will acknowledge receipt of findings and take action to resolve the discrepancy. When the discrepancy is resolved and the finding has been completed, maintenance personnel will update the status of the finding within the work order system. The status of any finding may be examined at any time through a query within the Airport's work order system. A list of all open and active findings can be viewed on the Airport's work order system. Any findings that require a NOTAM are all flagged in the system and will be on the Daily Part 139 Inspection report which is generated daily by the work order system.



For any potential hazardous discrepancy that cannot be immediately corrected, a NOTAM will be issued in accordance with FAR Part 139.339 requirements and FAA AC 150/5200-28, *Notices to Airmen (NOTAMs) for Airport Operators*, current edition.

# **TRACKING**

1) All findings can be viewed geographically or in list form in the work order system for review each day. A list of all findings that required a NOTAM will be auto generated by the work order system in report form (Attachment 327-1). Each finding will be reviewed each day by airfield personnel for completion.

2) When a finding that requires a NOTAM is completed, the finding will be verified as "satisfactory" by an Airport Operations Manager – Airfield and the NOTAM will be canceled. The finding will be removed from the "FOUND" list and added to the "COMPLETED" list and at the end of the inspection day the finding will be removed from the current inspection findings list. Findings verified as not being completed will be reissued by the inspector.

# **TRAINING**

- The Airport Operations Manager-Airfield is responsible for training the Airport Operations Specialists to ensure that qualified personnel perform the airfield inspections. The Airport has incorporated the procedures outlined in AC 150/5200-18, *Airport Safety Self-Inspection,* current edition, into the training program. In addition to on-the-job training, the training program has been established and includes initial and recurrent training every 12 consecutive calendar months in the following subject areas:
  - (a) Airport familiarization;
  - (b) Airport Emergency Plan (AEP);
  - (c) Notice to Airmen (NOTAM) notification procedures;
  - (d) Procedures for pedestrian and ground vehicles in movement areas and safety areas;
  - (e) Discrepancy reporting procedures;
  - (f) Any other training deemed necessary by the Administrator.
- 2) Airport Maintenance personnel are trained on the job in maintenance, equipment operation, and snow removal.
- Construction contractors and airport tenants will be briefed by the Executive Director of Airports, or his/her representative, on airport safety and procedures applicable to their activities in the movement area.

Original Date: <u>1 November 2004</u>



#### **RECORDS**

- A copy of the FAR Part 139 Self-Inspection Checklist used is included as Attachment 327-1. Inspection records will show the conditions found and all corrective action taken. Inspection records are kept on file in the work order system and on the company servers for at least 12 consecutive calendar months.
- 2) Training records for each individual include a description and date of training received. Training records are kept on file by Operations and Maintenance for at least 24 consecutive calendar months.



### Attachment 327-1



#### **Inspection** <sup>#</sup> - INSPECTION PART 139

Inspection Site: SLC - Salt Lake City Airport Inspection Date: Class Structure ID:

INSPECTION CATEGORY	FINDING DESCRIPTION	LOCATION	SAT	UNSAT	NOTAM #	WO #
PAVED AREAS						
PAVEMENT LIPS (>3	3")		✓			
HOLES - 5" DIAMET	ER & 3" DEEP		1			
CRACKS / SPALLING	G / HEAVES		1			
FOD: GRAVEL / DEB	RIS		×			
RUBBER DEPOSITS			1			
PONDING / EDGE D	AMS		×			
MARKINGS						
CLEARLY VISIBLE /	STANDARD		1			
RUNWAY MARKING	5		1			
TAXIWAY MARKING	S		1			
HOLDING POSITION	MARKINGS		1			
GLASS BEADS			✓			
SIGNS						
STANDARD / MEET	SIGN PLAN		1			
OBSCURED / OPERA	BLE		✓			
DAMAGED / RETROREFLECTIVE			✓			
LIGHTS						
OBSCURED / DIRTY	/ OPERABLE		✓			
DAMAGED / MISSIN	G		1			
RUNWAY LIGHTING			1			
TAXIWAY LIGHTING			1			
GUARD LIGHTS			1			
FAULTY AIM / ADJUSTMENT			1			
OBSTRUCTION LIGHTING			1			
ROTATING BEACON			✓			
PAPI (SLC)			1			

# - INSPECTION PART 139 -INSPECTION DATE -

1 / 3

Revision Date: <u>5 April 2022</u>

HTS ROACH LIGHTING (FAA) ROACH LIGHTING (FAA) I (FAA) 16L / 17 WAND ICE FACE CONDITIONS W BANK CLEARANCE HTS AND SIGNS OBSCURED F E E E E E E E E E E E E E E E E E E	×	Salt Lake Ci Departm	ty ent of Airpor
ROACH LIGHTING (FAA) I (FAA) 16L / 17 W AND ICE FACE CONDITIONS W BANK CLEARANCE HTS AND SIGNS OBSCURED F ITS REQUIRED INDEX ESSIBILITY TO AMA / OTHER LING OPERATIONS CING / GATES / SIGNS L LEAKS E / EXPLOSION HAZARDS			ent of Airpol
I (FAA) 16L / 17 W AND ICE FACE CONDITIONS W BANK CLEARANCE HTS AND SIGNS OBSCURED F F ITS REQUIRED INDEX ESSIBILITY TO AMA / OTHER LING OPERATIONS CING / GATES / SIGNS L LEAKS E / EXPLOSION HAZARDS			
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DW BANK CLEARANCE HTS AND SIGNS OBSCURED F TTS REQUIRED INDEX TS SIBILITY TO AMA / OTHER LING OPERATIONS CING / GATES / SIGNS L LEAKS E / EXPLOSION HAZARDS			
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F ITS REQUIRED INDEX ESSIBILITY TO AMA / OTHER LING OPERATIONS CING / GATES / SIGNS L LEAKS E / EXPLOSION HAZARDS	<ul> <li>✓</li> </ul>		
TS REQUIRED INDEX ESSIBILITY TO AMA / OTHER LING OPERATIONS CING / GATES / SIGNS L LEAKS E / EXPLOSION HAZARDS	<ul> <li>✓</li> </ul>		
TS REQUIRED INDEX ESSIBILITY TO AMA / OTHER LING OPERATIONS CING / GATES / SIGNS L LEAKS E / EXPLOSION HAZARDS			
ESSIBILITY TO AMA / OTHER LING OPERATIONS CING / GATES / SIGNS L LEAKS E / EXPLOSION HAZARDS	✓		
CING / GATES / SIGNS L LEAKS E / EXPLOSION HAZARDS	<ul> <li>✓</li> </ul>		
CING / GATES / SIGNS L LEAKS E / EXPLOSION HAZARDS			
E / EXPLOSION HAZARDS	✓		
E / EXPLOSION HAZARDS	1		
	✓ <b>✓</b>		
STORE TO	1		
BILE FUELERS	✓ ·		
TRUCTION LIGHTS OPERABLE	<b>✓</b>		
NES / TREES	✓		
ITED WIND INDICATORS			
ND CONES	1		
нтѕ	×		
UCTURES / MASTS	✓		
LIC PROTECTION			
CING / GATES / SIGNS	×		
DTECTION FROM JET BLAST	×		
DLIFE HAZARDS			
RACTANTS	✓		
D BIRDS	✓		
CKS OF BIRDS / ANIMALS	✓		
STRUCTION			
RICADES / LIGHTS			

# - INSPECTION PART 139 INSPECTION DATE -

2 / 3



#### SALT LAKE CITY INTERNATIONAL AIRPORT CERTIFICATION MANUAL

		Salt Lake City Department of Airpor
CONSTRUCTION		
BARRICADES / LIGHTS	✓	
EQUIPMENT / PARKING / FAR 77	✓	
OBSTRUCTION / MARKING / LIGHTING	✓	
MOVEMENT / CRITICAL / SAFETY AREAS	✓	
FOD	✓	
CONFUSING SIGNS / MARKINGS	✓	
SAFETY AREAS		
RUTS / HUMPS / EROSION	✓	
DRAINAGE / CONSTRUCTION	✓	
SUPPORT EQUIPMENT AIRCRAFT	✓	
FRANGIBLE BASES	✓	
UNAUTHORIZED OBJECTS	×	

# - INSPECTION PART 139 INSPECTION DATE -

3/3



## SECTION 329 - PEDESTRIANS AND GROUND VEHICLES

#### Section 139.329 – PEDESTRIANS AND GROUND VEHICLES

In a manner authorized by the Administrator, each certificate holder must-

- (a) Limit access to movement areas and safety areas only to those pedestrians and ground vehicles necessary for airport operations;
- (b) Establish and implement procedures for the safe and orderly access to, and operation in, movement areas and safety areas by pedestrians and ground vehicles, including provisions identifying the consequences of noncompliance with the procedures by all persons;
- (c) When an air traffic control tower is in operation, ensure that each pedestrian and ground vehicle in movement areas or safety areas is controlled by one of the following:
  - (1) Two-way radio communications between each pedestrian or vehicle and the tower;
  - (2) An escort with two-way radio communications with the tower accompanying any pedestrian or vehicle without a radio; or
  - (3) Measures authorized by the Administrator for controlling pedestrians and vehicles, such as signs, signals, or guards, when it is not operationally practical to have two-way radio communications between the tower and the pedestrian, vehicle, or escort;
- (d) When an air traffic control tower is not in operation, or there is no air traffic control tower, provide adequate procedures to control pedestrians and ground vehicles in movement areas or safety areas through two-way radio communications or prearranged signs or signals;
- (e) Ensure that all persons are trained on procedures required under paragraph (b) of this section prior to the initial performance of such duties and at least once every
   12 consecutive calendar months, including consequences of noncompliance, prior to moving on foot, or operating a ground vehicle, in movement areas or safety areas; and
- (f) Maintain the following records:
  - (1) A description and date of training completed after June 9, 2004 by each individual in compliance with this section. A record for each individual must be maintained for 24 consecutive months after the termination of an individual's access to movement areas and safety areas.
  - (2) A description and date of any accidents or incidents in the movement areas and safety areas involving air carrier aircraft, a ground vehicle or a pedestrian. Records of each accident or incident occurring after June 9, 2004 must be maintained for 12 consecutive calendar months from the date of the accident or incident.

Original Date: <u>1 November 2004</u>



#### LIMITED ACCESS / PERSONS AND EQUIPMENT

Pedestrians and ground vehicles authorized by the Executive Director of Airports or their designee to operate on movement areas and safety areas at the Airport are limited to those pedestrians and vehicles necessary for airport operations and include the following type of vehicles:

- Airport-owned vehicles equipped with an ATCT radio and a roof-top beacon or flashing light bar.
- FAA Airway Facilities vehicles authorized for maintenance of FAA equipment.
- Authorized construction vehicles.
- Select air carrier and FBO tow personnel utilizing tugs equipped with an ATCT radio and a mounted beacon or flashing light bar.

Other individuals who need access to the movement areas are escorted by qualified persons or are required to complete the Airport's movement area ground vehicle training program and complete all course requirements prior to operating a vehicle on the aircraft movement area.

#### CONTROLS

The training given to individuals authorized to drive on the movement area and safety areas specifically emphasizes the markings and signs that designate the movement area boundaries.

Airfield access is controlled by fencing and computer-controlled access badges for gates on roads leading to the secure airfield and for doors from the buildings that lead onto the secure airfield.

Violators will be escorted out of the area and the incident will be documented. Consequences of a movement area violation will include required retraining, the possibility of being issued a misdemeanor citation, and could result in termination of employment.

#### PROCEDURES FOR GROUND VEHICLE OPERATIONS

The Airport has a Letter of Agreement with ATCT allowing qualified Airport employees access to the taxiways while yielding to aircraft and remaining off all open runways. A copy of this letter can be found as Attachment 329-1. A list of qualified employees that are authorized to access the movement area per the Letter of Agreement will be kept and maintained by an Airport Operations Manager-Airfield in the Operations Division.

Original Date: <u>1 November 2004</u>

Federal Aviation Administration Northwest Mountain Region Airports Division APPROVED Mar 23 2023



#### **GROUND VEHICLE OPERATIONS WITH NON-OPERATIONAL CONTROL TOWER**

The FAA ATCT facility at Salt Lake City International is operational and staffed at all times.

#### TRAINING OF EMPLOYEES AUTHORIZED TO OPERATE ON THE AIRCRAFT OPERATIONS AREA, MOVEMENT AREA, AND VIOLATION PROCEDURES

Training required to receive an Airport badge includes these limitations via the badge color and gate access encoded on the badge. For an Airport employee to be in the Aircraft Operation Area, the following areas are covered in the training prior to receiving their Airport identification badge.

- 1) All vehicles operating on the Aircraft Operation Areas (AOA) will remain on or inside the designated roadways when practical, and when roadways are provided.
- 2) No airport vehicle may pass between an aircraft and an operating boarding gate when the aircraft is within 150 feet of the gate. No airport vehicle may pass underneath any boarding gate with or without an aircraft parked at the gate.
- 3) The maximum vehicle speed on the non-movement areas or perimeter service roads is posted for each area. Only emergency vehicles responding to an emergency may exceed this speed.
- 4) Each person who operates a ground vehicle on any portion of the Airport ramps will comply with the rules and regulations governing such activity. Each person must view a driver's training video and complete a digital test with a passing grade of 100% before being allowed to drive on any ramp areas and before receiving an Airport ID badge with a driving icon. All ramp driving training records will be kept in the computer-based training system located in the Airport Badging Office. Ramp driving refresher training will be taken every two years when the airport employee, tenant employee, or contractor renews his/her badge.
- 5) All vehicles operating on the Aircraft Movement Area (AMA) and safety areas will be equipped with two-way ATCT radios or will be escorted by a vehicle so equipped.
- 6) Vehicle drivers will request and obtain approval from Salt Lake City FAA ATC Ground Control prior to entering any taxiway, runway, or safety area and remain in contact with FAA ATC while in these areas. These control frequencies will not be used for vehicle-to-vehicle communications.

Original Date: <u>1 November 2004</u>



Inspecto

8) All new Department of Airports employees and other agency or tenant employees that are authorized by the Department of Airports to operate a ground vehicle on any portion of the AMA must receive additional training. All persons receiving the training will be provided with an operator's handbook prior to receiving authorization to drive on the AMA. The Airport's AMA driver's training course includes initial classroom training, a written test, a minimum of 5 hours of practical driving with a designated trainer, and a practical test. The written test must have a passing score of 100% and the practical driving test will receive a subjective pass/fail grade given by an Airport Operations Manager- Airfield based on knowledge of the Airport's taxiways and runways, knowledge of Navigational Aids, yielding to aircraft, and communications with the FAA ATCT. After the employee has completed their training, they will receive a red badge or a tow badge, which identifies and authorizes them to drive on the AMA. All training records for the AMA driver's training will be maintained by Airport Operations for 24 consecutive calendar months after the termination of the individual's access to the movement areas and safety areas.

Annual recurrent training will be provided, through computer-based Movement Area training modules, to all employees or Airport users that are authorized to drive on the AMA. Any updates or movement area changes will be provided during the recurrent training. The computer-based training modules must be passed with a score of 100%.

Areas discussed in training concerning Aircraft Movement Area Driver's Training and Ramp Driver's Training, also referred to as AOA Training, will consist of:

- Vehicle operating rules and regulations
- SLC Airport runways, Navigational Aids, ILS, and ALS
- Instrument Landing Systems
- Airfield markings and signs
- SLC Airport's driver requirements
- Communicating with Air Traffic Control
- Aviation glossary
- SLC Air Traffic Control
- Safety areas
- Normal vehicle operations on the AMA
- Low visibility vehicle operations
- SMGCS procedures and taxi route maps
- Airfield layout and SLCIA map (taxiways and runways)
- Hazards associated with vehicle operations on the AOA
- Light gun signals and lost communications procedures at KSLC.



- 9) Airport Operations will investigate and make record of any accident or incident on the movement areas involving air carrier aircraft and/or ground vehicles. These records will be kept in the Airport Operations Division for 12 months and will be accessible to the Administrator or his/her designated representative. Records for past years will be stored for 5 years.
- 10) If communications should fail while a vehicle is in the AMA, the Control Tower will utilize three methods of contacting the vehicle.
  - (a) First, the Control Tower will raise and lower the runway and/or taxiway lighting to get the attention of the driver.
  - (b) Secondly, the Control Tower will use light gun signals to give instructions. Airport vehicle drivers will be fully familiar with light gun signals. The following light gun signal pamphlets are placed inside all airport-owned vehicles and any other user vehicles authorized to drive onto the movement areas.
  - (c) Third, the Control Tower will notify Airport Operations via telephone and Airport Operations will attempt radio contact and/or other means of contact.

LIGHT GUN SIGNALS				
Color and Type of SignalMovement of Vehicles,Equipment and Personnel				
Steady Green	Cleared to cross, proceed or go			
Steady Red	Stop			
Flashing Red	Clear the taxiway/runway immediately			
Flashing White	Return to starting point on airport			
Alternating Red and Green	Exercise extreme caution			

- 11) All Airport vehicles are equipped with a yellow beacon. The driver will turn on the beacon prior to entering any aircraft movement areas. Some emergency vehicles are equipped with red beacons or red and blue beacons.
- 12) Airport Operations Managers and Specialists on the AOA continually monitor to ensure that vehicles and persons follow established rules, and that appropriate action is taken when violations are observed or reported.
- 13) If a runway incursion or surface incident occurs, Airport Operations will notify the FAA Tower supervisor and the Assistant Operations Director of the nature and severity of the incident. Appropriate action will be taken against the offending individual by Airport

Original Date: <u>1 November 2004</u>



Inspecto

Operations who will refer to the SLCDA AOA Safety Enforcement Policy which can be found in the SLCDA Rules and Regulations document.

- (a) <u>Surface Incidents</u> Depending on the nature and severity of the surface incident, Airport Operations reserves the right to permanently revoke an individual's Airport ID badge. A minimum of six points will be applied to the individual's Airport ID badge as outlined in the SLCDA Rules and Regulations. The accrual of six points will result in a one-day (24 hour) suspension of the offenders Airport issued ID badge. Offenders will be required to complete remedial training to reobtain an Airport ID badge.
- (b) <u>Runway Incursions</u> Depending on the nature and severity of the runway incursion, Airport Operations reserves the right to permanently revoke an individual's Airport ID badge. A minimum of nine points will be applied to the individual's Airport ID badge as outlined in the SLCDA Rules and Regulations. The accrual of nine points will result in a three-day (72 hour) suspension of the offenders Airport issued ID badge. Offenders will be required to complete remedial training to reobtain an Airport ID badge. Red Badge and Tow Badge holders will also be required to successfully recertify and complete the Airport's Movement Area Drivers Training program.

#### **MAINTAIN RECORDS**

Training records will be maintained by the Airport with a description and date of training completed by each individual operating in the movement areas, safety areas or aprons. Records are maintained for 24 consecutive calendar months after the termination of an individual's access to movement areas, safety areas and aprons.

Accidents or incidents that occur in the movement areas and safety areas involving air carrier aircraft, a ground vehicle or a pedestrian will be documented including a description of the event and the date. Records of each accident or incident will be maintained for at least 12 consecutive calendar months from the date of the accident or incident.

Training records, as well as accident/incident reports, are maintained by an Airport Operations Manager-Airfield in the Operations Division.



Inspecto

## ATTACHMENT 329-1

Letter of Agreement

## **Movement/Non-Movement Areas**

Between Salt Lake City Air Traffic Control Tower and Salt Lake City Department of Airports

Original Date: <u>1 November 2004</u>

Revision Date: <u>3 March 2023</u>

Federal Aviation Administration Northwest Mountain Region Airports Division APPROVED

Mar 23 2023

RECORDED

CITY RECORDER

MAY 1 2 2004 EFFECTIVE: May 10, 2004

Salt Lake City Airport Traffic Control Tower (ATCT) Salt Lake City Department of Airports/ SLC Corporation (SLCDA)

#### LETTER OF AGREEMENT

#### SUBJECT: Movement/Non-Movement Areas

- 1. <u>PURPOSE:</u> Delineates and defines jurisdictional responsibilities for Movement/Non-Movement areas.
- 2. <u>SCOPE:</u> The responsibilities outlined herein pertain to Movement/Non-Movement Areas within the Salt Lake City International Airport Aircraft Movement Area. (Attachment 1)
- <u>CANCELLATION</u>: This Letter of Agreement (LOA) cancels Movement/Non-Movement Areas LOA dated March 15, 2002.

#### 4. **<u>RESPONSIBILITIES:</u>**

- a. Salt Lake City (SLC) Air Traffic Control Tower (ATCT):
  - Has jurisdiction over and is responsible for approval/disapproval of operations on Movement Areas involving aircraft, vehicles, equipment, and personnel.
  - (2) Shall authorize operations on Movement Areas, excluding runway surfaces and runway safety areas, by SLCDA personnel specified in Attachment 2 without a requirement for prior radio contact. This authorization shall be extended to include vehicles, personnel and equipment under their escort.

**NOTE:** This authorization is cancelled when low visibility operations are in effect or pending. During these conditions, all personnel will make radio contact prior to operations on Movement Areas. Those already on Movement Areas will advise ATCT of their current location.

**NOTE:** SLCDA personnel will monitor the appropriate ATCT frequencies for their location as listed in Attachment 3, and maintain the capability of two-way communications at all time while on Movement Areas. Airport Rescue and Fire Fighting (ARFF) vehicles are authorized to operate per the Emergency Services LOA.

(3) Shall establish two-way radio communications with all aircraft, vehicles, equipment and personnel, or their escort, not specified in Attachment 2 prior to authorizing operations on Movement Areas.

Original Date: <u>1 November 2004</u>

Federal Aviation Administration Northwest Mountain Region Airports Division APPROVED

Revision Date: <u>3 March 2023</u>

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	(4)	Assumes <u>no</u> responsibility for control or separation for aircraft, vehicles, equipment or personnel outside Movement Areas. Any communication made by ATCT to personnel outside Movement Areas will be of an advisory nature only.
	(5)	Assumes <u>no</u> responsibility for control or separation for SLCDA vehicle operators specified in Attachment 2 on Non-runway Movement Areas unless the vehicle operator specifically requests separation services.
	(6)	Shall not direct aircraft over 12,500 lbs to make 180 degree turns, except on areas of concrete.
	(7)	Shall not taxi general aviation aircraft onto the air carrier apron, as depicted on Attachment 1, prior to coordinating with the Airport Duty Manager (Operations 60).
	(8)	Shall, when necessary, request a SLCDA "follow-me" vehicle for aircraft taxi operations on Movement Areas in accordance with the SLC Surface Movement Guidance and Control System (SMGCS) Plan.
b.	SLCD	A shall:
	(1)	Have jurisdiction over operations on all surfaces except the Movement Area. All SLCDA personnel shall contact and advise the Airport Duty Manager prior to beginning operations on Movement Areas.
	(2)	Coordinate with ATCT any operations on the Movement Area requiring special handling involving vehicles, equipment, and/or personnel.
		(a) Coordinate details of blanket crossings/flagging operations in advance via landline communications to reduce radio congestion.
		(b) Advise ATCT on the appropriate frequency at the actual start and completion of the coordinated operations.
	(3)	Issue/cancel Notices to Airmen pertaining to Movement/Non-Movement Areas.
	(4)	Monitor the appropriate ATCT frequency as depicted in Attachment 3 for their location when utilizing taxiways, performing standard or routine non- runway inspections or escorting vehicles.
	(5)	Yield to all aircraft on Movement Areas.
	(6)	Remain off all runways unless coordinated with and approved by ATCT.
		Federal Aviation Admini

Original Date: <u>1 November 2004</u>

Federal Aviation Administration Northwest Mountain Region Airports Division APPROVED Mar 23 2023 Inspector

- (7) Advise on the appropriate ATCT frequency if any traffic or taxi route will be impeded or blocked in any way.
- (8) Provide ATCT a list of all personnel (Attachment 2) authorized to operate on Non-runway Movement Areas without prior radio contact per this LOA and the Runway and Taxiway Inspection program.
- (9) Be responsible for ensuring airport tenants are briefed on the contents of this LOA.
- c. All Helipads are designated Non-Movement Areas.
- d. Attachments to this document shall be updated as necessary for changes in the information. Update of an attachment does not require a full document review.

Clark Desing, Air Traffic Manager Salt Lake City ATCT

## RECORDED

MAY 1 2 2004

Russell Pack, Director of Administration and Commercial Services Salt Lake City Department of Airports Salt Lake City Corporation



Ref. No.: SLC-304

Original Date: <u>1 November 2004</u>

Federal Aviation Administration Northwest Mountain Region Airports Division APPROVED

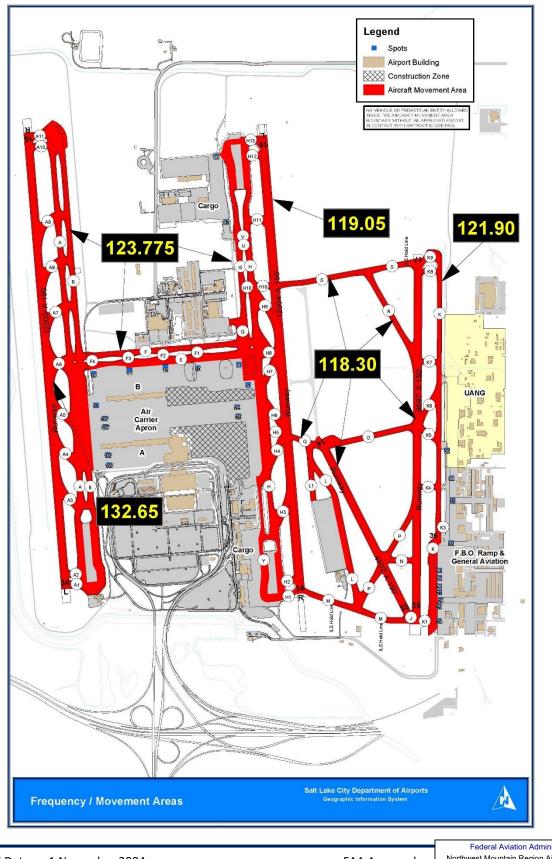
Inspector

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23 2023

Revision Date: <u>3 March 2023</u>

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Original Date: <u>1 November 2004</u>

Revision Date: <u>3 March 2023</u>

FAA Approval:

Federal Aviation Administration Northwest Mountain Region Airports Division APPROVED Mar 23 2023

Inspector

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ATTACHMENT 3 ATCT FREQUENCIES SLC-304 updated 11/14/12

#### SLC ATCT FREQUENCIES

- (1) Runway 16R/34L, Local Control West (Frequency 132.65 MHz)
- (2) Runway 16L/34R, Local Control Center (Frequency 119.05 MHz)
- (3) Runway 17/35, Local Control East (Frequency 118.30 MHz)
- (4) Runway 14/32, Local Control East (Frequency 118.30 MHz)

(5) Taxiways East of Runway 17/35, Ground East (Frequency 121.90 MHz)

(6) Taxiways between 16L/34R and 16R/34L, Ground West (Frequency 123.775 MHz)

(7) Taxiways between 17/35 and 16L/34R, Local Control East (Frequency 118.30 MHz)

Original Date: <u>1 November 2004</u>

Federal Aviation Administration Northwest Mountain Region Airports Division APPROVED

Revision Date: <u>3 March 2023</u>

Mar 23 2023

## SECTION 331 - OBSTRUCTIONS

#### Section 139.331 – OBSTRUCTIONS

In a manner authorized by the Administrator, each certificate holder must ensure that each object in each area within its authority that has been determined by the FAA to be an obstruction is removed, marked, or lighted, unless determined to be unnecessary by an FAA aeronautical study. FAA Advisory Circulars contain methods and procedures for the lighting of obstructions that are acceptable to the Administrator.

#### **GENERAL**

An initial inspection of all land under the control of the Airport has been made to identify and locate all objects classified by the FAA as obstructions. All obstructions on land controlled by the Airport have been removed, marked and/or lighted.

#### **OBSTRUCTIONS**

Obstruction lights located on FAA NAVAID equipment are the responsibility of the FAA maintenance team, obstruction lights located on Airport-owned equipment are maintained by Airport airfield electricians, and markings are maintained by Airport Airfield Maintenance. The lights and markings of obstructions will be inspected by Operations for proper condition, visibility, and currency as part of the regular airport condition inspection outlined in this manual.

The FAA receives a copy of the Airport's daily Airfield Lighting Inspection form which identifies any trouble spots. Work orders are placed to airfield electricians and Maintenance. Replacement or repair of obstruction lights and/or reconditioning of obstruction marking paint will be accomplished as soon as practical. Operations will coordinate closures as necessary for both groups to access needed areas.

All obstructions are shown on the Obstruction Light Inspection Form (Attachment 331-1) and inspected daily.

Any obstruction not in compliance with Federal Aviation Regulation Part 77 will be NOTAMed in accordance with FAR Part 139.339 requirements.

#### Page D-331-2

## Attachment 331-1



Airport Operations-Airfield Obstruction Light Inspection

Salt Lake City International Airport

> Date: \_ Specialist / Manager: \_

Map #	Description	Airfield Location	# of lights	Discepancies	Owner	Contact
1	Pump Station 9	Surplus Canal	2		Airport	Control
1A	Camera Pole	Gate 39	1		Airport	Control
1B	Support Building	S E Corner 34L Deice	2		Airport	Control
2	16R Localizer	S end of 16R	4		FAA	239-2599
3	AMASS Antenna	W of 34L @ S end	2		FAA	239-2599
4	34L Glide Slope	W of 34L	2		FAA	239-2599
5	34L Windsock	W of 34L @ touchdown	1		Airport	Control
6	Remote Pick Up (RPU)	Between A2 & A3	2		Airport	Control
7	<b>RVR</b> Transmissometer	W of 34L	2		FAA	239-2599
8	Radio Repeater (RTR)	W of 34L	2		FAA	239-2599
9	RPU	Between A5 & A6	2		Airport	Control
10	AMASS Antenna	W of 34L @ midfield	2		FAA	239-2599
11	RTR	W of 34L @ midfield	2		FAA	239-2599
12	RVR	W of 34L @ midfield	2		FAA	239-2599
13	RPU	Between A7 & A8	2		Airport	Control
14	RTR	W of 16R	2		FAA	239-2599
15	16R Glide Slope	W of 16R	2		FAA	239-2599
16	RVR	W of 16R	2		FAA	239-2599
17	16R Windsock	E of 16R @ touchdown	1		Airport	Control
18	RPU	S of A10	2		Airport	Control
19	34L Localizer	N end of 34L	4		FAA	239-2599
20	AMASS Antenna	W of 16R @ N end	2		FAA	239-2599
21	EQ Plant	N E of 16R	3		Airport	Control
22	NS - 12 Radio	S of ARFF TC	3		Airport	Control
24 & 25	4000 W Tunnel	N of TWY F/S of TWY E	7		Airport	Control
26	Weather Station	N of Fire Station 12	2		FAA	239-2599
27	SkyWest Hangar	N of TWY F	16		SkyWest	258-4318
28	FAA ATC Tower	1200N 4000W	8		FAA	509-9412
29	DELTA Hangar	N of TWY F	6		Delta	744-4543
30	DELTA Ramp Tower	TU2	4		Airport	Control
31	Airport Tower	TU1	2		Airport	Control
32	Pump Station 6	N of SPOT 6	1		Airport	Control
33	RVR	E of 16L-34R @ midfield	2		FAA	239-2599
34	Pump Station 5	E of 16L-34R @ midfield	2		Airport	Control
35	16L Windsock	W of 16L @ touchdown	1		Airport	Control
36	16L Glide Slope	E of 16L	2		FAA	239-2599
37	RTR	E of 16L	2		FAA	239-2599

Map #	Description	Airfield Location	# of lights	Discepancies	Owner	Contact
38	34R Localizer	N end of 34R	4		FAA	239-2599
39	AMASS Antenna	S of Police TC	2		FAA	239-2599
40	Camera Pole	Vehicle Gate 28	1		Airport	Control
41	AMASS Antenna	FAA ASR	2		FAA	239-259
42	AMASS Antenna	SW of Tree Farm	2		FAA	239-2599
43	35 Localizer	S of Q	4		FAA	239-259
44	17 Windsock	E of 17 @ touchdown	1		Airport	Control
45	RVR	W of 17	2		FAA	239-259
46	17 Glide Slope	W of 17	2		FAA	239-259
47	RTR	W of R	2		FAA	239-259
48	14 Windsock	E of 14 @ touchdown	1		Airport	Control
49	RTR	N of P	2		FAA	239-259
50	Radio Antenna	W of CAP Hangar	2		CAP	542-402
51	North Hangar	TACair	2		AT&T	238-511
52	RVR	W of 35 @ touchdown	2		FAA	239-259
53	35 Glide Slope	W of 35	2		FAA	239-259
54	35 Windsock	W of 35 @ touchdown	1		Airport	Control
55	32 Windsock	W of 32 @ touchdown	1		Airport	Control
56	AMASS Antenna	NE of Blue HangarTACair	2		FAA	239-259
57	Camera Pole	Near Hangar Row 6	1		Airport	Control
58	Camera Pole	Near Hangar Row 6	1		Airport	Control
59	Blue Hangar	S end of TACair ramp	2		TACair	359-208
60	17 Localizer	S end of 17	4		FAA	239-259
61	Support Building	W of 17 Localizer	2		FAA	239-259
62	Weather Station	W of (61)	2		NWS	524-571
63	South Vault	South Perimeter Road	4		Airport	Control
64	RPU	Between M & L Deice	1		Airport	Control
66	Support Building	E of 16L Localizer	2		FAA	239-259
67	16L Localizer	S end of 16L	4		FAA	239-259
68	34R Glide Slope	E of 34R	2		FAA	239-259
69	34R Windsock	W of 34R @ touchdown	1		Airport	Contro

 
 Work Orders Submitted:
 NO \_\_\_\_\_\_
 YES \_\_\_\_\_\_

 Work Order #/Location:
 \_\_\_\_\_\_\_
 Work Orders Submitted:

Comments:

## SECTION 333 - PROTECTION OF NAVAIDS

#### Section 139.333 – PROTECTION OF NAVAIDS

- In a manner authorized by the Administrator, each certificate holder must —
- (a) Prevent the construction of facilities on its airport that, as determined by the Administrator, would derogate the operation of an electronic or visual NAVAID and air traffic control facilities on the airport;
- (b) Protect—or if the owner is other than the certificate holder, assist in protecting—all NAVAIDS on its airport against vandalism and theft; and
- (c) Prevent, insofar as it is within the airport's authority, interruption of visual and electronic signals of NAVAIDS.

#### CONSTRUCTION

No facilities shall be constructed on the airport that have been determined by the FAA to derogate the operation of an electronic or visual NAVAID or air traffic control facilities. The Executive Director of Airports or his/her designee shall notify the FAA if aware of any changes in construction plans or equipment. Operations personnel are responsible for monitoring construction activity on the airport to prevent the interruption of visual and electronic signals of NAVAIDS.

#### PROTECTION AGAINST VANDALISM

Those NAVAIDS that lie inside the airport perimeter fence receive routine patrol 24 hours a day. Signs warning people and vehicles to remain clear without authorization are present. NAVAIDS that are outside the perimeter fence but still on airport property are fenced, locked and signed to keep people from interfering with their function. Salt Lake City Police Airport Division regularly patrol these sites as well.

#### **INTERRUPTION OF VISUAL AND ELECTRONIC SIGNALS OF NAVAIDS**

Interruption of visual and electronic signals of NAVAIDS is prevented, when within the Airport's authority. Maintenance personnel maintain the grass height and snow in ILS critical areas below levels that may affect electronic signals of NAVAIDS.

All construction projects on the airfield are evaluated to determine any possible interference with NAVAID signals. Individuals planning construction projects on the airport, or in the vicinity of the airport which could cause a hazard to air navigation, must submit Federal Aviation Administration Form 7460-1 prior to construction. Pre- construction conferences between the Executive Director of Airports or his/her representative, Airport Engineering, Finance and Administration representatives, and contractor personnel are held on all projects that impact the Air Operations Area.

Contractors are required to have prints of the underground utility lines in their area of activity. Contractors are also required to contact all utility companies to mark their respective lines. If any line is cut, it will be reported to the Executive Director of Airports, or his/her representative, immediately so repairs can be made. If the break involves the operation of a NAVAID under Airport control, a NOTAM will be issued in accordance with FAR Part 139.339. If the NAVAID is under other jurisdiction, the appropriate agency will be immediately notified.

## SECTION 335 - PUBLIC PROTECTION

#### Section 139.335 – PUBLIC PROTECTION

- (a) In a manner authorized by the Administrator, each certificate holder must provide-
  - (1) Safeguards to prevent inadvertent entry to the movement area by unauthorized persons or vehicles; and
  - (2) Reasonable protection of persons and property from aircraft blast.
- (b) Fencing that meets the requirements of applicable FAA and Transportation Security Administration security regulations in areas subject to these regulations is acceptable for meeting the requirements of paragraph (a)(1) of this section.

#### ACCESS CONTROL

Access onto apron areas is limited to persons who have an operational need. Procedures for controlling access onto apron areas are included in the Airport Security Program required by TSR Part 1542 of the Federal Aviation Regulations. This plan provides for public protection and outlines procedures for the inadvertent entry of persons or large domestic animals onto the movement and safety areas.

The Salt Lake City Department of Airports designates specific times and locations for aircraft engine run-ups. Also, when leaving a boarding gate, aircraft are advised to use minimal power to effect taxi. Power-backs will be addressed on a gate-by-gate basis.

Floodlighting is installed in appropriate areas and on buildings subject to normal use to provide public protection from inadvertent access to hazardous areas or unauthorized entry into operational areas. All such lighting will be inspected periodically.

#### **FENCING**

All fencing which borders the aircraft movement areas is eight feet chain link with three strands of barbed wire on top. Fencing at the airport shall prevent inadvertent entry onto airport property by persons or vehicles. Signs restricting access are posted on all gates at regular intervals around the perimeter. The Airport has established procedures for controlling access through perimeter gates.

Perimeter fencing, gates, and signs are inspected as part of the patrols assigned to both the Salt Lake City Police Airport Division and the Operations personnel. Problems noted will be recorded on the daily inspection form and a repair order will be issued. Fencing is repaired and maintained by Airport Airfield Maintenance.

## SECTION 337 - WILDLIFE HAZARD MANAGEMENT

#### Section 139.337 – WILDLIFE HAZARD MANAGEMENT

- (a) In accordance with its Airport Certification Manual and the requirements of this section, each certificate holder must take immediate action to alleviate wildlife hazards whenever they are detected.
- (b) In a manner authorized by the Administrator, each certificate holder must ensure that a wildlife hazard assessment is conducted when any of the following events occurs on or near the airport:
  - (1) An air carrier aircraft experiences multiple wildlife strikes;
  - (2) An air carrier aircraft experiences substantial damage from striking wildlife. As used in this paragraph, substantial damage means damage or structural failure incurred by an aircraft that adversely affects the structural strength, performance, or flight characteristics of the aircraft and that would normally require major repair or replacement of the affected component;
  - (3) An air carrier aircraft experiences an engine ingestion of wildlife; or
  - (4) Wildlife of a size, or in numbers, capable of causing an event described in paragraphs (b)(1), (b)(2), or (b)(3) of this section is observed to have access to any airport flight pattern or aircraft movement area.
- (c) The wildlife hazard assessment required in paragraph (b) of this section must be conducted by a wildlife damage management biologist who has professional training and/or experience in wildlife hazard management at airports or an individual working under direct supervision of such an individual. The wildlife hazard assessment must contain at least the following:
  - (1) An analysis of the events or circumstances that prompted the assessment.
  - (2) Identification of the wildlife species observed and their numbers, locations, local movements, and daily and seasonal occurrences.
  - (3) Identification and location of features on and near the airport that attract wildlife.
  - (4) A description of wildlife hazards to air carrier operations.
  - (5) Recommended actions for reducing identified wildlife hazards to air carrier operations.
- (d) The wildlife hazard assessment required under paragraph (b) of this section must be submitted to the Administrator for approval and determination of the need for a wildlife hazard management plan. In reaching this determination, the Administrator will consider—

   (1) The wildlife hazard assessment;
  - (2) Actions recommended in the wildlife hazard assessment to reduce wildlife hazards;
  - (3) The aeronautical activity at the airport, including the frequency and size of air carrier aircraft;
  - (4) The views of the certificate holder;
  - (5) The views of the airport users; and
  - (6) Any other known factors relating to the wildlife hazard of which the Administrator is aware.

Original Date: 1 November 2004

- (e) When the Administrator determines that a wildlife hazard management plan is needed, the certificate holder must formulate and implement a plan using the wildlife hazard assessment as a basis. The plan must—
  - (1) Provide measures to alleviate or eliminate wildlife hazards to air carrier operations;
  - (2) Be submitted to, and approved by, the Administrator prior to implementation and;
  - (3) As authorized by the Administrator, become part of the Airport Certification Manual.
  - (f) The plan must include at least the following:
  - (1) A list of the individuals having authority and responsibility for implementing each aspect of the plan.
  - (2) A list prioritizing the following actions identified in the wildlife hazard assessment and target dates for their initiation and completion:
    - (i) Wildlife population management;
    - (ii) Habitat modification; and
    - (iii) Land use changes.
  - (3) Requirements for and, where applicable, copies of local, State, and Federal wildlife control permits.
  - (4) Identification of resources that the certificate holder will provide to implement the plan.
  - (5) Procedures to be followed during air carrier operations that at a minimum includes—
    - (i) Designation of personnel responsible for implementing the procedures;
    - (ii) Provisions to conduct physical inspections of the aircraft movement areas and other areas critical to successfully manage known wildlife hazards before air carrier operations begin;
    - (iii) Wildlife hazard control measures; and
    - (iv) Ways to communicate effectively between personnel conducting wildlife control or observing wildlife hazards and the air traffic control tower.
    - (6) Procedures to review and evaluate the wildlife hazard management plan every 12 consecutive months or following an event described in paragraphs (b)(1), (b)(2),
    - and (b)(3) of this section, including:
    - (i) The plan's effectiveness in dealing with known wildlife hazards on and in the airport's vicinity and
    - (ii) Aspects of the wildlife hazards described in the wildlife hazard assessment that should be reevaluated.
  - (7) A training program conducted by a qualified wildlife damage management biologist to provide airport personnel with the knowledge and skills needed to successfully carry out the wildlife hazard management plan required by paragraph (d) of this section.
- (g) FAA advisory Circulars contain methods and procedures for wildlife hazard management in airports that are acceptable to the Administrator.

#### **GENERAL**

The Airport shall take immediate measures to alleviate wildlife hazards whenever they are detected or reported. Airport Operations personnel shall:

- 1) Watch for and report any unusual concentration of wildlife or birds that may be a hazard to aircraft operations, especially when low-flying or in the vicinity of runways, their respective safety areas, and immediate approach areas; and
- 2) In circumstances when such concentrations of wildlife or birds are observed, take appropriate measures to disperse the wildlife or birds or otherwise attempt to alleviate any risk of strikes by aircraft. Dispersal activities will take into consideration the traffic flow and coordinate with ATCT to avoid dispersing wildlife into the path of aircraft.

#### **EVENTS TRIGGERING A WILDLIFE HAZARD ASSESSMENT**

The Salt Lake City International Airport is located in close proximity to the Great Salt Lake and its associated marshes and wetlands. The Great Salt Lake has a large resident and migratory bird population. Birds from this area often use the airport locale for a convenient feeding and loafing area.

The United States Department of Agriculture has completed an ecological study covering items listed in 139.337(b). This study has been reviewed by the Administrator.

A wildlife hazard management plan has been prepared in accordance with Section 139.337(d), using the ecological study as a basis, and has been approved by the Administrator. The plan is included as Appendix B.

## SECTION 339 - AIRPORT CONDITION REPORTING

#### Section 139.339 – AIRPORT CONDITION REPORTING

In a manner authorized by the Administrator, each certificate holder must--

- (a) Provide for the collection and dissemination of airport condition information to air carriers.
- (b) In complying with paragraph (a) of this section, use the NOTAM system, as appropriate, and other systems and procedures authorized by the Administrator.
- (c) In complying with paragraph (a) of this section, provide information on the following airport conditions that may affect the safe operations of air carriers:
  - (1) Construction or maintenance activity on movement areas, safety areas, or loading ramps and parking areas.
  - (2) Surface irregularities on movement areas, safety areas, or loading ramps and parking areas.
  - (3) Snow, ice, slush, or water on the movement area or loading ramps and parking areas.
  - (4) Snow piled or drifted on or near movement areas contrary to § 139.313. (5)
     Objects on the movement area or safety areas contrary § 139.309.
  - (6) Malfunction of any lighting system, holding position signs, or ILS critical area signs required by § 139.311.
  - (7) Unresolved wildlife hazards as identified in accordance with § 139.337.
  - (8) Non-availability of any rescue and firefighting capability required in § 139.317 or 139.319.
  - (9) Any other condition as specified in the Airport Certification Manual or that may otherwise adversely affect the safe operations of air carriers.
- (d) Each certificate holder must prepare and keep, for at least 12 consecutive calendar months, a record of each dissemination of airport condition information to air carriers prescribed by this section.
- (e) FAA Advisory Circulars contain methods and procedures for using the NOTAM system and the dissemination of airport information that are acceptable to the Administrator.

#### **REPORTING AIRPORT CONDITIONS**

- 1) Airport personnel in the following positions are authorized to issue Airport Condition Reports via the Federal NOTAM system or to the Cedar City AFSS.
  - (a) Airport Operations Managers-Airfield



#### AIRPORT CONDITION REPORTING SYSTEM

The procedures for issuing the Airport condition reports are as follows:

1) NOTAMs will be issued utilizing FAA NOTAMS Manager Program. A backup will be to contact the Lockheed Martin Flight Services E- NOTAM Specialist PRC (West) by phone. NOTAMs are issued in accordance with AC 150-5230-28, *Notices to Airmen (NOTAMS) for Airport Operators*, current version.

A current list of personnel authorized to issue NOTAMs is provided to Prescott AZ FSS.

2) ARFF Daily Status Reports detailing equipment and personnel availability will be passed down verbally or in writing to Airport Operations to verify compliance with Sections 139.317 and 139.319.

#### **CONDITIONS REQUIRING A SURFACE CONDITION REPORT**

The following Airport conditions that may affect the safe operation of air carriers shall be disseminated to the Prescott Arizona-AFSS, or disseminated locally to the ATCT and air carriers if AFSS does not accept the condition for NOTAM distribution:

- 1) Construction or maintenance activity on movement areas, safety areas, loading ramps and parking areas;
- 2) Surface irregularities on movement areas, safety areas, loading ramps, and parking areas;
- 3) Snow, ice, slush or water on movement areas or loading ramps and parking areas;
- 4) Snow piled or drifted on or near movement areas at such a height that all air carrier aircraft propellers, engine pods, rotors, and wingtips may not clear the snowdrift or snow banks as the aircraft's landing gear traverses any full strength portion of the movement area;
- 5) Objects on the movement area or safety areas contrary to Section 309;
- 6) Malfunction of any Airport maintained and required lighting system, e.g. holding position signs, ILS critical area signs, or rotating beacon;
- 7) Unresolved wildlife hazards in accordance with Section 337;
- 8) Non-availability of any required rescue and firefighting capability required in Sections 317 and 319;
- 9) Any other conditions that may otherwise adversely affect the safe operations of air carriers.

Original Date:	1 November 2004
-	



#### **RECORDS**

NOTAM Manager archives NOTAMs indefinitely user can retrieve past NOTAMs for one year. Older NOTAMs require a request to the NOTAMS office.

Original Date: <u>1 November 2004</u>

Revision Date: <u>5 April 2022</u>



## SECTION 341 - IDENTIFYING, MARKING AND REPORTING CONSTRUCTION AND OTHER UNSERVICEABLE AREAS

#### Section 139.341 – IDENTIFYING, MARKING AND REPORTING CONSTRUCTION AND OTHER UNSERVICEABLE AREAS

(a) In a manner authorized by the Administrator, each certificate holder must--

- (1) Mark and, if appropriate, light in a manner acceptable to the Administrator—
  - (i) Each construction area and unserviceable area that is on or adjacent to any movement area or any other area of the airport on which air carrier aircraft may be operated;
  - (ii) Each item of construction equipment and each construction roadway, which may affect the safe movement of aircraft on the airport; and
  - (iii) Any area adjacent to a NAVAID that, if traversed, could cause degradation of the signal or the failure of the NAVAID; and
- (2) Provide procedures, such as a review of all appropriate utility plans prior to construction, for avoiding damage to existing utilities, cables, wires, conduits, pipelines, or other underground facilities.
- (b) FAA Advisory Circulars contain methods and procedures for identifying and marking construction areas that are acceptable to the Administrator.

#### **Marking and Lighting**

Each construction area and unserviceable area that is located on, or adjacent to, areas on which air carrier aircraft may be operated will be marked and lighted in accordance with FAA AC 150/5370-2. Inspections of these areas for appropriate markings and lighting take place daily and the contractor is notified of any incompliance.

Each item of construction equipment and construction roadway will be marked appropriately as to not adversely affect the safe movement of aircraft on the airport. Construction vehicles are required to display either a flashing amber beacon visible from all sides, or an orange and white checkered flag measuring at least 9 sq. feet. Vehicles operating at night are required to have a flashing amber beacon.

Construction activities will not take place adjacent to any NAVAID facility without prior authorization from Airport Operations. A review of the planned activities will take place to insure there is no degradation of signal or failure of the NAVIAD. In the event that construction activities will adversely affect NAVIADs, the FAA will be notified and NOTAMs issued for the duration of the project.

#### **Protection of Utilities**

A review of utilities will take place prior to the start of any construction activity. This review will be conducted during the Construction Safety and Phasing Plan meeting and verified by the contractor by physically locating utilities. The contractor will report any variances to Salt Lake City International Airport prior to additional construction activities taking place.

In the event that utilities are encountered that were not shown, work will immediately cease until an additional review by the Airport can be conducted.

Original Date: <u>1 November 2004</u>

## SECTION 343 – NONCOMPLYING CONDITIONS

#### Section 139.343 – NONCOMPLYING CONDITIONS

Unless otherwise authorized by the Administrator, whenever the requirements of subpart D of this part cannot be met to the extent that uncorrected unsafe conditions exist on the airport, the certificate holder must limit air carrier operations to those portions of the airport not rendered unsafe by those conditions.

The Salt Lake City Department of Airports recognizes its obligations under this section and will comply. Airport Operations personnel shall inform the Executive Director of Airport or his/her designee of any condition which he/she feels warrants closing a portion or all of the airport to air carrier traffic. The Executive Director of Airports or his/her designee shall decide the severity of the condition.

Should any area be thus deemed unsafe for air carrier operations, it shall be closed to air carrier operations and marked appropriately by Airport Operations. The FAA and air carriers will be so notified by the Executive Director or his/her designee.

**APPENDIX A1** 

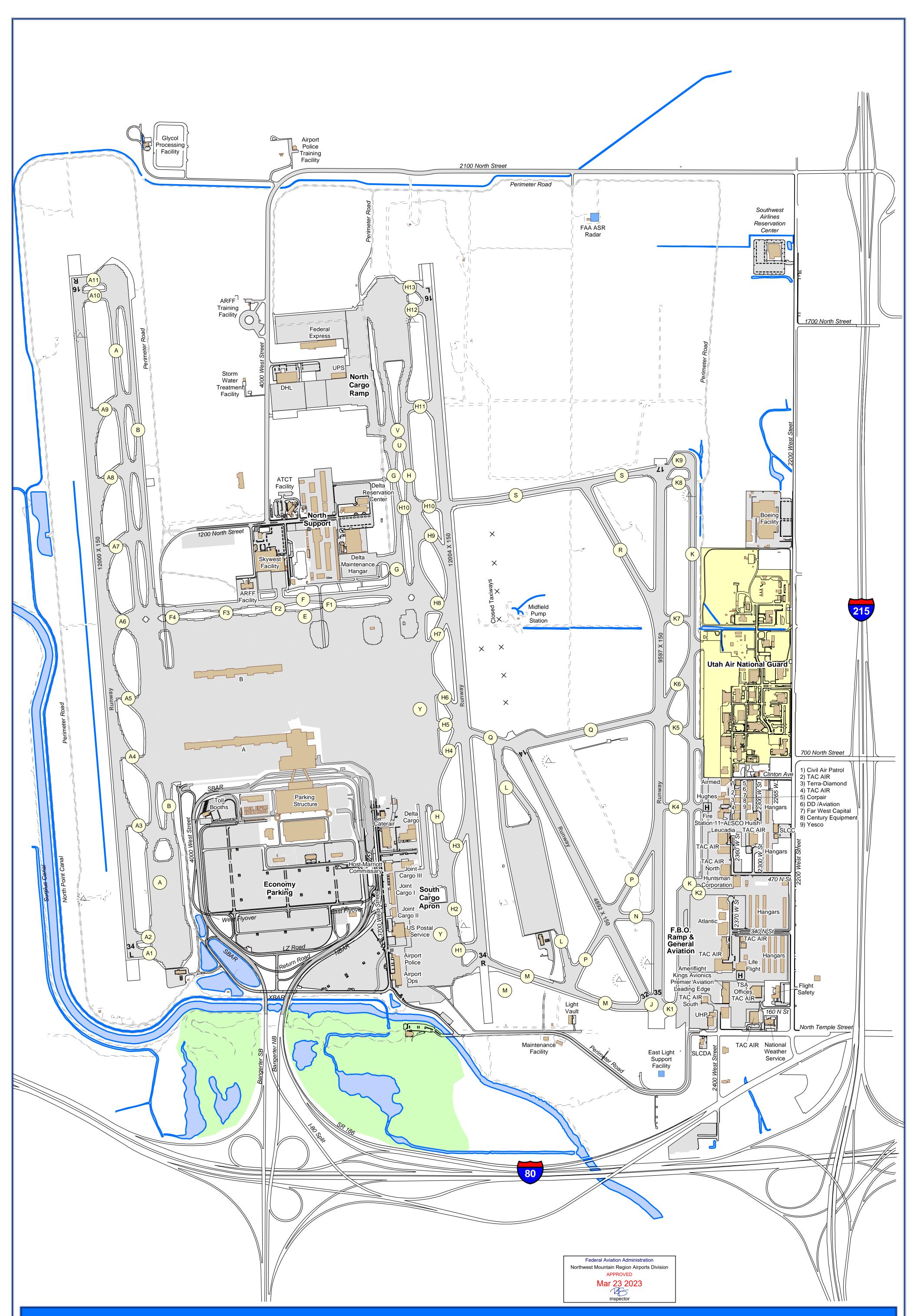
# Salt Lake City Vicinity Map

Original Date: <u>1 November 2004</u>

Revision Date: <u>3 March 2023</u>

FAA Approval:





Salt Lake City International Airport Vicinity

Salt Lake City Department of Airports Geographic Information System





**APPENDIX A2** 

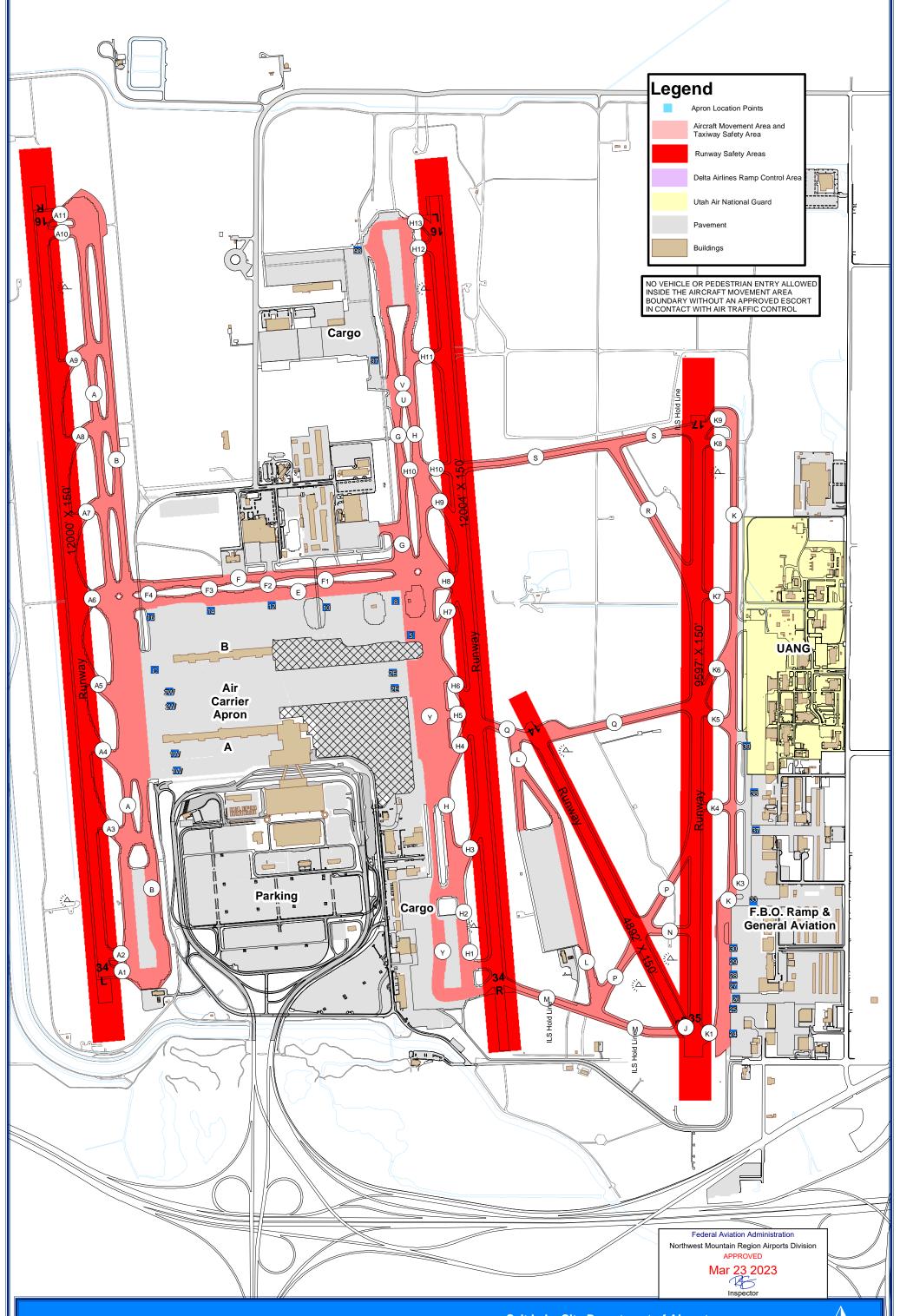
## **Aircraft Movement and Safety Areas**

Original Date: <u>1 November 2004</u>

Revision Date: <u>3 March 2023</u>

FAA Approval:

Federal Aviation Administration Northwest Mountain Region Airports Division APPROVED Mar 23 2023 Inspector



Runway/Taxiway Safety and Aircraft Movement Areas Salt Lake City Department of Airports Geographic Information System

## **APPENDIX A3**

## **Grid Map**

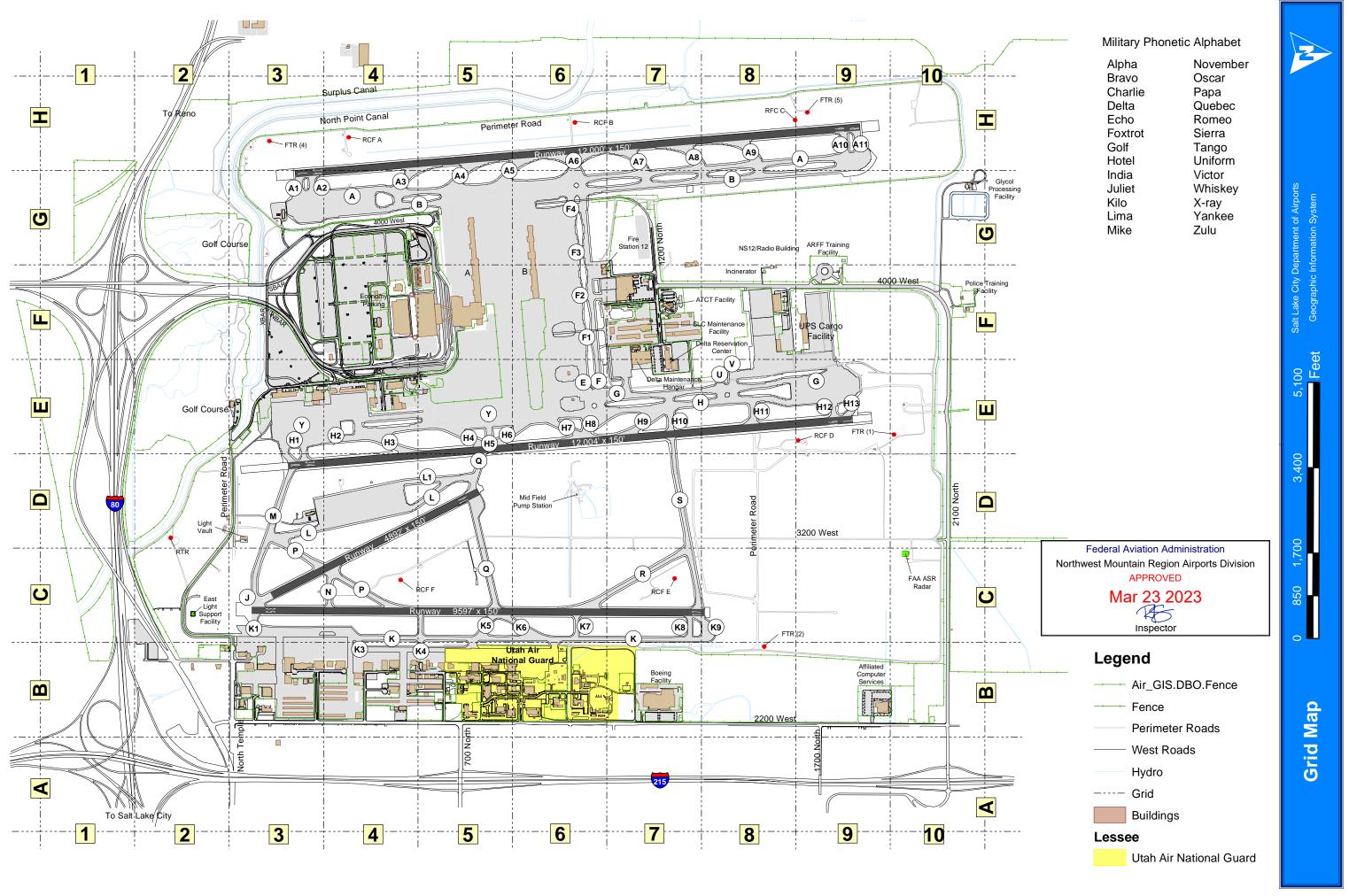
Original Date: <u>1 November 2004</u>

Revision Date: <u>3 March 2023</u>

FAA Approval:



Federal Aviation Administration



## **APPENDIX A4**

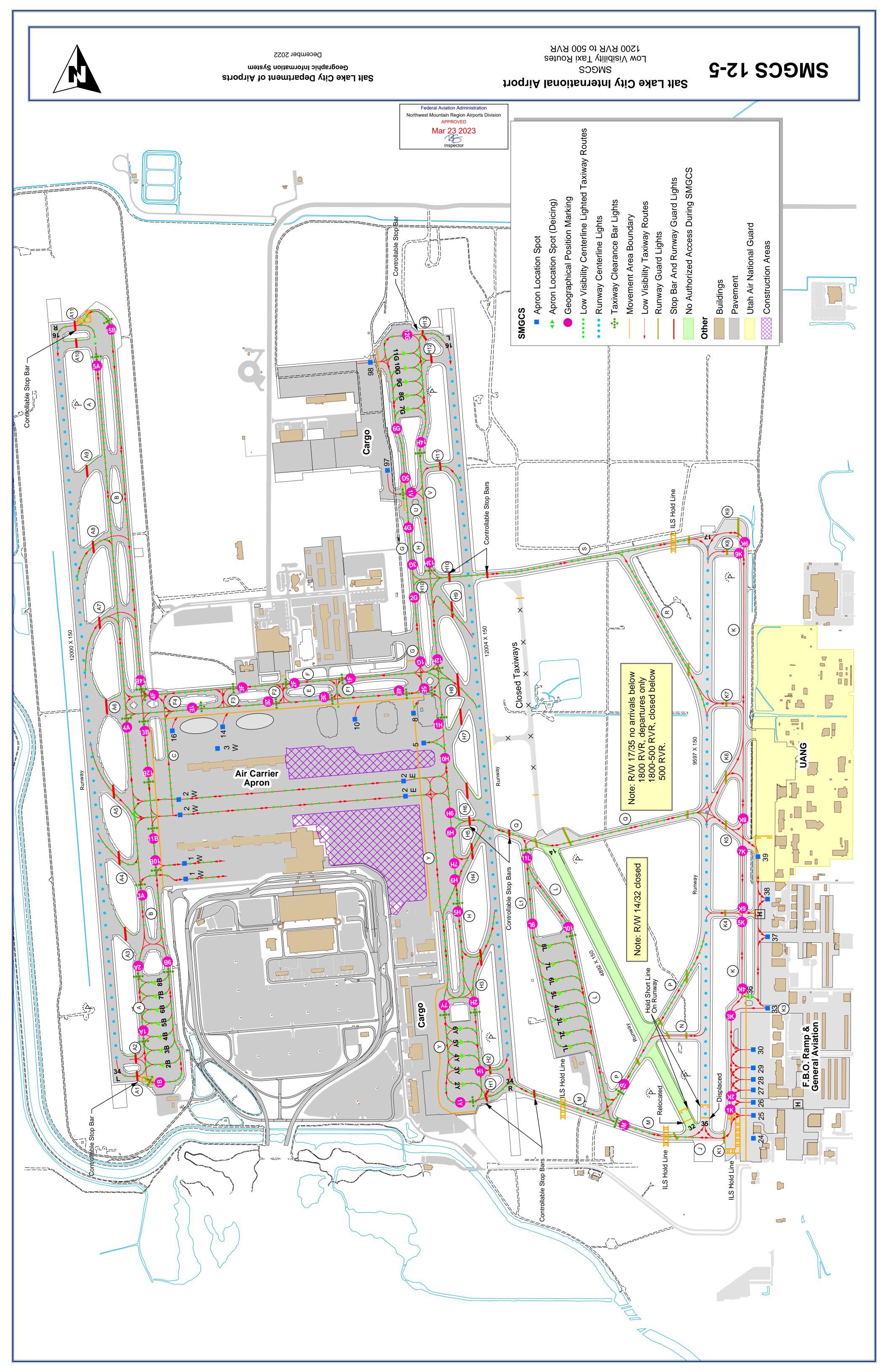
# **SMGCS** Maps

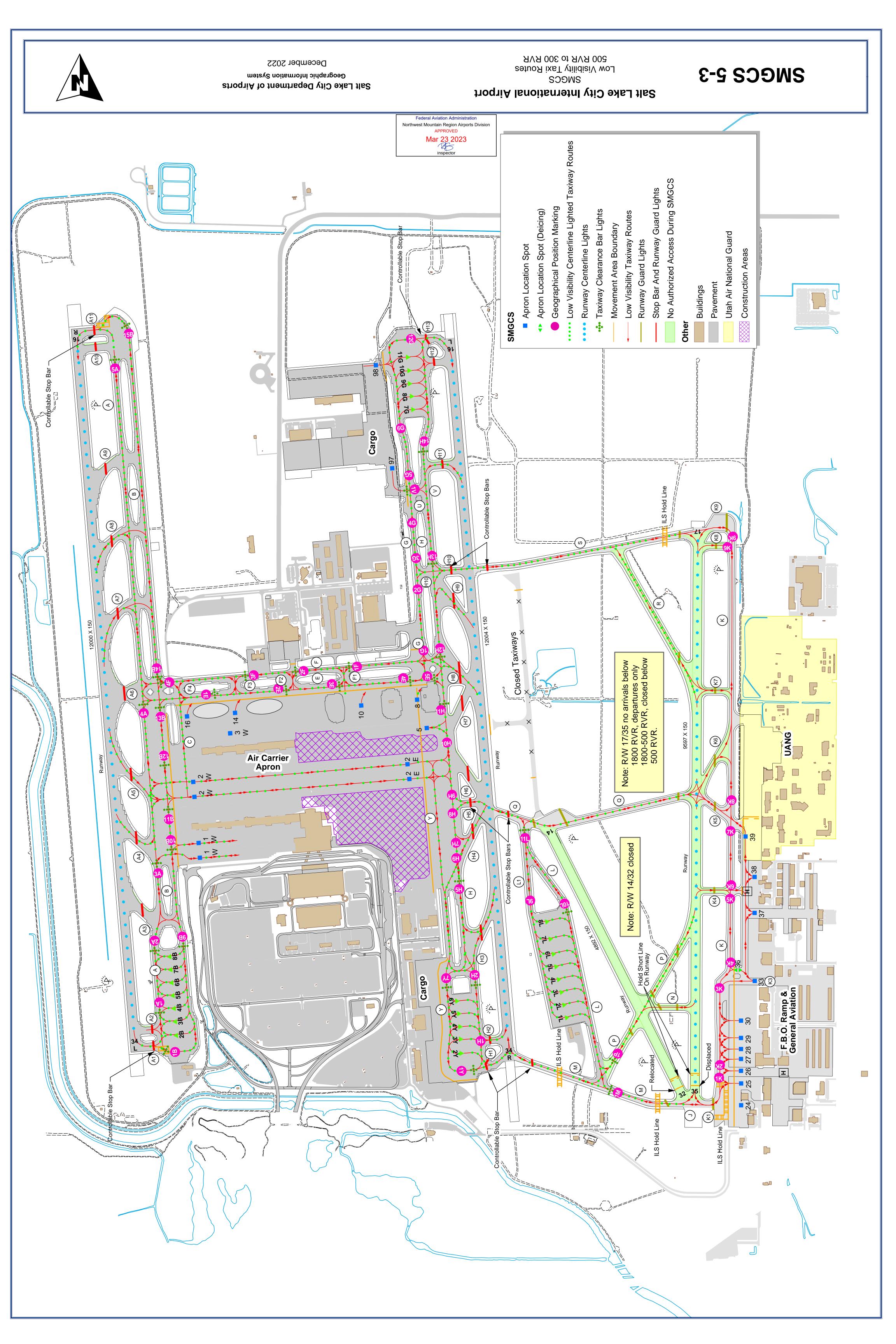
(2 pages)

Original Date: <u>1 November 2004</u>

Revision Date: <u>3 March 2023</u>







APPENDIX A5

# **Snow Removal Priorities**

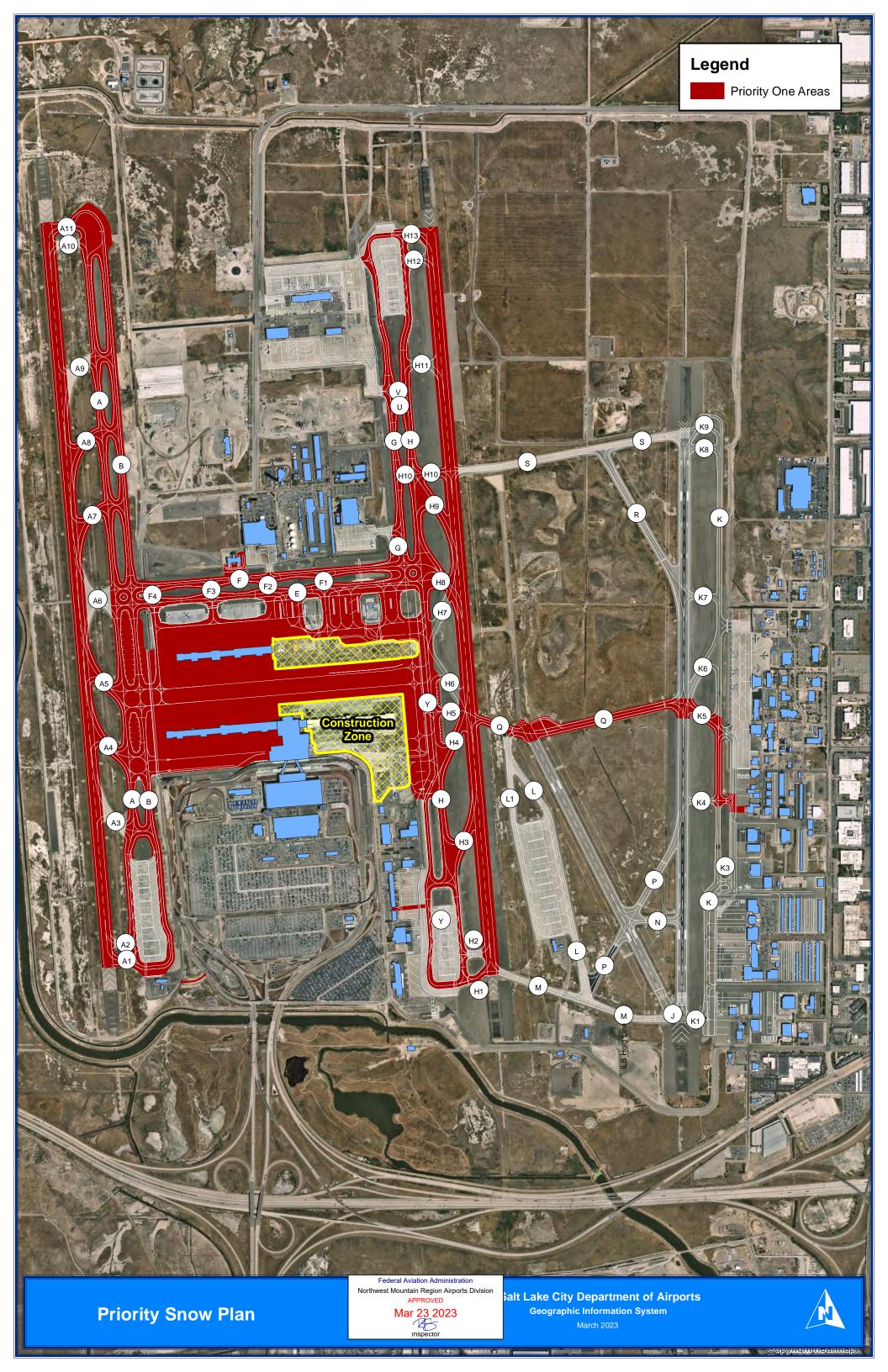
(4 pages)

Original Date: <u>1 November 2004</u>

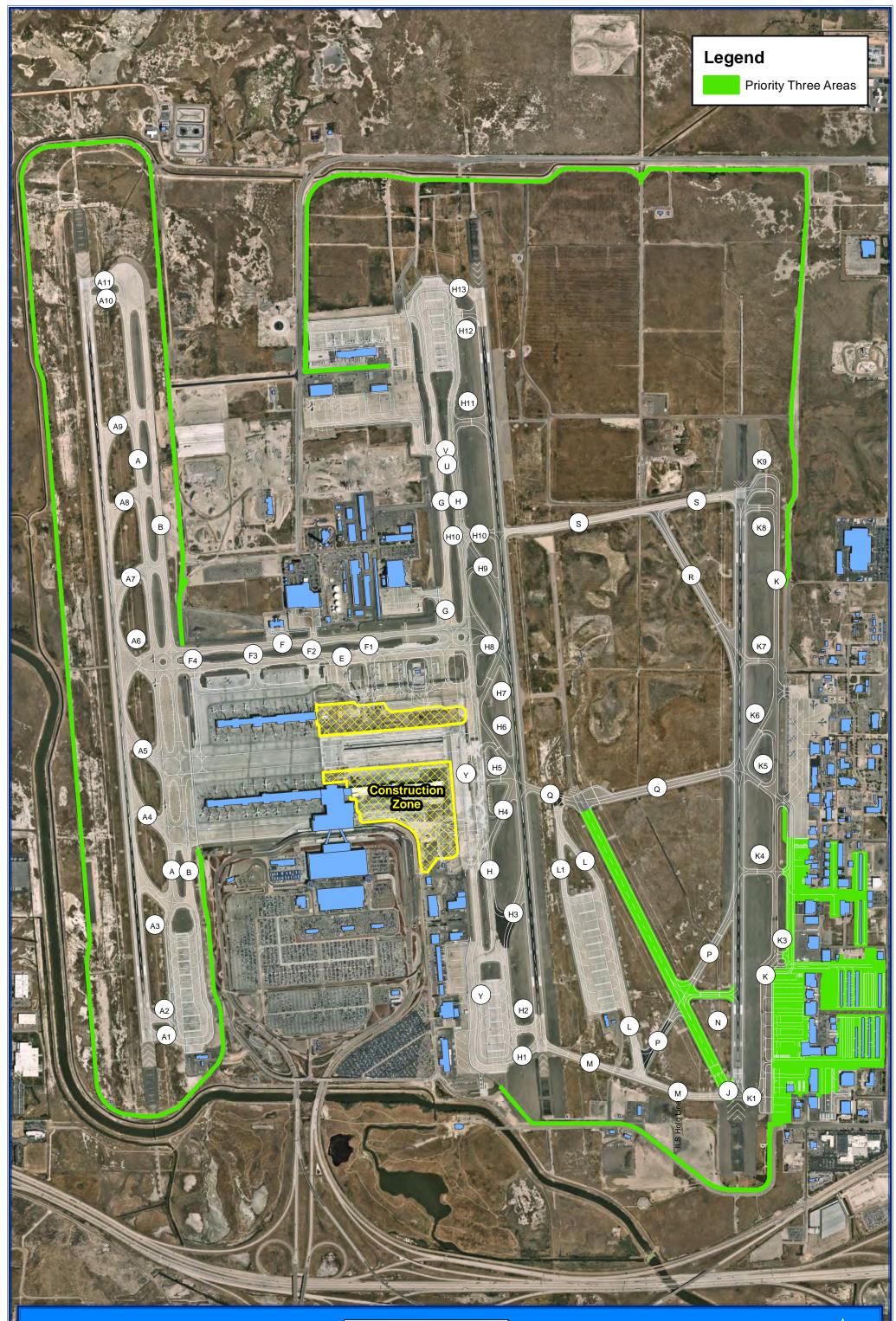
Revision Date: <u>3 March 2023</u>

FAA Approval:

Federal Aviation Administration Northwest Mountain Region Airports Division APPROVED Mar 23 2023 Inspector







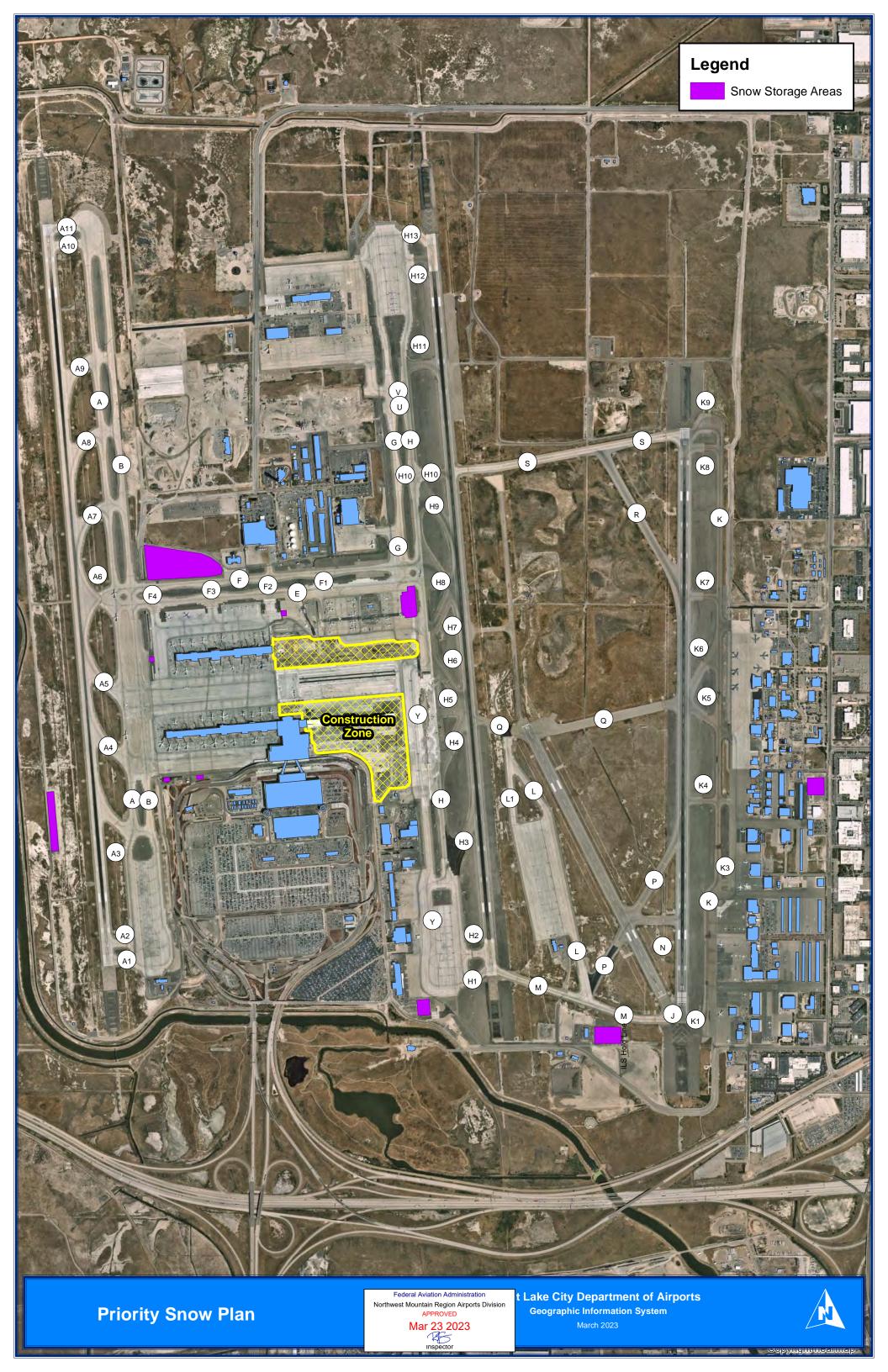
## **Priority Snow Plan**

Federal Aviation Administration Northwest Mountain Region Airports Division APPROVED Mar 23 2023 Inspector

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Salt Lake City Department of Airports Geographic Information System

March 2023



## **APPENDIX B1**

# Wildlife Hazard Management Plan

Original Date: <u>1 November 2004</u>

Revision Date: <u>8 December 2020</u>

FAA Approval: \_\_\_\_\_7 May 2021\_\_\_\_

## **APPENDIX B**

# Wildlife Hazard Management Plan

Original Date: 1 NOV 2004\_\_\_\_\_

Revision Date: 8 DEC 2020 \_\_\_\_\_

Federal Aviation Administration Northwest Mountain Region Airports Division APPROVED May 07 2021 RE Inspector

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- 1. Wildlife Plan Implementation Authority & Responsibilities.
  - List of Departments and their role in the plan.
  - 1.1) List of outside Agencies, and their role in the plan.
- 2. Assessment Summary & List of prioritized actions identified in the Wildlife Assessment.
  - 2.1) Summary of ecological study and Assessment.
  - 2.2) Habitat Management
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  - 2.4) Species specific Population Management.
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    - 2.3 c) Ducks
    - 2.3 d) Gulls
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- 5. Procedures During Air Carrier Operations
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  - 5.3) Wildlife Control

Original Date: 1 NOV 2004\_\_\_\_\_

FAA Approval:



5.4) Communication

- 6. Periodic Review
- 7. Training

## Wildlife Hazard Management Plan Salt Lake City Department of Airports

## **INTRODUCTION**

A Wildlife Hazard Management Plan (WHMP) addresses the responsibilities, policies, and procedures necessary to reduce wildlife hazards at an airport. Recognizing the potential hazards wildlife pose to aircraft and human lives, the Salt Lake City Department of Airports (SLCDA) is committed to providing a successful WHMP that is dependent on determined, resourceful personnel whose efforts are based on knowledge of bird biology and behavior. The Federal Aviation Administration (FAA) requires airports that incur bird-aircraft strikes to implement a WHMP according to Code of Federal Regulations (CFR) Title 14 FAR Part 139.337. In accordance with that section, the WHMP must include 7 required components. These required components are as follows:

- (1) A list of the individuals having authority and responsibility for implementing each aspect of the plan.
- (2) A list prioritizing the following actions identified in the wildlife hazard assessment and target dates for their initiation and completion:
  - (i) Wildlife population management;
  - (ii) Habitat modification; and
  - (iii) Land use changes.
- (3) Requirements for and, where applicable, copies of local, State, and Federal wildlife control permits.
- (4) Identification of resources that the certificate holder will provide to implement the plan.
- (5) Procedures to be followed during air carrier operations that at a minimum includes—
  - (i) Designation of personnel responsible for implementing the procedures;
  - Provisions to conduct physical inspections of the aircraft movement areas and other areas critical to successfully manage known wildlife hazards before air carrier operations begin;
  - (iii) Wildlife hazard control measures; and
  - (iv) Ways to communicate effectively between personnel conducting wildlife control or observing wildlife hazards and the air traffic control tower.
- (6) Procedures to review and evaluate the wildlife hazard management plan every 12 consecutive months or following an event described in paragraphs (b)(1), (b)(2), and (b)(3) of this section, including:
  - (i) The plan's effectiveness in dealing with known wildlife hazards on and in the airport's vicinity and

Original Date: 1 NOV 2004\_\_\_\_\_

- (ii) Aspects of the wildlife hazards described in the wildlife hazard assessment that should be reevaluated.
- (7) A training program conducted by a qualified wildlife damage management biologist to provide airport personnel with the knowledge and skills needed to successfully carry out the wildlife hazard management plan required by paragraph (d) of this section.

Note: Requirements and procedures of the WHMP may be altered in accordance with Part 139.113.

#### Section 139.113 – DEVIATIONS

In emergency conditions requiring immediate action for the protection of life or property, the certificate holder may deviate from any requirement of subpart D of this part, or the Airport Certification Manual, to the extent required to meet that emergency. Each certificate holder who deviates from a requirement under this section must, within 14 days after the emergency, notify the Regional Airports Division Manager of the nature, extent, and duration of the deviation. When requested by the Regional Airports Division Manager, the certificate holder must provide this notification in writing.

1. Wildlife Plan Implementation Authority and Responsibilities

Implementation of the Salt Lake City Department of Airports' (SLCDA) WHMP is the responsibility of the Airport Operations division under the direction of the Executive Director of Airports. The following are other Airport departments that play a role in the plan.

#### Airport Operations

The Superintendent of Airport Operations has the authority and responsibility of designating an Airport Operations Manager-Airfield as the Wildlife Program Manager (WPM) who is responsible for managing the Airport's WHMP, and Wildlife Section. The Airport Operations Division has a Wildlife Section of assigned personnel that includes a full time United States Department of Agriculture (USDA) Wildlife Services biologist devoted to wildlife control and associated projects. In addition to the assigned wildlife personnel the Operations Division also has personnel assigned to the airfield 24 hours a day, 365 davs a vear whose responsibilities also include wildlife control. Airport Operations reviews construction and new design plans that has potential to attract wildlife and makes recommendations to reduce that attraction.

Original Date: 1 NOV 2004\_\_\_\_\_



Revision Date: 8 DEC 2020

Airport Planning and Engineering

- Is responsible for incorporating Reduction of wildlife attractants in landscape design by reducing the number of trees planted and selecting species least desirable to wildlife;
- Consideration to the exterior, architectural design of buildings to limit roosting
- Design of water retention ponds that automatically pump standing water off of the airfield; and
- Design of bridges to have enclosed understructure to prevent roosting and nesting areas.

Airport Maintenance

- Is responsible for maintenance of the airfield, which includes field mowing to keep the grass maintained at a length least desirable for wildlife;
- Tree removal of nesting and roosting habitat;
- Maintaining the Airport's 8' perimeter fence to keep large mammals (ungulates and coyotes) off the airfield;
- Small scale pesticide and herbicide spraying on the Airport;
- Installation of netting to prevent roosting and nesting
- Filling and grading of low areas that collect standing water.

Vehicle Maintenance Shop

• Is responsible for repair and maintenance of the Airports vehicles and sirens used for wildlife control and may provide repair and maintenance of other wildlife related equipment.

All above departments assist by reporting wildlife hazards observed on the Airport to Airport Operations.

#### 1.1 Outside Agencies

Departments outside the Airport that assist in the WHMP include the following:

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USDA Wildlife Services

- is under contract by the Airport and provides a full time wildlife biologist who is responsible to assist in monitoring wildlife use patterns,
- trapping and relocating raptors and other wildlife,
- identifying aircraft hazards on the Airport and surrounding property,
- monitoring of wildlife prey base that may attract hazardous wildlife,
- provide supplemental hazing or coordinated population reduction,
- provide regular wildlife control training,
- provide expert legal testimony,
- advise, on request, of future expansion concerning wildlife, and
- Assistance in removal of deer and other wildlife from Airport property.

Utah Division of Wildlife Resources

- is responsible for issuing state wildlife depredation permits,
- provides bird counts and estimated waterfowl numbers in wetlands surrounding the Airport, and
- Provides advice on various wildlife issues.
- U. S. Fish and Wildlife Services
- Is responsible for issuing depredation permits to the Airport to control federal migratory birds listed in the permit.
- Has management authority over threatened and endangered species

#### 2. Prioritized List of Actions Identified In Wildlife Assessment

#	Action/ Item	Status	Completion
			Date/ Goal
	Airport Property		
1.	Drain Critical areas of standing water located	On-going	On-going
	in jurisdictional wetlands		
2.	Drain or fill areas of standing water, non- jurisdictional wetlands	On-going	On-going
3.	Clear trees and brush along canals and others areas attracted by wildlife	On-going	On-going
4.	Planning will ensure any future retaining pond will be built will include the ability to drain completely within 48 hours.	On-going	On-going
5.	All future perimeter fence construction will include a subterranean barrier to discourage mammals from digging underneath.	On-going	On-going
	AOA Action Items		
6	Maintain airfield grass height at a length least desirable to wildlife	On-going	On-going

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7.	Locate and excavate any fox or burrowing owl dens for backfill.	On-going	On-going
8.	Seasonal weed control of milled safety areas	On-going	On-going
9.	ARS Vegetation project will be evaluated for continuance, or relocation	Completed/ project Cancelled	May 2019
10.	Removal of inactive powerlines on AOA	Complete	August 2018
11.	Airport will complete work to ensure proper drainage from rwy 35 apprch, non- jurisdictional wetland.	Complete	September 2020
	Airport Property within 2 miles of AOA	<u> </u>	
12.	Airport will deliver plan for removal of ponding water from areas adjacent to the Main Entrance/ Exit to Airport Terminals	Complete	Area monitored 1 year no act ion needed
13.	Airport will coordinate with Rose Park Golf Course to determine a cooperative mitigation plan of the Canada Goose Population that exists in the area.	Complete	August 2020
14.	Airport will deliver a management plan to reduce the hazards that exist on the former golf course.		
15.	Airport will coordinate with SLC Corp to determine future land use of the former golf course and implementation of USDA habitat modification recommendations.	Complete	August 2020
1.4	Airport Property within 5 miles of AOA		
16.	Airport will coordinate with ACOE and deliver water management plan for wetland mitigation site to reduce wildlife hazards.	On-going	August 2021
17	Other Obtain Agricultural truck to eliminate need for third party vendor application of herbicide, and pesticide.	In progress	August 2023
18.	Acquire Wildlife dedicated vehicle, making mitigation surveys, and wildlife control work more effective in wetland area	CAP request pending completion	August 2022
19.	Acquire less invasive hazing tool for waterfowl in public pond areas	completed	RC boat acquired 2017
20.	Airport will coordinate with Wildlife Services to determine if a conclusion could be gained from collected Raptor telemetry data.	Completed	May 2020
21.	Airport will coordinate with DWR on AWPE research project, for determination of course	Ongoing	January 2021 update

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	of actions		
22.	The Airport Will deliver a GIS mapping process to identify and log swallow nesting locations. The info will help to track swallow activity trends, and identify problem areas which should be monitored regularly during nesting season.	Complete	February 2020
23.	The Airport Will deliver a GIS mapping process to identify and log Duck nesting locations. The info will help to track Duck nesting areas which should be monitored regularly during nesting season.	In- Progress	March 2021
24.	Finalize list of adjacent landowners with Wildlife Hazards located on property. Complete contact log, and document conversations.	In Progress	September 2021

#### 2.1. Ecological Study/ Wildlife Assessment-

USDA Wildlife Services conducted an initial wildlife hazard assessment in 1991, which resulted in a long-term ecological study that continued through 1997. In December of 2004 Wildlife Services updated the ecological study with a Wildlife Assessment of the SLC Airport.

USDA made the following recommendations to reduce wildlife hazards on the Airport.

- elimination of standing water and vegetation along canals,
- Discontinuing livestock grazing and agricultural farming. (SLCAA banned livestock grazing in the east airfield pastures in 1994)
- Tree, brush and construction debris removal.

To date all recommendations listed in the study have been completed or are ongoing, and the Airport continues to consult regularly with USDA Wildlife Services to make habitat modifications that reduce wildlife hazards.

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Wildlife Surveys continue on the Salt Lake City International Airport, and Surrounding Property. As the Airport Re-development project progresses, additional surveys of the new structures and landscapes will be implemented.

#### 2.2. <u>Habitat Management</u>

- It is the policy of the Airport to minimize to the extent practical the creation of new wildlife habitat and elimination of existing wildlife habitat and land uses, which attract birds and other wildlife. When determined to be a problem, the following action will be taken to eliminate habitat and land uses identified as contributing to wildlife hazards. These changes will be made consistent with available resources and the Airport's ability to influence land use decisions.
- Drain or fill areas of standing water that are not jurisdictional wetlands and identified as strong wildlife attractants that are frequented by shorebird and other waterfowl.
- Design of future retention ponds will include the ability to drain completely within 48 hours.
- Storm water detention basins will be pumped out in timely fashion to reduce the attraction to wildlife.
- Clear trees, brush and vegetation along canals and other areas, which are found to be strong wildlife attractants.
- Turf will be maintained in such a manner that it will not constitute an attraction to hazardous wildlife.
- Prey base populations will be monitored and direct control may be initiated if necessary.
- Future perimeter fence construction, will contain a subterranean barrier to discourage small mammals from digging underneath.
- Buildings will be made as uninhabitable as possible to nesting or roosting wildlife using netting, bird spikes or other suitable material.
- Construction debris that may be a strong wildlife attractant by providing cover for small mammals and perching sites for birds will be removed.
- Specialists will monitor insect populations and insecticides may be applied if necessary.
- Off Airport property will be monitored for wildlife attractants and cooperative efforts will be made with landowners to reduce the attractant to best extent possible.
- Agricultural practices and livestock grazing that are not more of an attractant than current habitat may be allowed on a case by case basis after review.
- 2.3. <u>Telemetry Project</u> -

Starting in 2017 the airport began participating in a telemetry project to track raptors that have been trapped on the airport then released. Raptor movements were monitored to help with identification of migratory routes of species found on the airport. The data collected was to be used to determine

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relocation sights with the lowest raptor return rates. To date, all 8 units have been deployed on raptors, with only one unit still transmitting. The costs associated with the program, and the additional time it required to collect, and review the data made the project cumbersome without providing tangible returns on the investment. In the Spring of 2020, the airport collaborated with College Students finishing their Master's program. The Group ended up using the Airport's telemetry data in coordination with other telemetry projects to glean a Clearer picture of Raptor Movements. Published study findings should made available by Spring of 2021.

#### 2.4. Species Specific Population Management

#### 2.4a. <u>Waterfowl Management Summary</u>

#### <u>History</u>

Salt Lake City International Airport, is the 25th busiest in North America and 85th worldwide with regards to passenger numbers. SLC International airport is located on the southeast edge of the Great Salt Lake eco system and on the edge of two waterfowl migration flyways (Central and Pacific). These three factors create a hazard for aircraft waterfowl interaction.

Waterfowl, which include Ducks, Geese, Pelicans and other shore birds, are the leading cause of damaging strikes at SLC. In 2018 there were a total of 38 waterfowl strikes, with 21 of those causing damage. In 2019 the waterfowl strikes seemed to remain close the annual total in 2018, however there was a 30% reduction in the damaging Waterfowl strikes that occurred. 2020 should end with another downward trend in waterfowl strikes overall, including another 10% decrease in damaging waterfowl strikes from 2019.

#### Areas of Focus:

#### **On Site Management**

#### AOA

Waterfowl are rarely surveyed on the AOA. Typically they are only seen during the wet years when ponding water occurs inside the AOA. These areas will be monitored regularly for waterfowl activity, and be considered for draining or removal through mitigation banking.

#### Former Wingpointe Golf Course

The Airport will determine the land use application for the former Wingpointe Golf Course. During the Spring and Summer of 2019, the Airport begun implementing recommended habitat modifications on the former course which included removal of trees, and vegetation along the canal banks, and maintaining a taller grass height to reduce the attractiveness to target Wildlife. The 2020 season has shown an

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overall decrease in waterfowl activity using the Golf Course, with a 10% reduction in waterfowl activity from 2019.

#### Canals

There are approximately 15 miles of canal system that surround the AOA covering three sides. Part of this same drainage system includes a surplus canal which runs through the former Wingpointe Golf Course, parallel to the Jordan River Drainage system, then diverting water to the ranching operation to the north of the airport The canals present a unique hazard, because the canals are flowing water, they rarely freeze over. In the cold winter months when the open water of ponds and wetlands begin to freeze over the water on the canals stays open. This causes an increase of waterfowl present on the canals increasing the strike potential. Canal banks will be kept free of vegetation, to mitigate cover areas for resting waterfowl and increase the visibility to these resting areas so that wildlife personnel can easily observe if waterfowl are present. The removal of vegetation along canal banks is a requirement of our WHMP (section 2.2 Habitat Management). Routine patrols of the canals will be done by the wildlife staff, to reduce the length of time in which waterfowl will sit undisturbed on the canals. During the winter months, patrols of the canal may extend beyond sun down to prevent waterfowl from roosting in the canals adjacent to the airport.

#### **Retention ponds**

There are a few retention ponds located around the road system entering and exiting the airport. These retention ponds are used to hold water that is runoff from parking lots before being pumped out to the canal. These ponds don't always drain, especially during wet years. There can be a point where there is enough water to create standing water in these areas but not enough water so that it can be pumped out. This creates small pockets of standing water in the approach and departure paths of aircraft. During the Spring of 2020 the Airport identified retention ponds, which were not fully draining, then grated the area for better drainage into the pump systems.

#### Landscape

The landscape and green areas around the parking lots and throughout the airport create great nesting habitat for waterfowl during the early spring months. This creates a nesting cycle at the airport as the waterfowl chick will be imprinted on the area. This will increase the likely hood of those birds to return to the airport. The airport will limit vegetation introduced into newly landscaped areas to mitigate attractiveness to target species.

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#### **Offsite Management**

Per Advisory Circular 150/5200-33B, the FAA recommends that Airport Operators Identify all Wildlife Hazards within a 5 mile circle of the Airfield; coordinating with land users to the extent possible, in reducing Wildlife Hazards. The Airport will continue to look for opportunities of coordination with local land users to reduce the Wildlife Hazards that exist within the FAA's recommended separation distances cited in AC 150/5200-33B.

#### Wetlands within 3 mile of the Airport

The airport is surrounded to the north and west by thousands of acres of wetlands. Most of this is private land and also duck clubs. This presents a challenge, AC 150/5200-33B recommends a minimum separation distance of 10,000 feet between the AOA and hazardous wildlife attractant. Section 2-4 specifically lists wetlands as hazardous wildlife attractant. There are private land owners and duck clubs located as close as half a mile (2,600ft.) from the AOA, well within the separation distance recommended. This presents the wildlife staff with a unique challenge. The private land owners and ducks clubs are trying to draw or attract ducks to their property for hunting purpose. Whereas the wildlife staff is trying to minimize the hazardous wildlife within the 10,000ft separation distance. Because this is private property, the wildlife staff cannot use control or dispersal methods without written permission from the landowner. The wildlife staff will routinely observe these areas for activity. Individual considerations will be given to each area of designated wetland, located on airport property for possible drainage. Depending factors will be access for equipment. Ponds shown to have frequent bird activity that are unable to be drained, will at a minimum, be maintained in a manner that allows accessibility to the area by wildlife personnel.

#### **SLDA Wetland Mitigation Site**

When the Airport constructed the furthest West runway, 16R/34L, in 1995; designated Wetlands were removed, and therefore mitigated through purchase, and creation of additional Wetlands off the Airfield. The Airport's Wetland Mitigation property contains approximately 920 acres of Wetland habitat, located just over a mile and a half from runway 16R/34L. This puts the mitigation site within the separation distance listed in AC150/5200-33B. The Airport does not allow hunting on the property, and since its creation, has become a rest area for the surrounding Duck Clubs located on the South point Canal System.

The Wetland Performance Standards monitoring period has ended, and the area is approved as a mitigated Wetland. The FAA strongly

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recommends against enhancing mitigation areas to prevent attractiveness to hazardous wildlife. The Airport will continue to monitor water quality, and manage noxious/ invasive species of weeds that exist on the property. Noxious vegetation will be treated as directed by its classification by the State of Utah, and Department of Agriculture. The airport will not improve the habitat on the mitigation site as to not increase the attractiveness of the mitigation site to waterfowl. Wildlife personnel will make routine visits to the wetland mitigation site. These visits will involve; surveys, harassment, hazing and lethal take. The Airport will research its agreement with the ACOE to determine compliance if the mitigation site was completely drained for 3-4 months of the year, reducing Wildlife Hazards during peak waterfowl use seasons, also allowing the ability to complete water weir maintenance.

#### **International Center**

The international center is a business park composed of hotels, factory warehouses, and other businesses. There are two decorative ponds that are located around this area that are frequently used by a variety of species of waterfowl for feeding and loafing. The ponds are located less than a mile west, of Runway 16R/34L. During the winter months these ponds have been surveyed to have over a 1,000 waterfowl loafing on them. During the spring months these ponds provide a great nesting habitat for waterfowl as well. Being located in a business park, these waterfowl are exposed to human activity daily, creating a feeding problem. This creates a hazardous issue as it attracts more waterfowl and will create resident birds. In 2017 the wildlife team coordinated with the property lease manager, and signs were placed around the pond educating the public on the hazards of feeding the waterfowl. The Airport coordinated with Utah DWR to perform a waterfowl round up. Waterfowl were rounded up during the 2020 molt season, in accordance with federal, and state depredation permits. Future coordination will continue with DWR in the following seasons to determine the best course of action with this population in regards to euthanasia or relocation. Due to the proximity of the public, pyrotechnics were not a dispersal option.

#### **Regional Athletics Complex**

The Regional Athletics Complex is a sporting complex composed of 16 soccer fields and about 4 acres of ponds. This complex is located approximately 1.4 miles Northeast of Runway 17/35. The area is City owned property, often used during the summer for Soccer tournaments, and events. During the fall and winter this habitat provides short grass, designated wetlands, as well as a small pond in the center of the property. A variety of species of waterfowl frequent

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the pond. Canada geese, ducks and gulls are often observed in flocks, loafing in the pond, or feeding in the short grass. This area is patrolled daily by the wildlife staff as to prevent waterfowl from using the ponds or the short grass area. Hazing, and monitoring efforts continue, and have shown marked reductions in the number of waterfowl using the area.

#### **Golf Courses**

Rose Park Golf course is located 1.2 miles east of runway 17. Golf courses are listed as hazardous wildlife habitat in AC 150/5200-33B. The short grass and well-manicured greens and fairways make them great habitat for geese. Geese like to feed on the grass and if water is present use the water as a loafing area. Rose Park has 1.5 miles of the Jordon River that runs through the middle of the golf course. These two key habitat features, make this golf course prime habitat for hazardous wildlife. Since this golf course falls within the separation distance listed within AC 150/5200-33B it has been placed in the prioritized actions list. A meeting was held with the Rose Park Property Manager in the Spring of 2019 to discuss a wildlife management plan. The Goose activity on the course is relatively low due to the topography, and thick stands of trees. The property manager committed to keeping an observation log, and immediately contacting Airport Wildlife when goose populations are present in the area. The Airport Wildlife Manager will coordinate with the property manager once a year to ensure no changes in personnel or activity have taken place.

#### 2.4b. Canada Geese

Canada geese are a species of serious concern and often attempt to congregate on the Airport and surrounding wetlands and golf courses throughout the year. Canada geese are likely to cause damage to aircraft due to their large size and flocking behavior.

#### Attractants:

Much of the geographic area near the Airport is wetland marshes that contain many private waterfowl hunting clubs that manage the habitat to promote waterfowl numbers. The Great Salt Lake, private waterfowl hunting clubs, and several wildlife refuges north of the Airport contribute to very large waterfowl numbers near the Airport. Geese often attempt to use the Airport as a refuge to avoid hunting pressure from surrounding hunting clubs. The Airport golf course and Surplus Canal at the south of end of the Airport can be a strong attractant to geese with open water most of the year and acres of grass that geese use as a primary food source.

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#### Management Techniques:

Hazing

- 12-gauge shotguns and pistol launchers are utilized to launch pyrotechnics, to haze birds from the area. Live ammunition is used if lethal control is necessary.
- A paint ball gun is utilized when pyrotechnics or lethal control is not a good option and is a non-lethal deterrent.

#### **Population Control**

Nest oiling and addling is utilized under the terms and conditions listed in the US Fish and Wildlife depredation permit to control future generations of geese being imprinted to the area.

#### Lethal Control

Lethal control is utilized under the terms and conditions listed in the US Fish and Wildlife depredation permit.

#### Habitat Modification

To the extent practical, shallow pools of ephemeral water and wet areas are eliminated and airfield graded to prevent establishment of jurisdictional wetlands.

#### 2.4c. Ducks

Ducks are a species of serious concern and often attempt congregate on the Airport and surrounding wetlands and golf courses throughout the year. Ducks are likely to cause damage to aircraft due to their size and flocking behavior. Large numbers are present in surrounding wetlands during spring and fall migration periods.

#### Attractants:

The Great Salt Lake, private waterfowl hunting clubs and several wildlife refuges north of the Airport contribute to very large waterfowl numbers near the Airport. Ducks are attracted to areas of the Airport that contain standing water such as the golf course ponds and the Surplus Canal.

#### Management Techniques:

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#### Hazing

- 12-gauge shotguns and pistol launchers are utilized to launch pyrotechnics, to haze birds from the area. Live ammunition is used if lethal control is necessary.
- A paint ball gun is utilized when pyrotechnics or lethal control is not a good option and is a non-lethal deterrent

#### Lethal Control

Lethal control is utilized under the terms and conditions listed in the US Fish and Wildlife depredation permit.

#### Habitat Modification

To the extent practical, shallow pools of ephemeral water and wet areas are eliminated and airfield graded to prevent establishment of jurisdictional wetlands.

#### 2.4d. Gulls-

Gulls are a serious threat and are likely to cause aircraft damage due to their size, low flight patterns and the tendency to flock. The surrounding Great Salt Lake marshes are home to one of the largest breeding populations of California gulls in the world. Gulls are mostly a seasonal problem in the spring, summer and fall. The Airport applies a seasonal application of insecticide to airfield grass areas to control the grasshopper population. Treatments have been effective spraying every other year. The airport consults with a USDA entomologist early each spring to determine the need for an insecticide treatment. The Airport wildlife team will continue to monitor a known, previous breeding site for a population of California gulls, (an island located on the Rudy Duck Club), north of the airfield. If the Gulls are using the island for nesting again, hazing efforts and egg addling will take place.

#### Attractants:

Gulls are attracted to the Airport by open water and a potential prey base of grasshoppers, armyworms, earthworms. Since adopting a regular insecticide treatment for the airfield grass areas, Gull sightings on the airfield have been less frequent and sporadic.

Management Techniques:

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Hazing

- 12-gauge shotguns and pistol launchers are utilized to launch pyrotechnics, to haze birds from the area. Live ammunition is used if lethal control is necessary.
- An aerial insecticide spray application will be used to control the insect population that attracts the gulls. The treatments will be applied as needed, or recommended by the USDA entomologist.

#### Colony Removal

USDA Wildlife Services and a local hunting club removed a large colony of approximately 10,000 gulls north of the Airport that were established on the hunting club in 1999. The gull colony was a serious threat as their daily flight pattern was directly over the Airports center and east runways. The colony was removed by nest removal, egg oiling and finally by pigs being put on the nesting colony island. The pigs would consume the gull eggs, and destroyed new nests. In subsequent years gulls would relocate before attempting to nest.

#### Lethal Control

Lethal control is utilized under the terms and conditions listed in the US Fish and Wildlife and Utah State depredation permit.

#### Habitat Modification

To the extent practical, shallow pools of ephemeral water and wet areas are eliminated and airfield graded to prevent establishment of jurisdictional wetlands. Aerial Insecticide treatments are applied as needed or recommended by the USDA entomologist.

#### 2.4e. White Faced Ibis

White faced ibis are a species of concern mostly during spring and fall migration periods. The nearby Great Salt Lake marshes are home to one of the largest breeding populations in the world.

#### Attractants:

This species is mostly an off airport concern, but will occasionally attempt to congregate on the airport in shallow areas of standing water in the spring and early summer.

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#### Management Techniques:

Hazing

- 12-gauge shotguns and pistol launchers are utilized to launch pyrotechnics, to haze birds from the area. Live ammunition is used if lethal control is necessary.
- A paint ball gun is utilized when pyrotechnics or lethal control is not a good option and is a non-lethal deterrent

#### Lethal Control

Lethal control is utilized under the terms and conditions listed in the US Fish and Wildlife depredation permit.

#### Habitat Modification

To the extent practical, shallow pools of ephemeral water and wet areas are eliminated and airfield graded to prevent establishment of jurisdictional wetlands.

#### 2.4f. American White Pelican

American white pelicans are a species of serious concern and are migratory birds that are present mostly during spring, summer and fall. Pelicans are very large birds that are likely to cause damage due to their size. Pelicans are an increased strike hazard due to their flight pattern of riding warm thermal air currents in a circular pattern for extended periods gaining altitude to glide back to the nesting colony.

#### Attractants:

These birds move in large flocks to feed on fish in fresh water marshes near the Airport. They have been observed on the golf course ponds and Surplus canal attempting to feed on fish.

#### Management Techniques:

Hazing

- 12-gauge shotguns and pistol launchers are utilized to launch pyrotechnics, to haze birds from the area. Live ammunition is used if lethal control is necessary.
- A paint ball gun is utilized when pyrotechnics or lethal control is not a good option and is a non-lethal deterrent.

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#### Research

In 2012 the Airport entered into an agreement with The Utah Division of Wildlife Resources to trap and mark American white pelicans using leg bands, patagial tags and GPS satellite telemetry. Juvenile pelicans from Gunnison Island are caught and marked with patagial tags and leg bands. Adult Pelicans have been caught and fitted with GPS satellite telemetry. The Cooperative research agreement with DWR, and Tracy Aviary has garnered additional attention, and support. In 2019 the Airport renewed its research agreement with the DWR to place new telemetry technology on the adult birds. The new technology has geo-fencing capabilities, to allow for real-time notifications of birds entering the Airport's 5 mile control distances. Once a bird enters the defined geo-fence area, the telemetry tracker will update location every 5 minutes as opposed to every few hours. This will give the Airport a clearer picture of how long the Pelicans are using the Airport's airspace, and where. The Airport has committed funding to this project for an additional 5 years.

#### Lethal Control

Lethal control is utilized under the terms and conditions listed in the US Fish and Wildlife and Utah State depredation.

Habitat Management

Keeping the west golf course pond pumped dry during spring, summer and fall periods has reduced the attraction to pelicans at the Airport. The Airport drains the ponds located in the Wetland Mitigation area, alternately every year to control the fish population which attracts the pelicans to the area.

Prey Base Control

Area duck clubs near the Airport have periodically joined together to poison areas of standing water to remove fish that destroy habitat for aquatic vegetation utilized by waterfowl. In 2017 the Airport joined with area duck clubs to treat water areas with rotenone to control fish that have attracted large numbers of American white pelicans. (Refer to Section 5.3 – Wildlife Control)

2.4g. Swallows-

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Barn and Cliff swallows are a species of concern that present a seasonal problem in the spring and summer months. Swallows are small birds that congregate in nesting colonies. They tend to fly in loose flocks that generally do not cause serious damage when struck by aircraft, but aircraft strikes with swallows often result in flight delays and downtime for inspection; and, as with any bird strike, the potential for serious consequences is always a concern to minimizing strikes with any species. Swallows do not respond well to hazing and unless an immediate threat no action may be the best option. Nesting areas are closely monitored for activity, and nests removed before a colony can be established.

#### Attractants:

Swallows are attracted to bridges and buildings for nesting sites. The Surplus Canal is a water source that supports a large insect population and buildings and bridges near there are a strong attractant. Open fields are also an attractant the swallows use for hunting insects.

#### Management Techniques:

#### Colony Removal

When swallows are attempting to establish a nesting colony in an area that may impact aircraft operations and it is not practical to construct a permanent barrier nests are destroyed prior to birds laying eggs. Nests are removed by knocking them down with a pole or high-pressure water hose. Airport ARFF units have been utilized in nest removal.

#### Habitat Modification

If practical, an exclusion barrier or building modification may be installed on bridges or buildings in areas that swallow colonies may be attracted.

#### 2.4h. Starlings

Starlings are a species that are a concern due to the large migratory flocks that may include over 100,000 birds and the tendency to fly in tightly dense flocks. Flocks of starlings often attempt to feed on the ground in open grass fields and move as cohesive unit to other feeding areas a short distance away. Damage caused is generally related to flock size. Several birds seldom cause damage, but a large flock may cause damage.

#### Attractants:

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Open grassy fields, insects, above ground electrical wires and trees attract starlings. Most trees have been removed from the airfield.

#### Management Techniques:

#### Habitat Modification

Large groups of Russian olive trees have been removed by Airport maintenance from areas on the Airport and adjacent properties. These trees were a strong attractant as nighttime thermal roosting sites.

#### Lethal Control

Lethal control is utilized when starlings present a threat to aircraft operations. Starlings are not protected by state or federal policy.

#### Trapping

The Airport utilizes starling traps constructed at the Airport that are placed at various locations on the airfield to trap and control the starling population on the Airport.

#### 2.4i. Horned Lark

Horned larks have been one of the most common species of birds involved in strikes with aircraft at the Airport. Horned larks inhabit the Airport year round and generally are more of a concern during the winter months. They are small birds that congregate in flocks of approximately 100. Serious bird strike damage to aircraft is seldom caused, but strikes often result in flight delays and down time for inspection. Horned larks do not respond well to hazing and unless they present an immediate threat to aircraft, no action may be the best option.

#### Attractants:

Horned larks are attracted to paved surfaces after measurable snowfall as a resting place and to gather grit placed as part of the Airport snow removal operations.

#### Management Techniques:

Hazing

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Because horned larks are generally an immediate threat to aircraft operations while on a runway or taxiway, hazing with vehicle sirens and lethal control has proven to be most effective.

#### Lethal Control

Lethal control is utilized under the terms and conditions listed in the US Fish and Wildlife and Utah State depredation permit.

#### 2.4j. <u>Raptors</u>

Raptors often cause aircraft damage due to their size. Raptors are present at the Airport throughout the year, but are most prevalent during spring and fall migration. The most common species are the American Kestrel, the Red tailed hawk, Northern Harrier, Swainsons hawk, Rough legged hawk, and ferruginous hawk. Bald and golden eagle presence are occasional near the airport. Permits to trap, haze, and relocate Eagles are obtained as necessary, at the discretion of the Wildlife Manager.

#### Attractants:

Raptors are attracted to open fields to hunt for small rodents and are often observed on the ground in open fields, perched on fences, poles airfield buildings and equipment. They also soar above the open field hunting for prey.

#### Management Techniques:

Hazing

- 12-gauge shotguns and pistol launchers are utilized to launch pyrotechnics, to haze birds from the area. Live ammunition is used if lethal control is necessary.
- A paint ball gun is utilized when pyrotechnics or lethal control is not a good option and is a non-lethal deterrent

Trapping and Relocating

The Airport regularly traps and relocates raptors away from the Airport. (Refer to Section 5.3 – Wildlife Control)

Habitat Modification:

Original Date: 1 NOV 2004\_\_\_\_\_



- The Airport has a vegetation control program aimed at reducing vegetation near runways that attracts prey base for raptors. (Refer to Section 5.3 Wildlife Control)
- The airport has an airfield mowing plan which identifies, and names each quadrant of vegetation. Areas are mowed via a workorder, input by the Wildlife Manager when the grass reaches the desired height to deter raptors from foraging for rodents. The plan also allows definitive tracking of mow times to determine if there is an increase in raptor activity hunting behind tractors.

#### Prey Base Control

The Airport monitors raptor prey base and has conducted aerial insecticide applications to control grasshoppers that attract American kestrels and Swainson hawks. (Refer to Section 5.3 - Wildlife Control)

#### Lethal Control

Lethal control is utilized under the terms and conditions listed in the US Fish and Wildlife and Utah State depredation.

#### 2.4k. Red Fox

Red foxes inhabit the Airport throughout the year and have been prevalent for many years. Although the potential for being struck by aircraft exists, strikes have been seldom. Since taking an active approach in controlling the red foxes on the airfield in 2012, regular sightings of them have drastically reduced.

#### Lethal Control

Lethal control is utilized when red foxes present a threat to aircraft operations. Red foxes are not protected by state or federal policy.

#### Habitat Management

Culverts, and drainage areas are fitted with grates to discourage the foxes from using them as cover. Fox Dens are identified, and marked by Wildlife personnel for removal Dens are removed by digging the area out, 3'-4' down before back-filling, this discourages the foxes from simply returning and re-excavating the site.

2.5 <u>Vegetation Project</u>

 Original Date: 1 NOV 2004\_\_\_\_\_\_
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 Federal Aviation Administration<br/>Northwest Mountain Region Airports Division<br/>APPROVED

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The airport cancelled its vegetation research project with Utah State University in the Summer of 2019. The project was intended to introduce a monoculture of grass species, in determination of which was the least desirable to wildlife. The invasive grasses that exist on the AOA in these areas was not sterilized, and therefore the no-till seeding did not take, due to the competing vegetation. The decision was made to terminate the project, due to the inability to control invasive species with large scale sterilizer.

#### 2.6 Ground and Standing Water Project

Ground and standing water near runway and taxiway safety areas will be pumped to remove water from the area to avoid attractant of wildlife and the growth of unwanted vegetation. This project will be ongoing.

#### 3. Permit Requirements

The Airport Operations Department Manager for wildlife will maintain all state and federal wildlife depredation permits. All applications and renewals will be completed as stated in permits. Wildlife control will be conducted under the terms and conditions of said permits. Current Permits are kept in the Wildlife Manager's office.

#### 4. <u>Resources Assigned</u>

The Airport Operations Department is responsible for implementing the Airports WHMP in conjunction with USDA Wildlife Services, who is under contract with the Airport. The following is an inventory of equipment and personnel used for implementing The Airport's WHMP.

#### Personnel

- A dedicated Wildlife Section consisting of a USDA Wildlife Services biologist, a Wildlife Program Manager and assigned Airport Operations Specialists. From sun-up to sun-down.
- The Airport Operations division also has personnel assigned to the airfield 24 hours a day, 365 days a year whose responsibilities include wildlife control.

#### Equipment

- Four wheeled drive vehicles
- Carpentry saws and metal fabrication tools for trap building

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- Starling and raptor traps
- Collecting kits for gathering wildlife remains for identification
- 12-gauge shotguns used to launch cracker shells and fire live ammunition
- FLIR monocular. "Forward Looking Infrared"
- Pistol launcher used to launch "banger and screamer" cartridges
- Pellet gun used for lethal control
- Paint ball gun used as non-lethal control and to mark problem birds.
- Gun safes used as a secure storage area for firearms, ammunition, pyrotechnics, FLIR and camera equipment.

when not being used for wildlife control.

- Vehicles, spotlights and sirens
- Snare poles and nets used to catch wildlife and domestic pets.
- Binoculars, flashlights, cameras, waders, and bird field guides.
- Wildlife freezer used to store wildlife carcasses and remains until species can be positively identified.
- Six-wheeled UTV.
- Alumacraft 16' flat bottom boat with a 27 HP motor.
- I-Pads for logging daily wildlife activities, and surveys.
- RC Boat for hazing waterfowl from public ponds

#### 5. <u>Procedures During Air Carrier Operations</u>

5.1. <u>Personnel</u>

Personnel designations and responsibilities for implementation of the plan are described and delineated in Section 1.

#### 5.2. <u>Provisions for Physical Inspections</u>

#### Inspections

The Airport Operation Division has a dedicated Wildlife section within the division that is dedicated to wildlife control and associated projects to assist in alleviating wildlife strikes at SLCDA. In addition to the assigned wildlife personnel, the Operations division also has personnel assigned to the airfield 24 hours a day 365 days a year, whose responsibilities also include wildlife control. Wildlife inspections of all aircraft movement, and critical areas are conducted every morning by the C shift manager prior to air carrier operations. Periodic inspections of the movement areas and other critical areas are conducted regularly daily. Efforts to remedy any observed wildlife hazard will be taken as soon as it's safely possible. If necessary, personnel will advise FAA Air Traffic Control (ATC) of wildlife that may affect aircraft operations. Additional inspections and control measures may be required and will be conducted as conditions warrant. Personnel are available 24 hrs a day to respond to wildlife issues. The general aviation manager will conduct routine

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wildlife inspections at South Valley Regional Airport and Tooele Valley Airport.

Other Departments

Other Airport departments that have a role include Airport Maintenance who is responsible for small-scale pesticide and herbicide application by certified personnel. They also provide tree and vegetation removal and fill areas of ponding water on the airfield. The Utah Air National Guard participates independently with wildlife control on their base.

#### 5.3. Wildlife Control

#### Habitat Modification

The Airport attempts to manage wildlife to the extent practical with land use and planning to reduce the risk of wildlife hazards. SLCDA has implemented a vegetation reduction effort on the airfield to control prey base that is dependent on vegetation on the airfield. The prey base includes deer mice, house mice, meadow voles, pocket gophers, grasshoppers, army worms and other insects and organisms that attract wildlife to areas near the runways. This is a habitat modification project that uses asphalt millings from past runway and other asphalt overlays to fill airfield infields and runway safety areas. Elimination of the vegetation is best achieved by removing approximately 3" to 6" of the surface topsoil and vegetation before placing the millings in the area.

#### Prey Base Control

The Airport monitors prey base populations on the airport and has conducted numerous prey base control operations. The last Aerial treatment the Airport contracted was in 2015, applying Demilin to control large numbers of grasshoppers. Army worm control has been implemented with a ground spraying application when their numbers have been large enough to attract

gulls and other birds to the airfield. Pocket gopher control has been implemented with a mechanical burrow builder that deposits treated bait below ground to control pocket gophers on the airfield. Small scale applications of zinc Phosphide were applied in the fall of 2018 in designated test plots with increased rodent activity. The results were positive, with raptor activity in those areas decreased the following months. The west golf course pond is pumped dry every spring to remove the fish that has attracted American White Pelicans in the past. In the Spring of 2017 the Airport coordinated with the North Point duck clubs to treat water areas with rotenone to control fish that have attracted large numbers of American white pelicans to wetlands north and west of the airport. The Airport provided half of the

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chemical rotenone to complete the treatment. Rotenone treatments are ongoing on a case by case basis.

Trapping and Relocating

The Airport's Wildlife Section, under the direction of the USDA Wildlife Service's biologist, has an extensive raptor trapping program where traps are designed and constructed at the airport and placed on the airfield to trap and control raptors. Captured raptors are banded under the terms and conditions listed in the US Fish and Wildlife Service permit and relocated away from the airport.

The airport terminated it's raptor telemetry program, however still continues to monitor raptor return rates through re-sights on the airfield, and recaptures of banded birds. Locations with the least percentage of return rates are chosen, and continually monitored for seasonal changes.

#### Hazing

The Airport uses scare tactics as a secondary means of controlling wildlife; Habitat modification being the first line of defense. Wildlife harassment is accomplished using a combination of pyrotechnics, and vehicle lights and sirens.

- When an area is identified as an increased attractant to Wildlife, additional inspections will be conducted to determine the attractant, and mitigate immediate wildlife dangers.
- Species of birds respond differently to hazing tactics. Personnel should identify the species and be aware of its habits before hazing. Most waterfowl respond well to hazing and will find another area if hazing is aggressive and consistent. Often times, no action is the best option with certain species, and therefore will be at the discretion of wildlife personnel.
- Large flocks of birds may be difficult to move by just one person and a joint effort is often necessary to move birds from the area.
- The Airport Control Center will be notified of wildlife control that may elicit public or tenant response from the noise of firearms and pyrotechnics used.

## Lethal Control

• Lethal control will be used primarily as a last resort after other methods have proven to be ineffective, in emergency situations or if necessary to destroy an injured animal.

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- As a general rule, for lethal control to be effective on flocking species of birds, it should be used on a sizeable flock to have an impact on other birds and deter them from coming back to the area. Certain problem birds that refuse to haze and can be identified may be taken as an exception to having a large flock present.
- Lethal control will be conducted under the terms listed in the US Fish and Wildlife and Utah State depredation permits. If a species of wildlife causing a threat is protected and not listed in the Airports permit USDA Wildlife Services will be contacted.
  - If large mammals, such as deer are a threat to aircraft operations, or human health and safety, personnel with the USDA Wildlife Services or a trained Wildlife Specialist should be contacted through the Airport Control Center.

#### Wetland Mitigation

The Airport manages a 460 acre wetland mitigation site 1.75 miles west of the Airport that will be monitored for hazard wildlife that may adversely affect aircraft operations. If necessary, control measures will be taken to reduce the wildlife hazard.

#### Documentation

Wildlife inspections and control measures will be logged on specified electronic tablets by Designated Wildlife personnel. Operations specialists not assigned to the wildlife section will log wildlife control activity with the Airport Control Center. Wildlife activity logged on the electronic tablets include the following fields:

- Wetland Mitigation
- Control Call response
- Bird Hazing
- Bird Survey
- Wildlife Inspections
- Lethal Control
- Return Bird
- Trapped Bird
- Traps Set
- Relocation
- Miscellaneous

All wildlife strikes and carcasses or wounded wildlife found on the airfield will be considered a wildlife strike according to AC 150/5200-32, current edition, and documented on FAA Form 5200-7 and sent to the FAA. If possible the aircraft crew or mechanics should be contacted to obtain as

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much information as possible to complete report. If a bird strike is reported to be a possible bird strike (i.e. pilot reported he/she thought they hit a bird and no evidence can be found on the aircraft or runway), do not do a report. If pilot is confident they hit a bird, do a report. If species involved is unidentifiable, remains should be obtained by gathering carcass, remaining pieces or a blood sample and placing it in the wildlife freezer for further identification. The FAA report confirmation number will be listed with all remains. If necessary remains will be sent to the Smithsonian for positive identification.

## 5.4. Communication

All wildlife control personnel will maintain AMA access credentials. Vehicles will be equipped with radios to contact the air traffic control tower (ATCT). Radios may be used to coordinate wildlife control and advise ATCT of wildlife hazards. If an immediate hazard exists that might compromise the safety of air traffic, coordination should be made with the ATCT, and if necessary, suggest delaying arriving or departing air traffic until the hazard is eliminated. In extreme cases, the runway may need to be closed temporarily at the discretion of the Airport Operations Manager.

#### 6. Periodic Review and Evaluation

The Airport Wildlife Program Manager, and a biologist with the USDA Wildlife Services will review the Airport WHMP annually within 12 consecutive calendar months, or following a triggering event. Wildlife hazards are often changing due to the natural ecosystem that cannot always be predicted. The Airport Wildlife Section is committed to an ongoing evaluation and review process of the WHMP to ensure that the plan is effective in dealing with the existing wildlife hazard at SLCDA. Operations personnel meet regularly with the USDA Wildlife Service personnel to discuss hazards described in the Hazard Management Plan that may need to be reevaluated.

## 7. <u>Training</u>

A successful WHMP is dependent on determined, resourceful personnel whose efforts are based on knowledge of bird biology and behavior. Airfield Operations personnel responsible for wildlife control receive annual wildlife control training from a qualified wildlife biologist on a 12 consecutive calendar month basis. With this training, a strong emphasis is placed on bird identification, pyrotechnics and air traffic ground control training, to effectively implement the WHMP. Personnel assigned to the Wildlife Section receive additional training in Firearms, wildlife control, trapping, trap building, banding, relocation, prey base surveys and control, accredited wildlife surveys, habitat modification, prey base analysis of wildlife struck

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by aircraft, and ongoing assessment techniques. This training allows the Airport to take immediate measures to alleviate wildlife hazards whenever they are detected.

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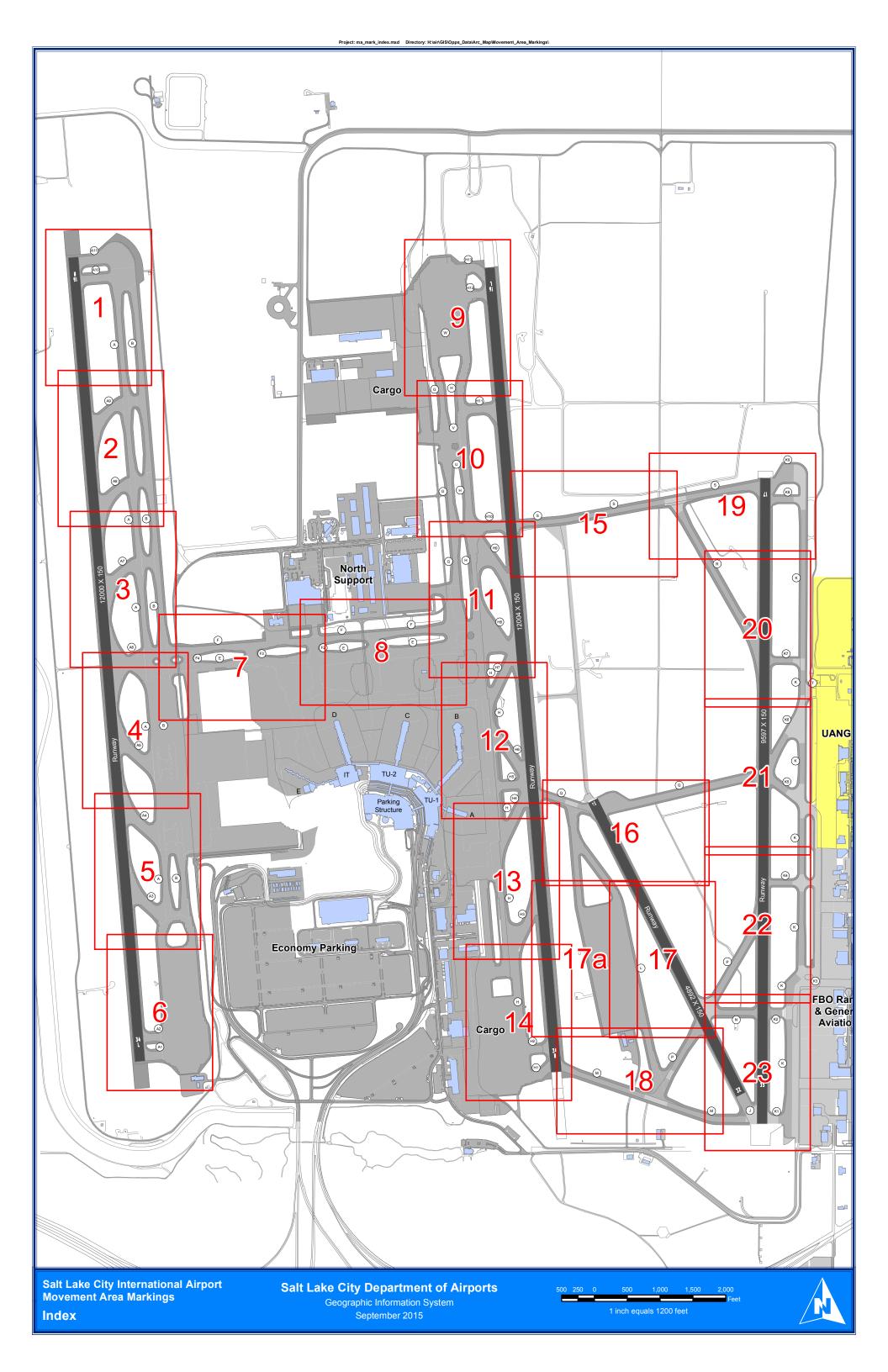
## **APPENDIX C1**

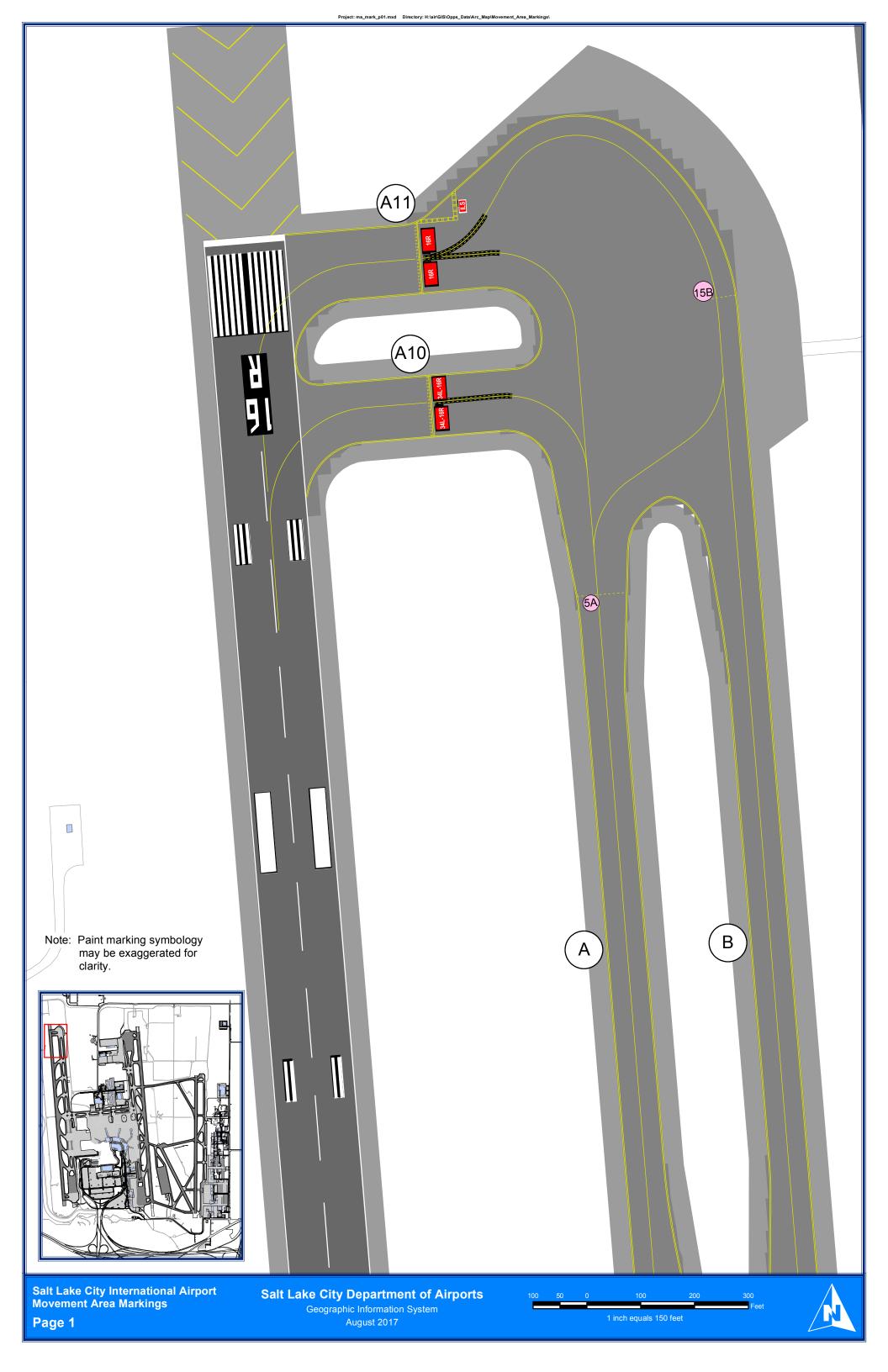
# **Airfield Marking Plan**

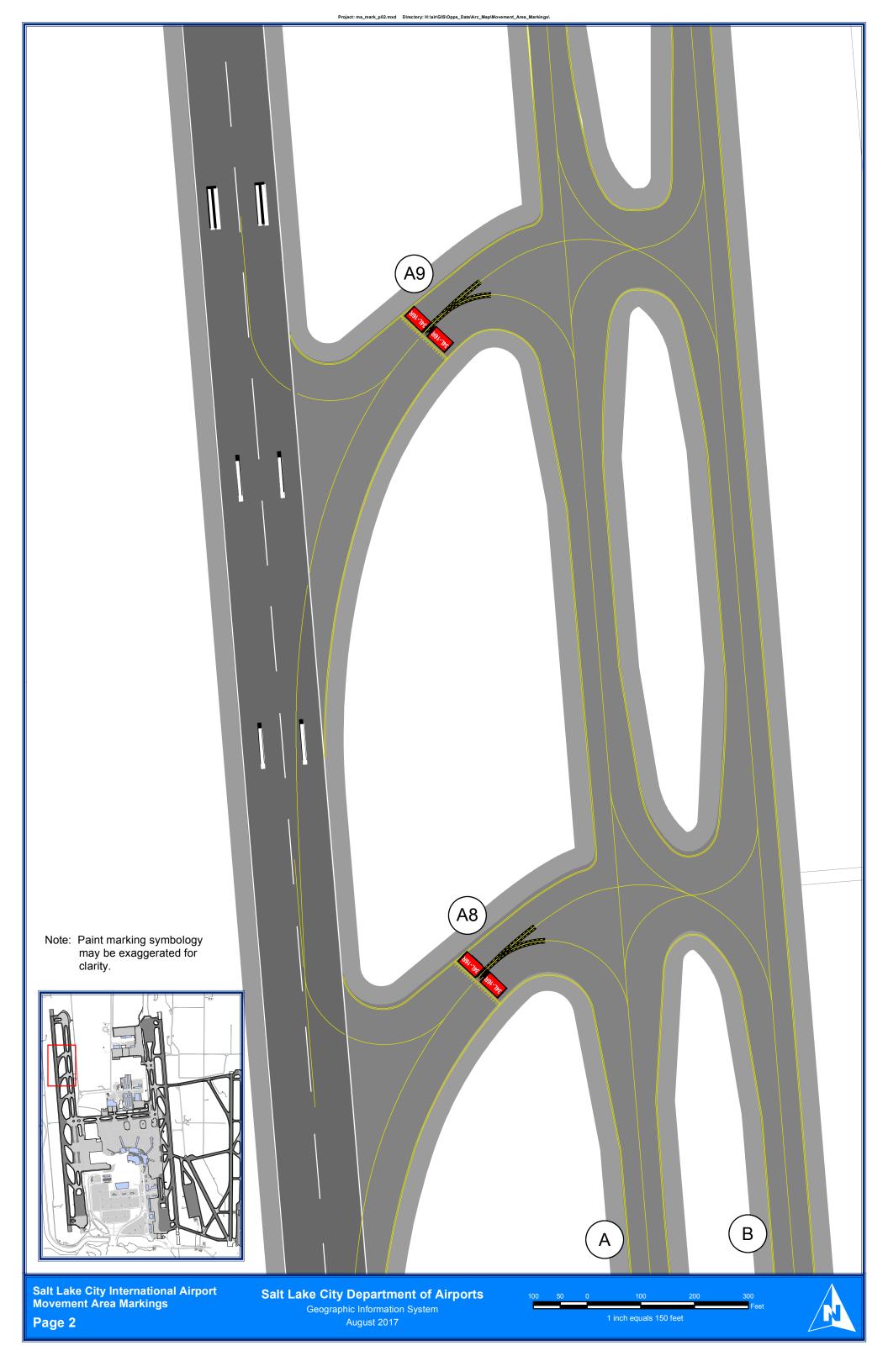
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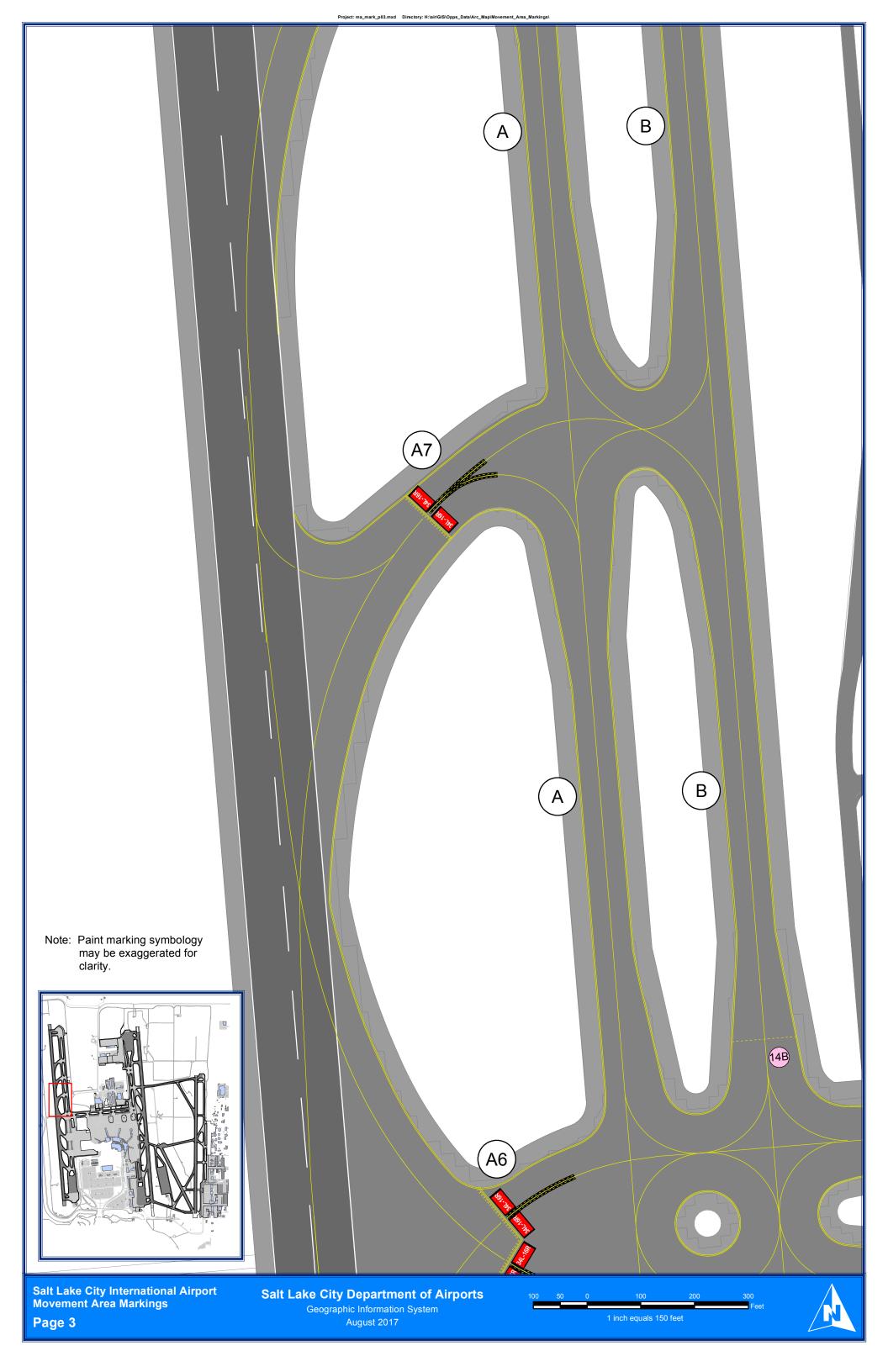
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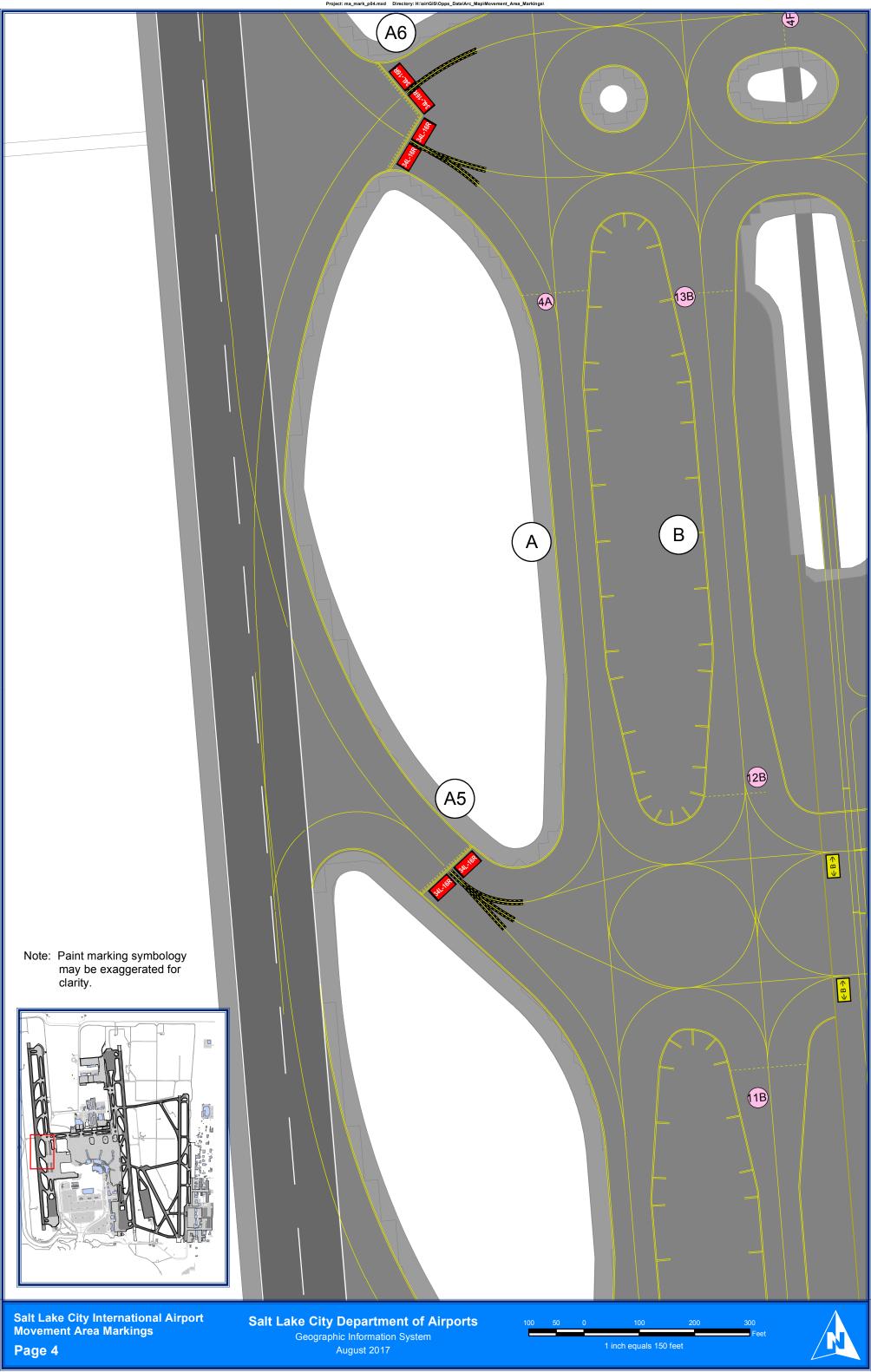




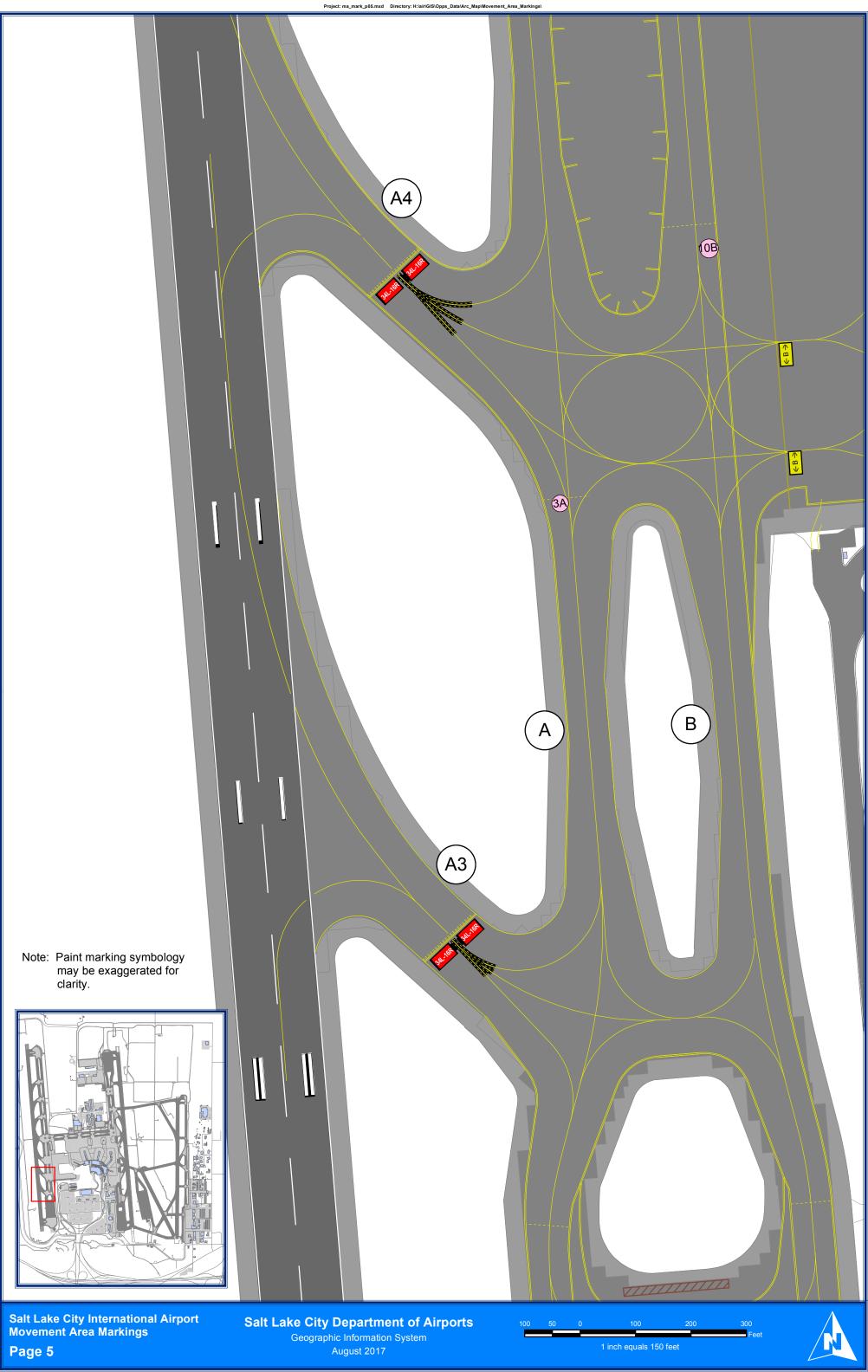


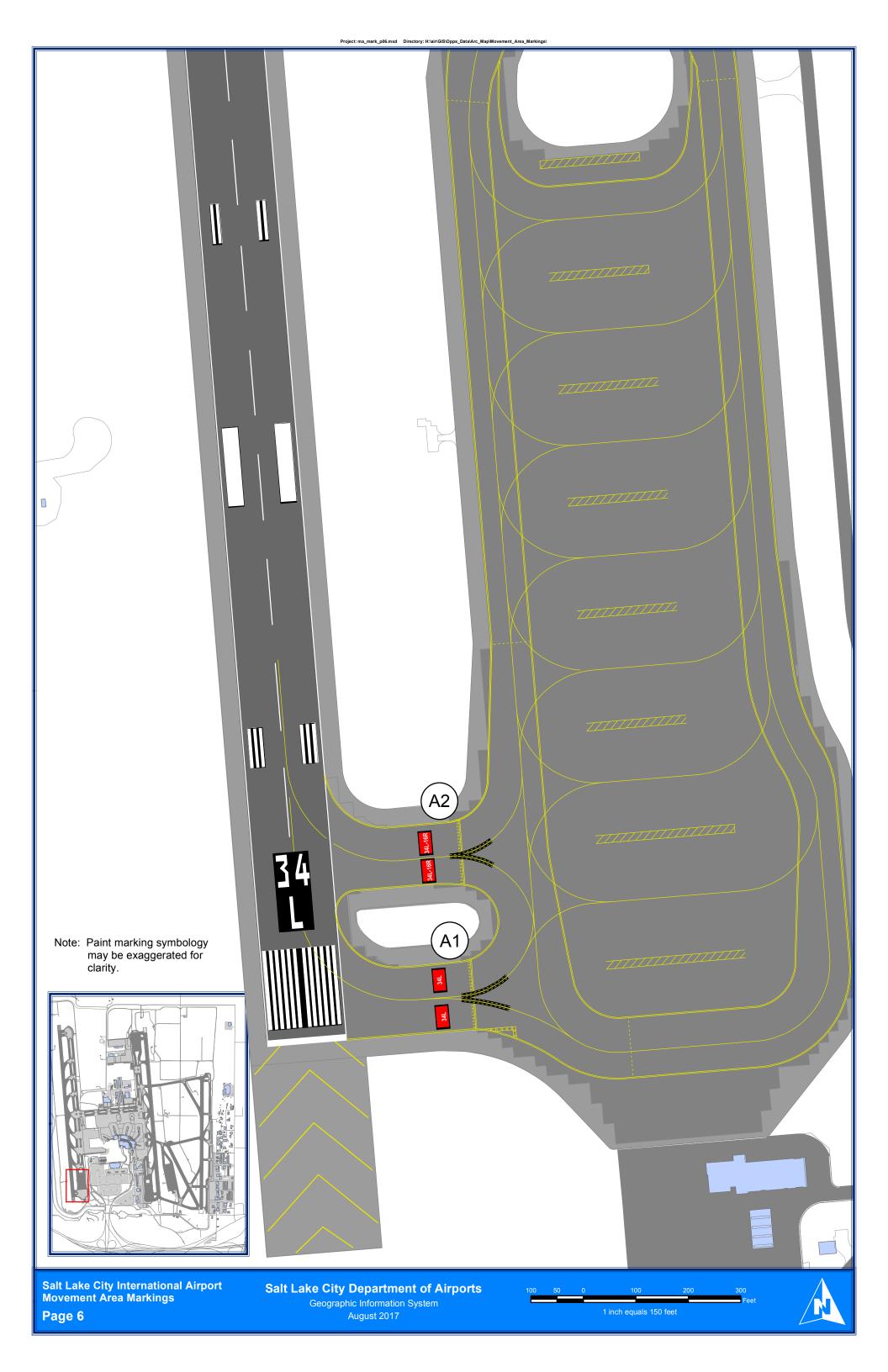


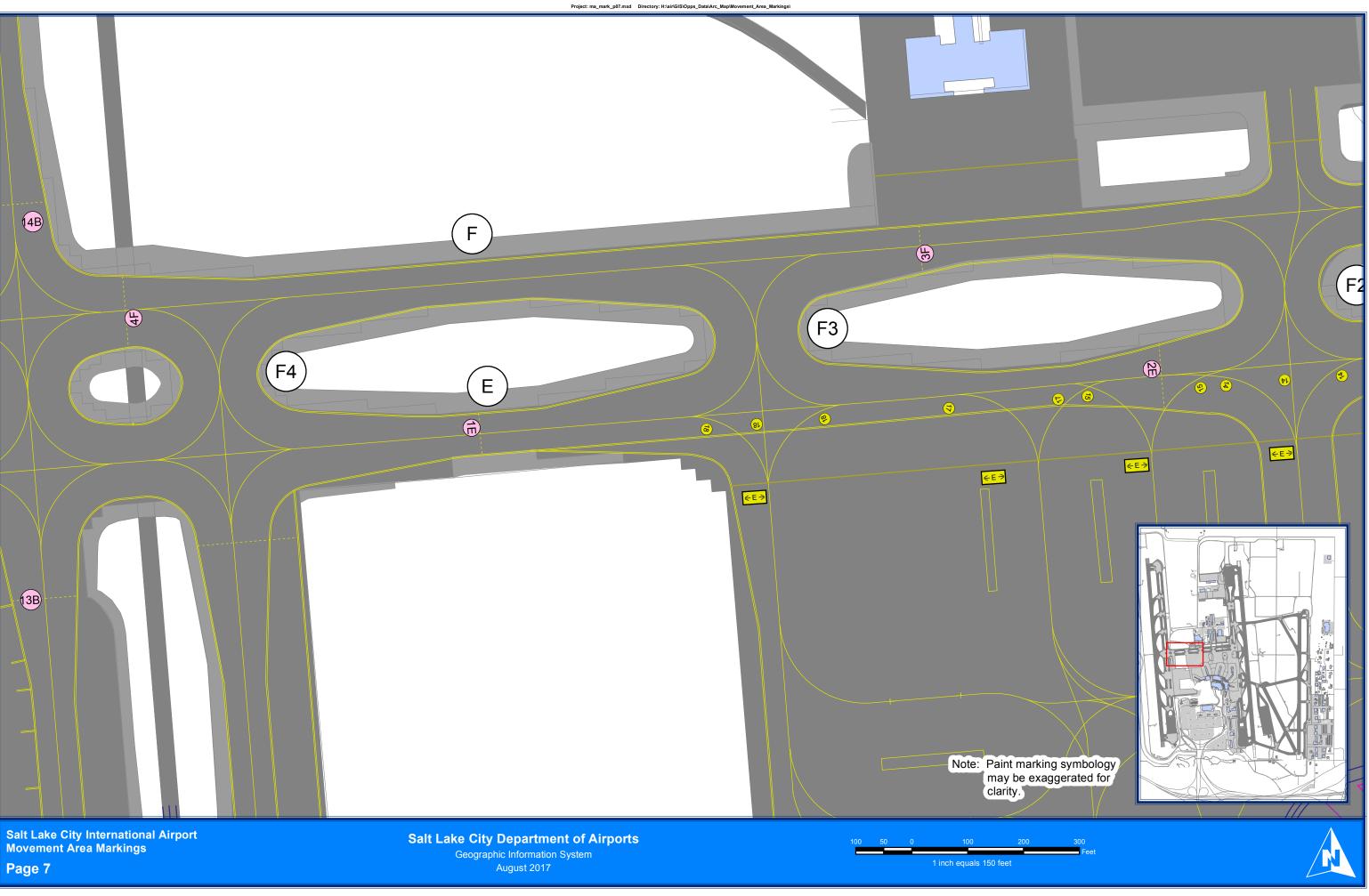


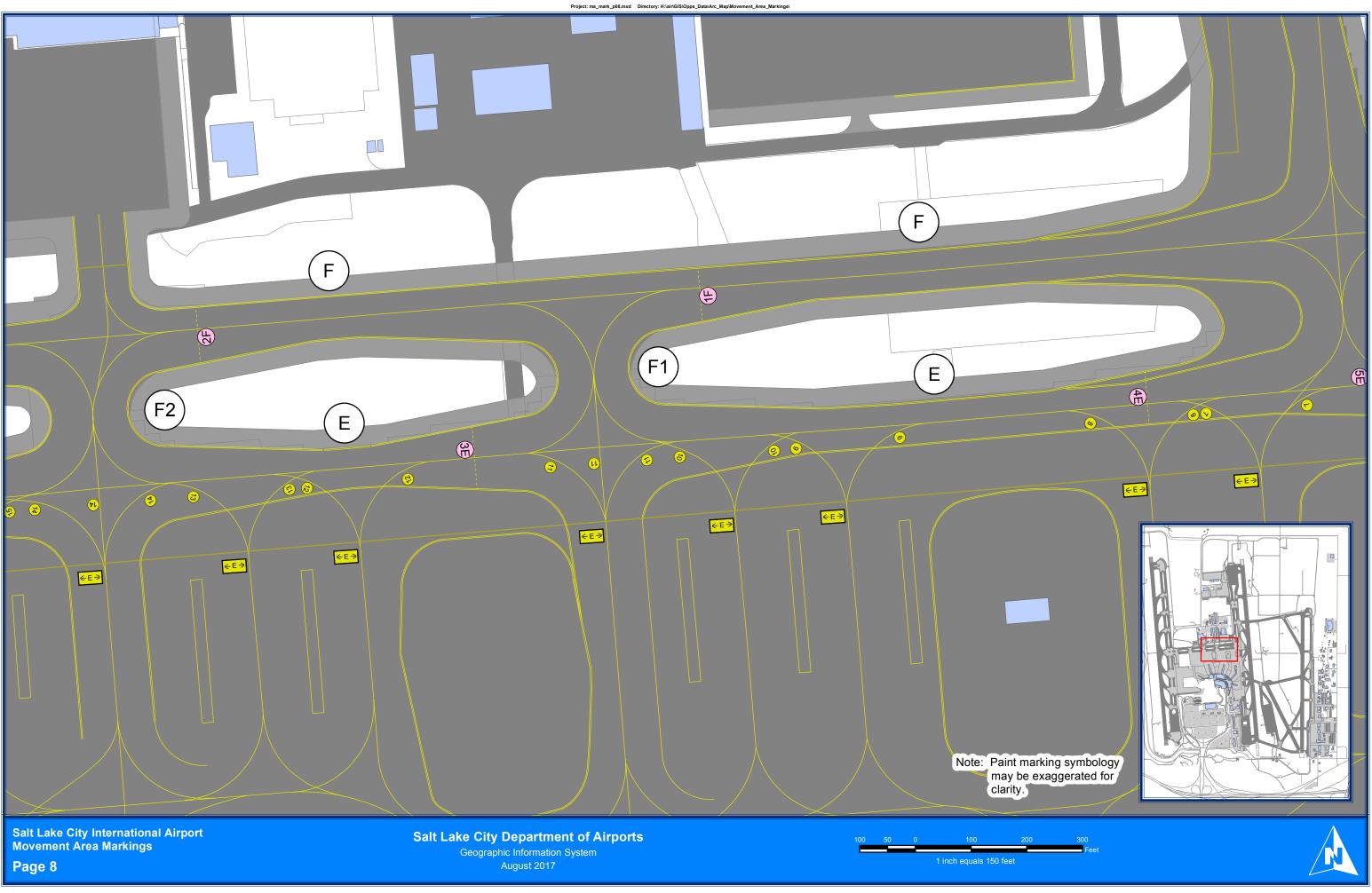


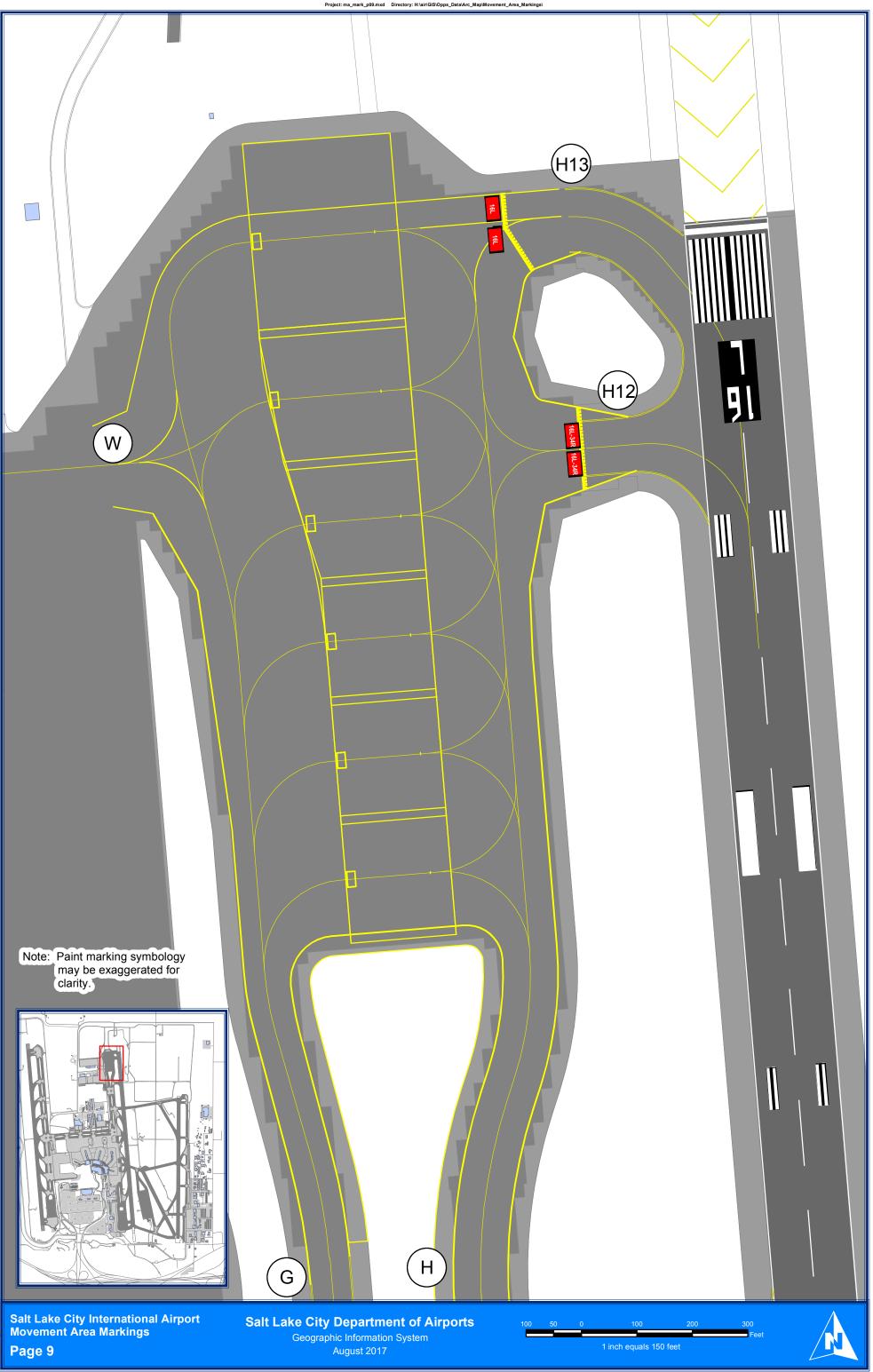


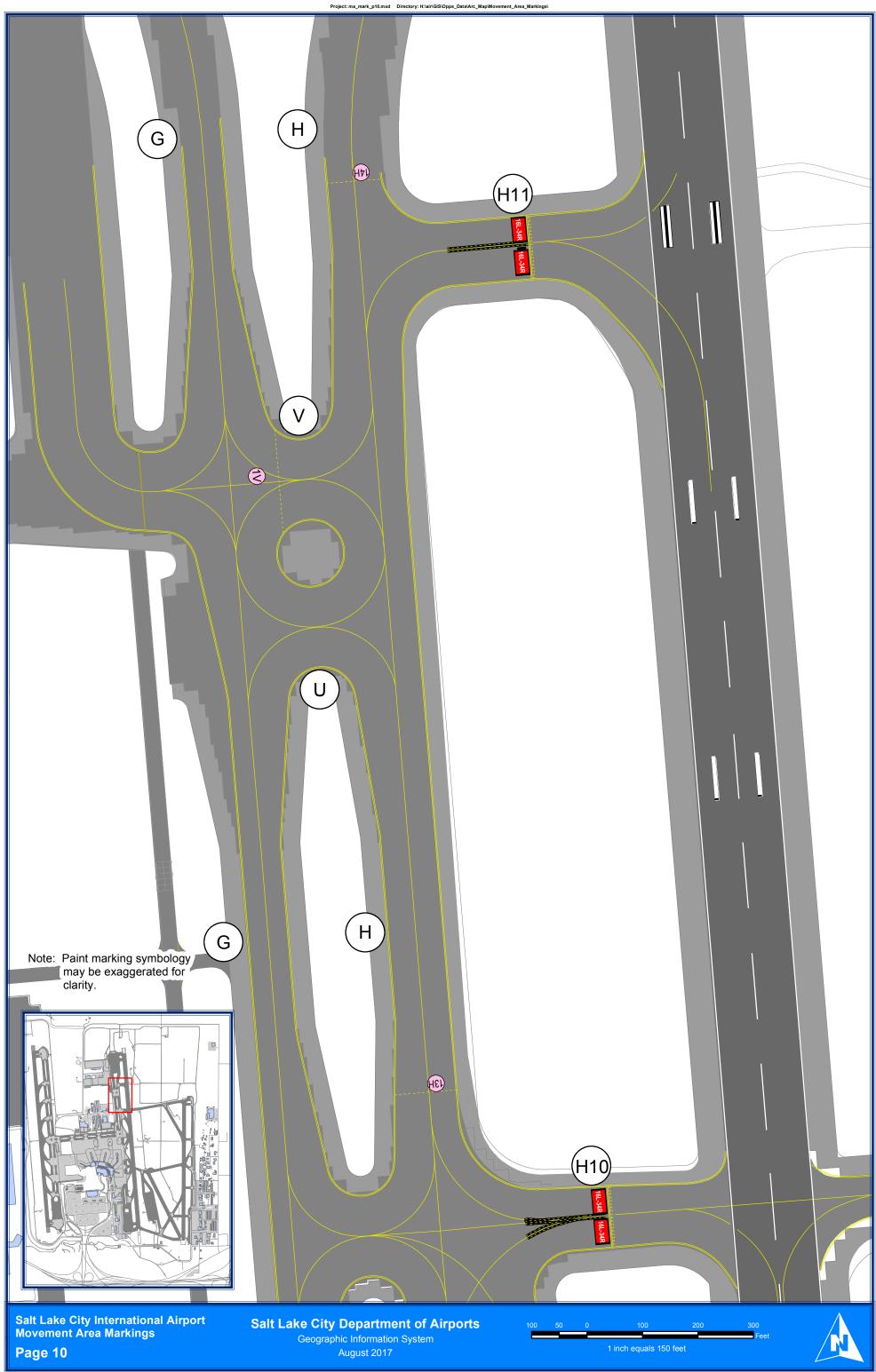


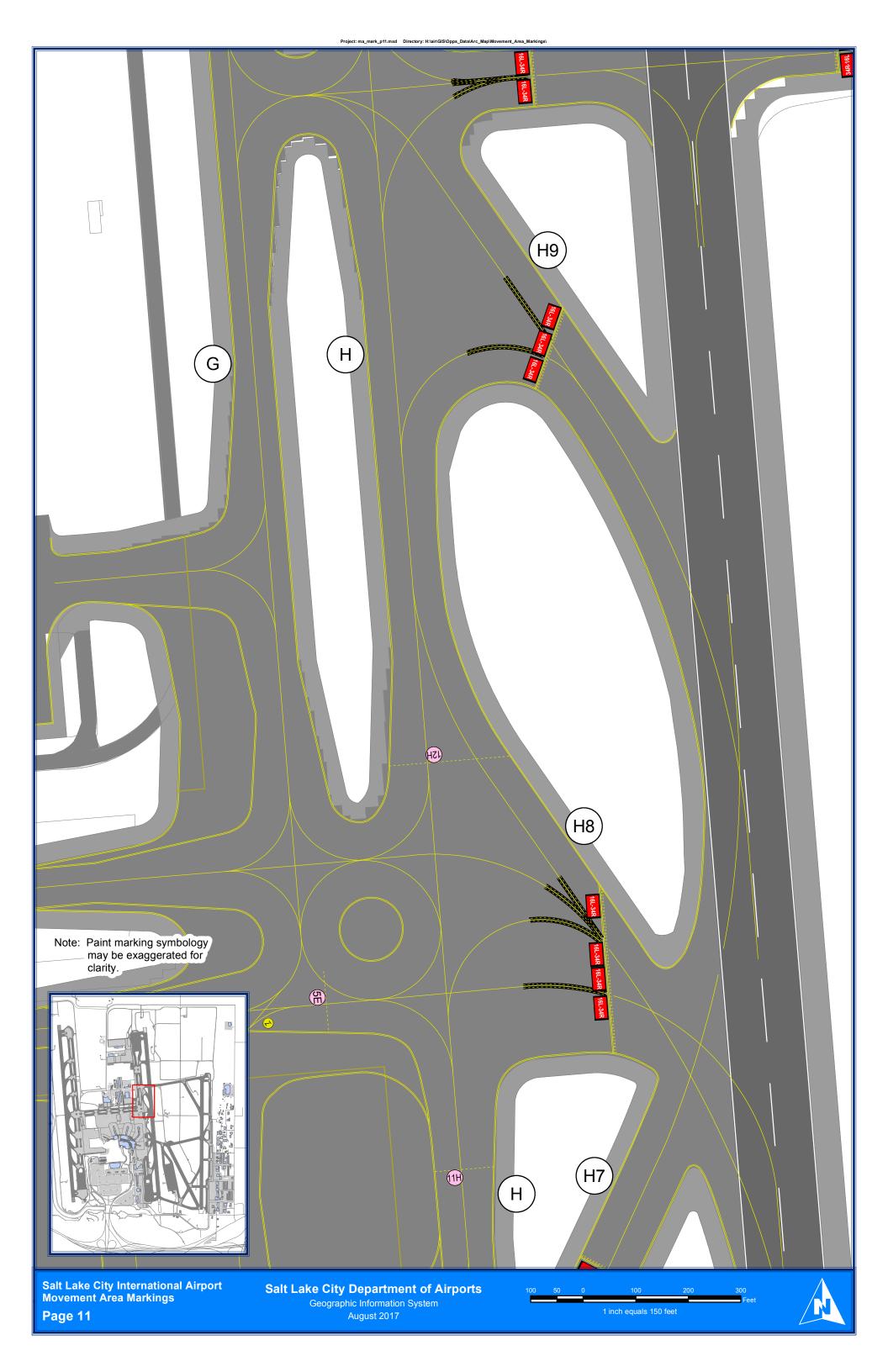


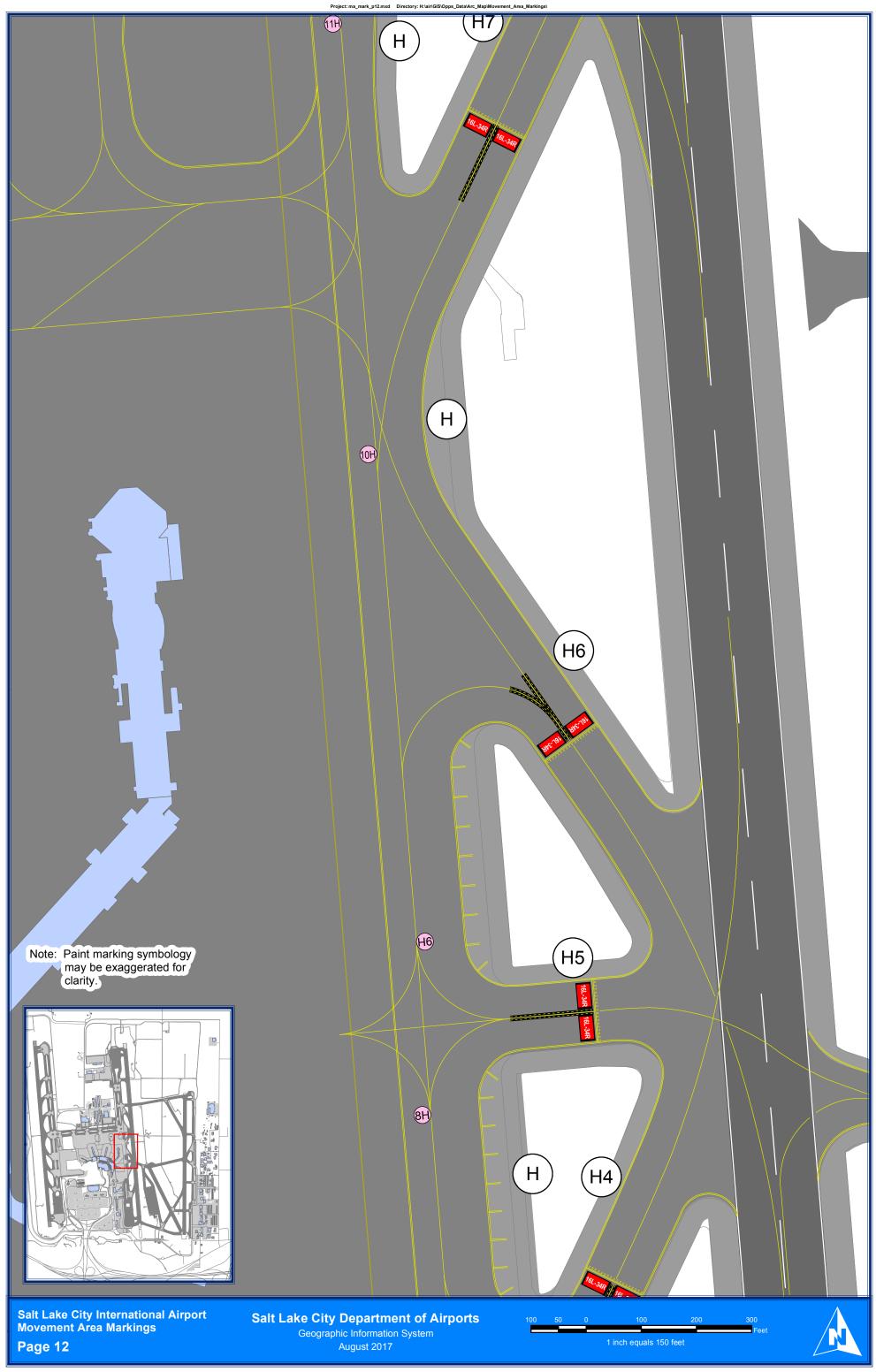


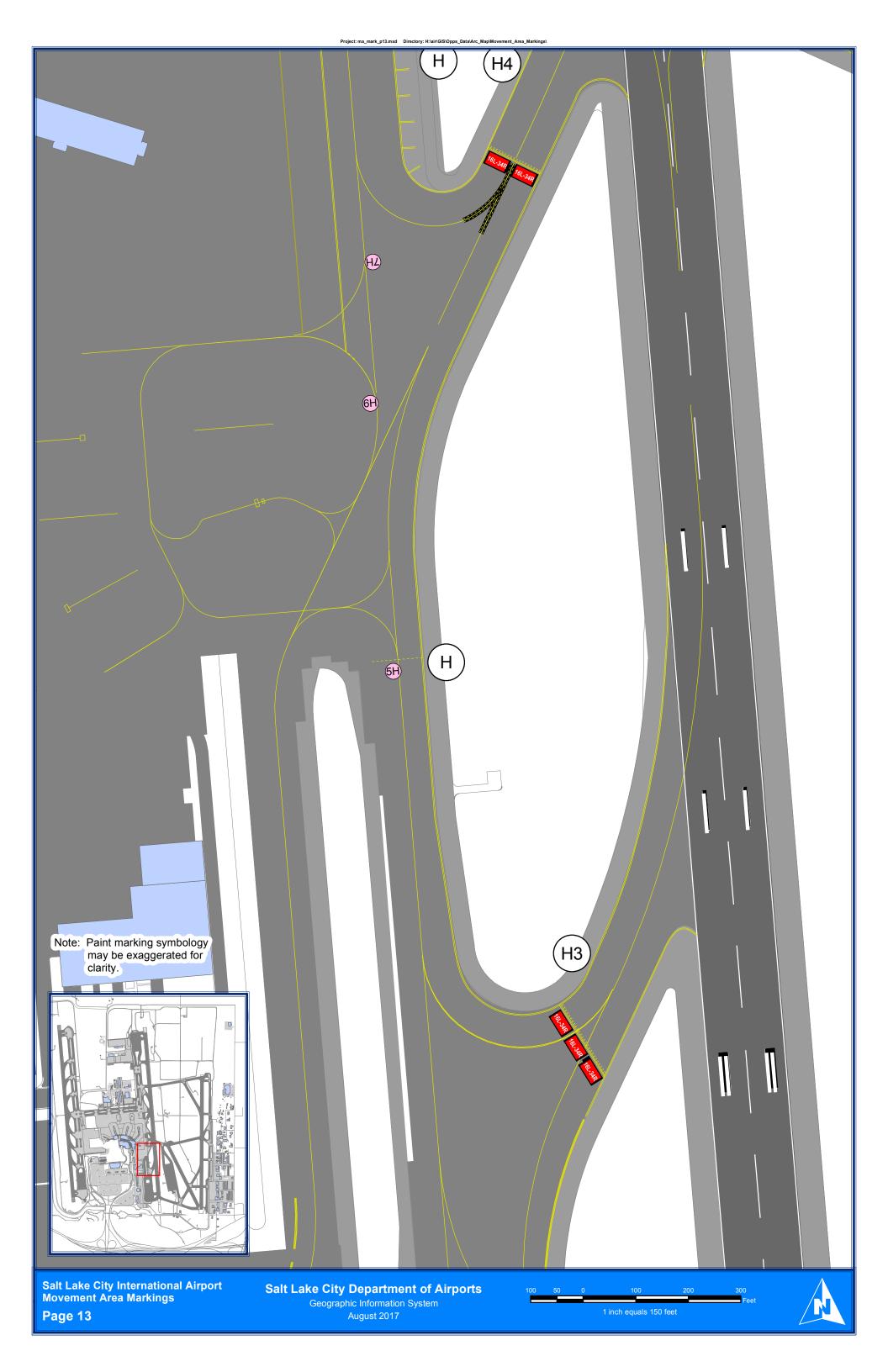


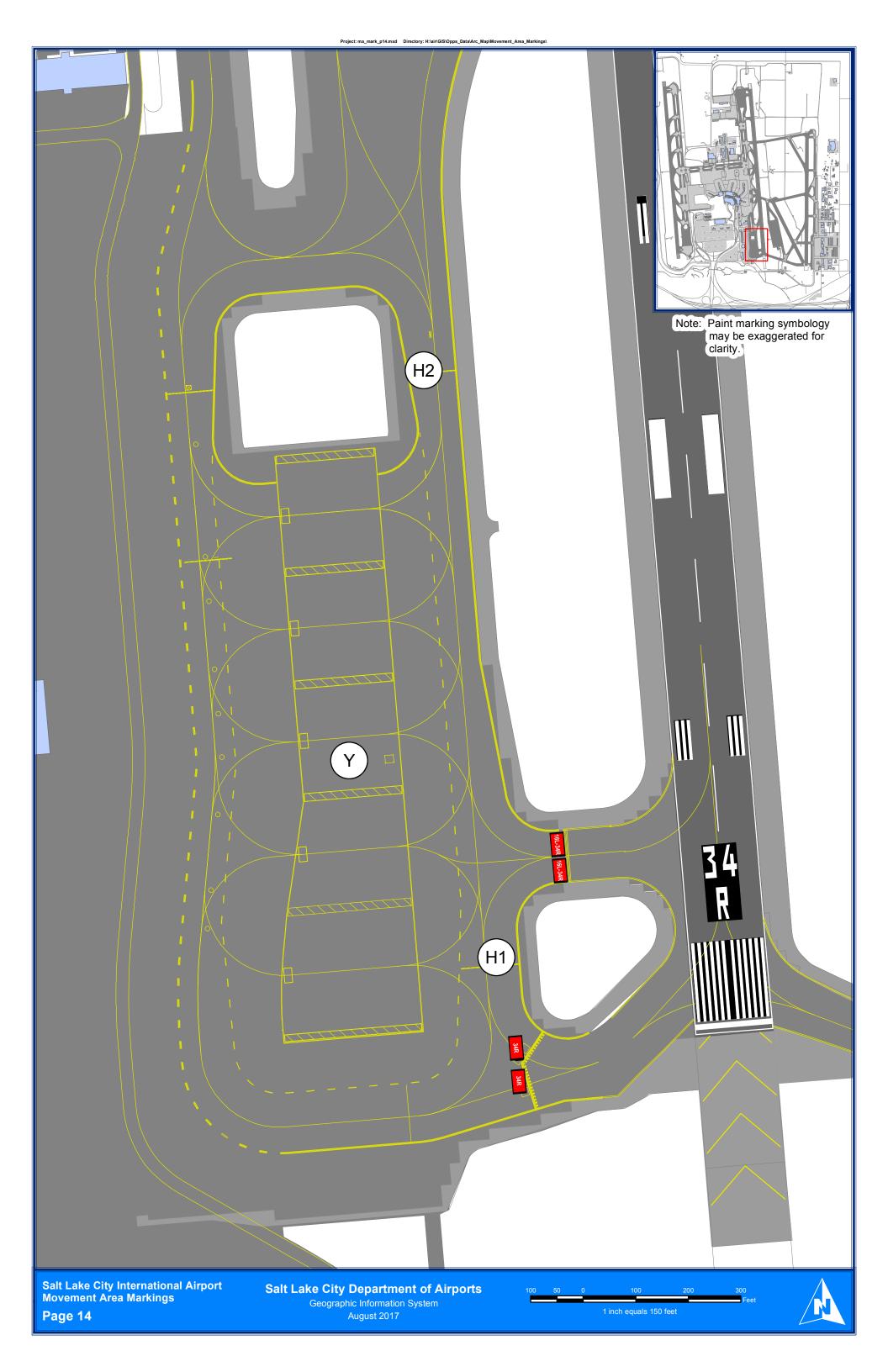


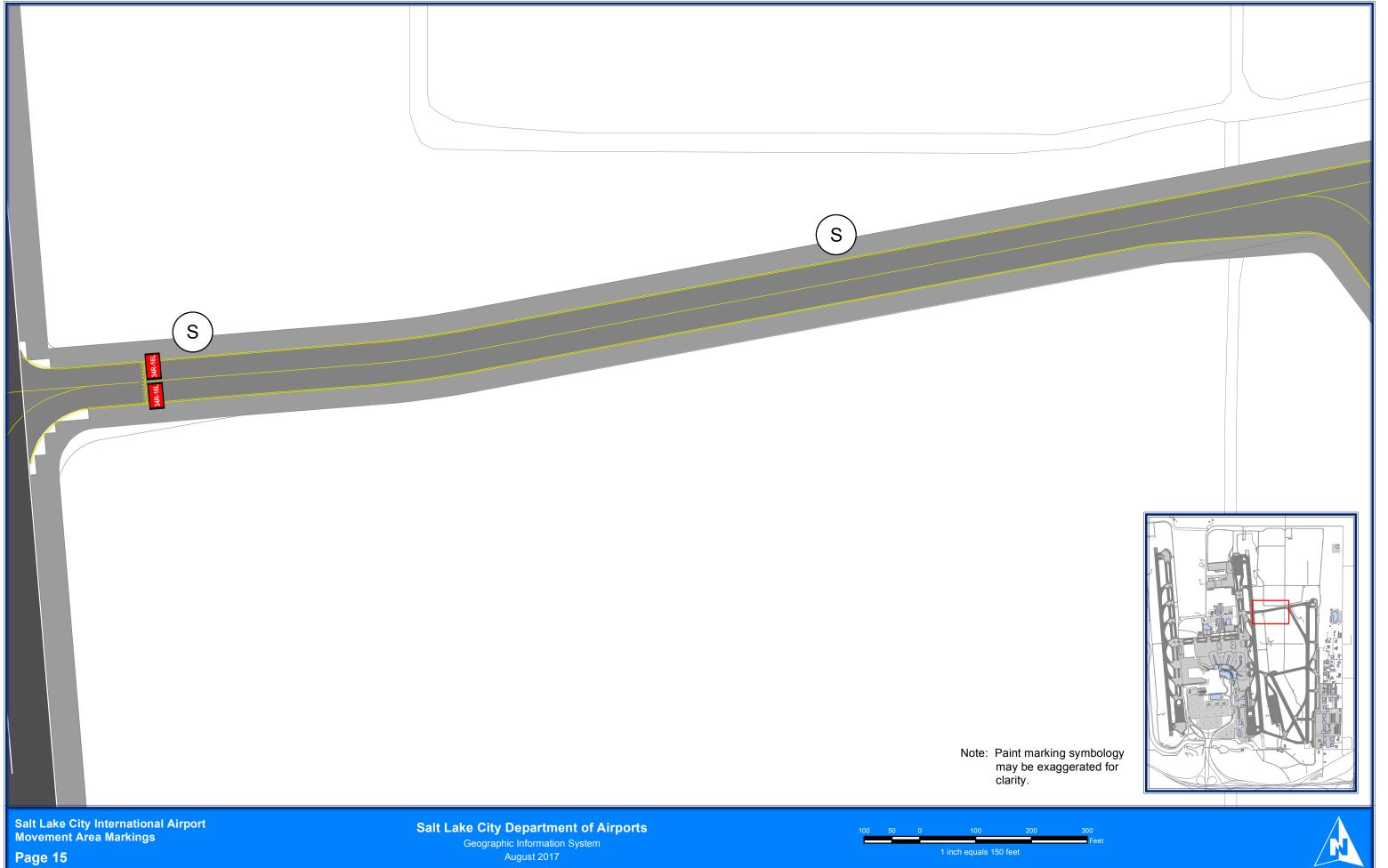


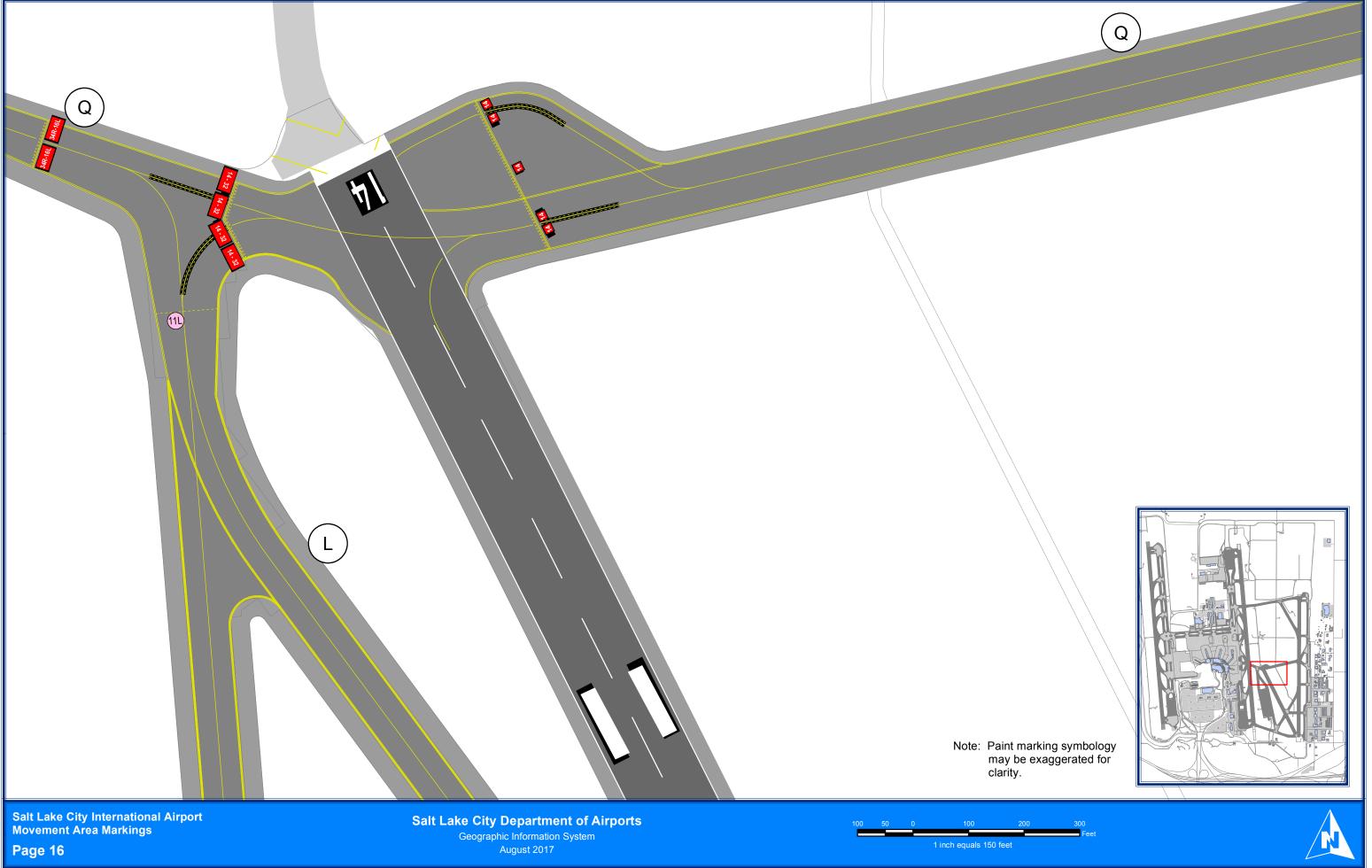


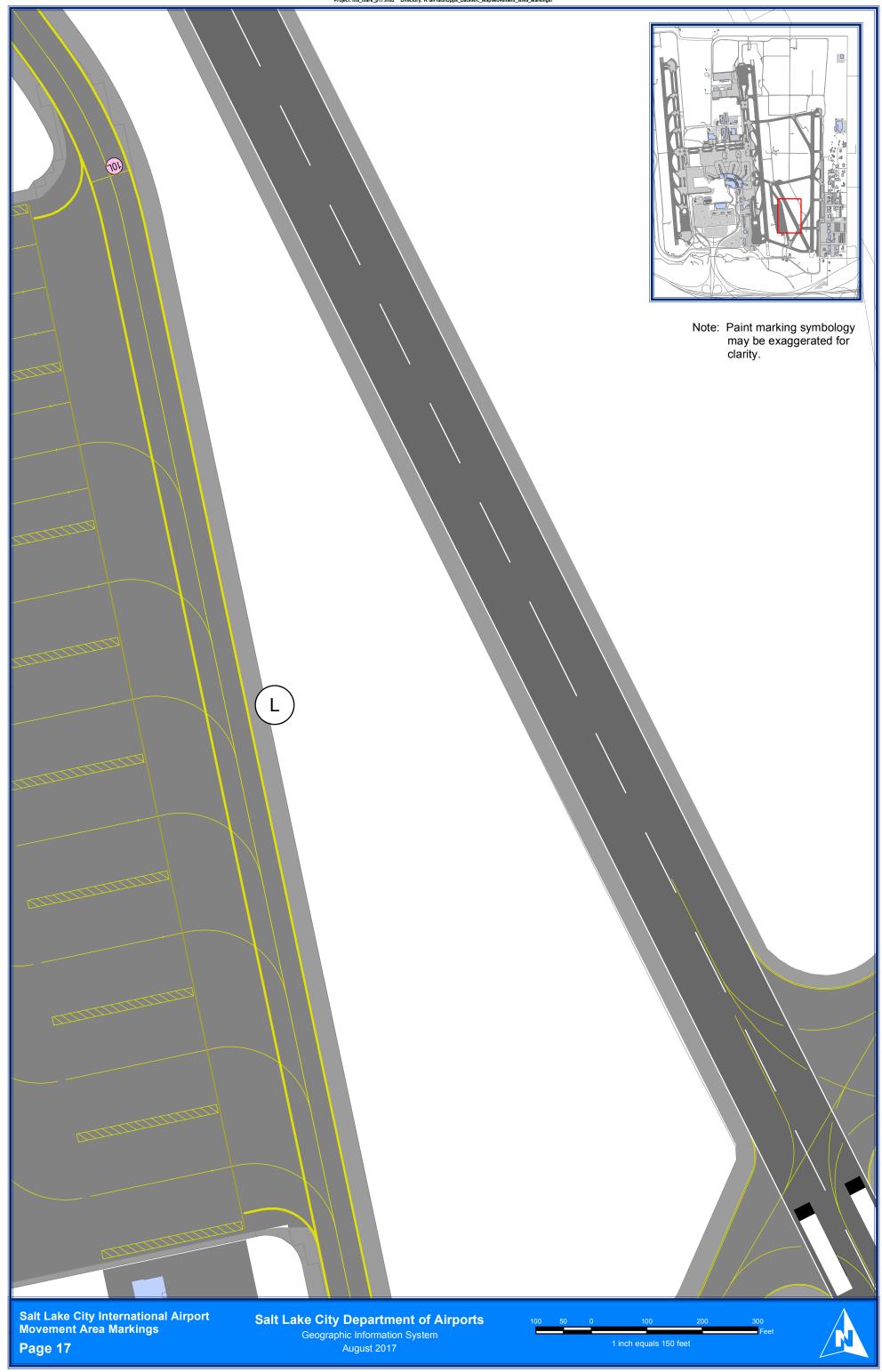


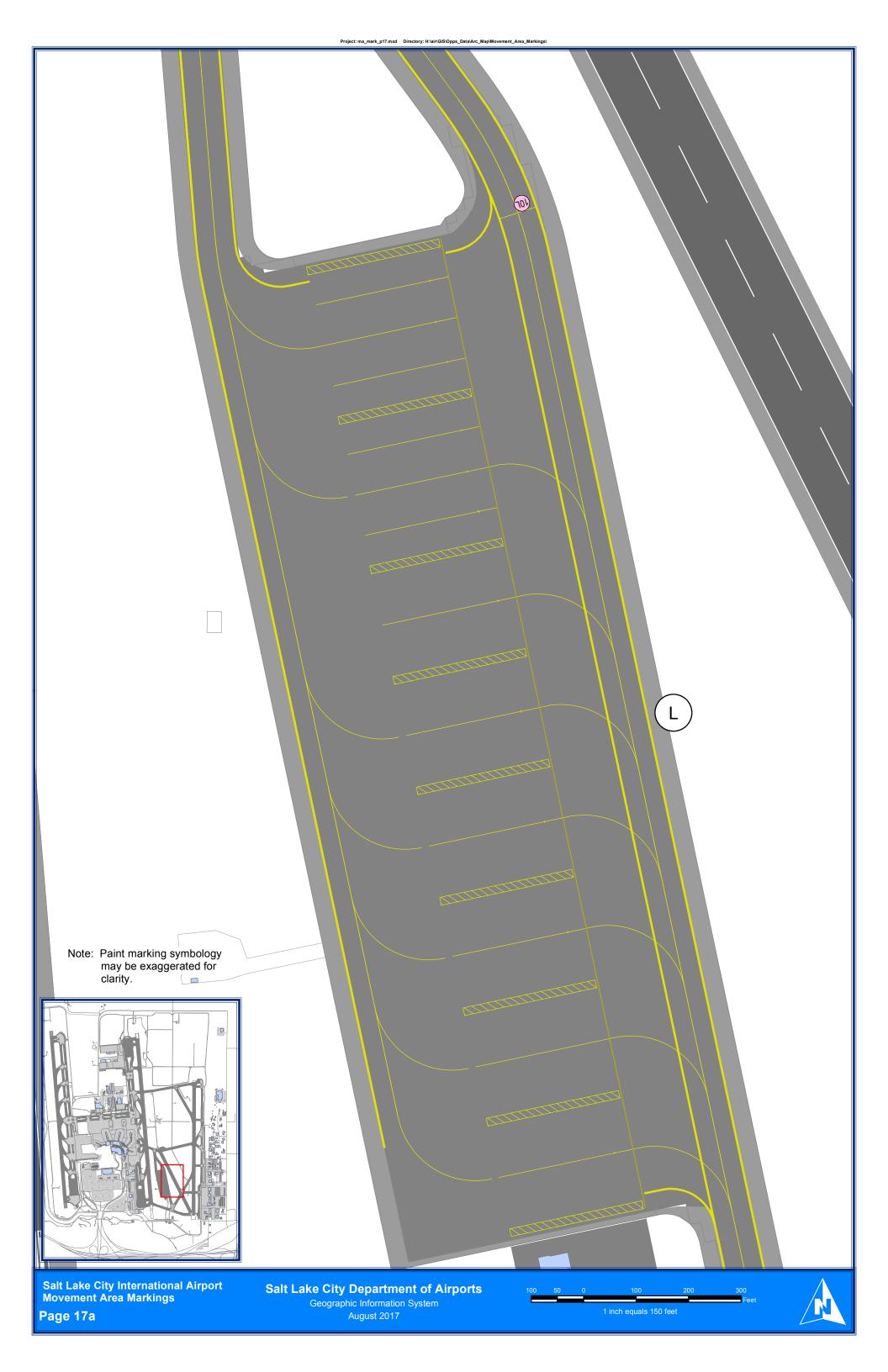


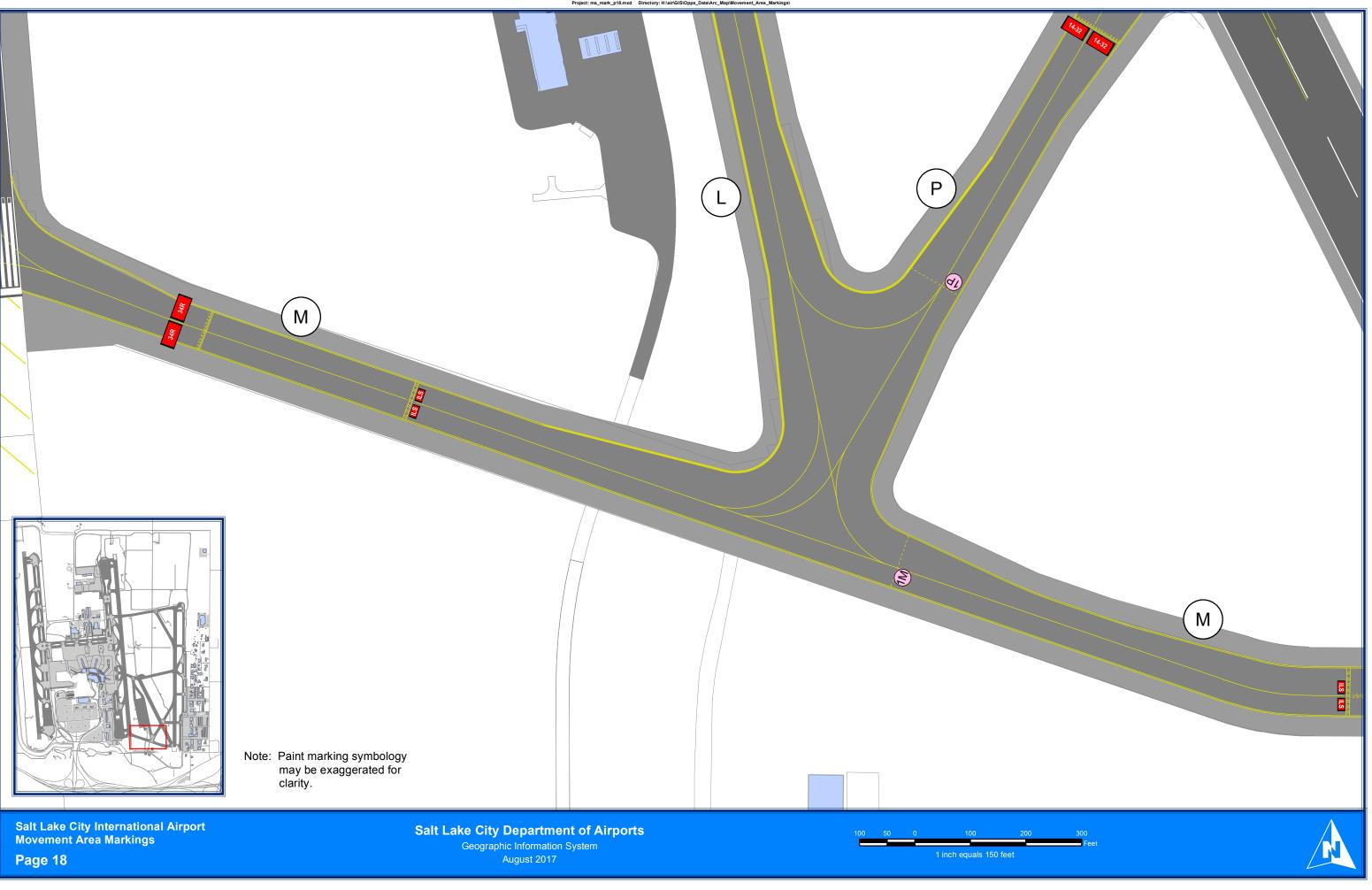


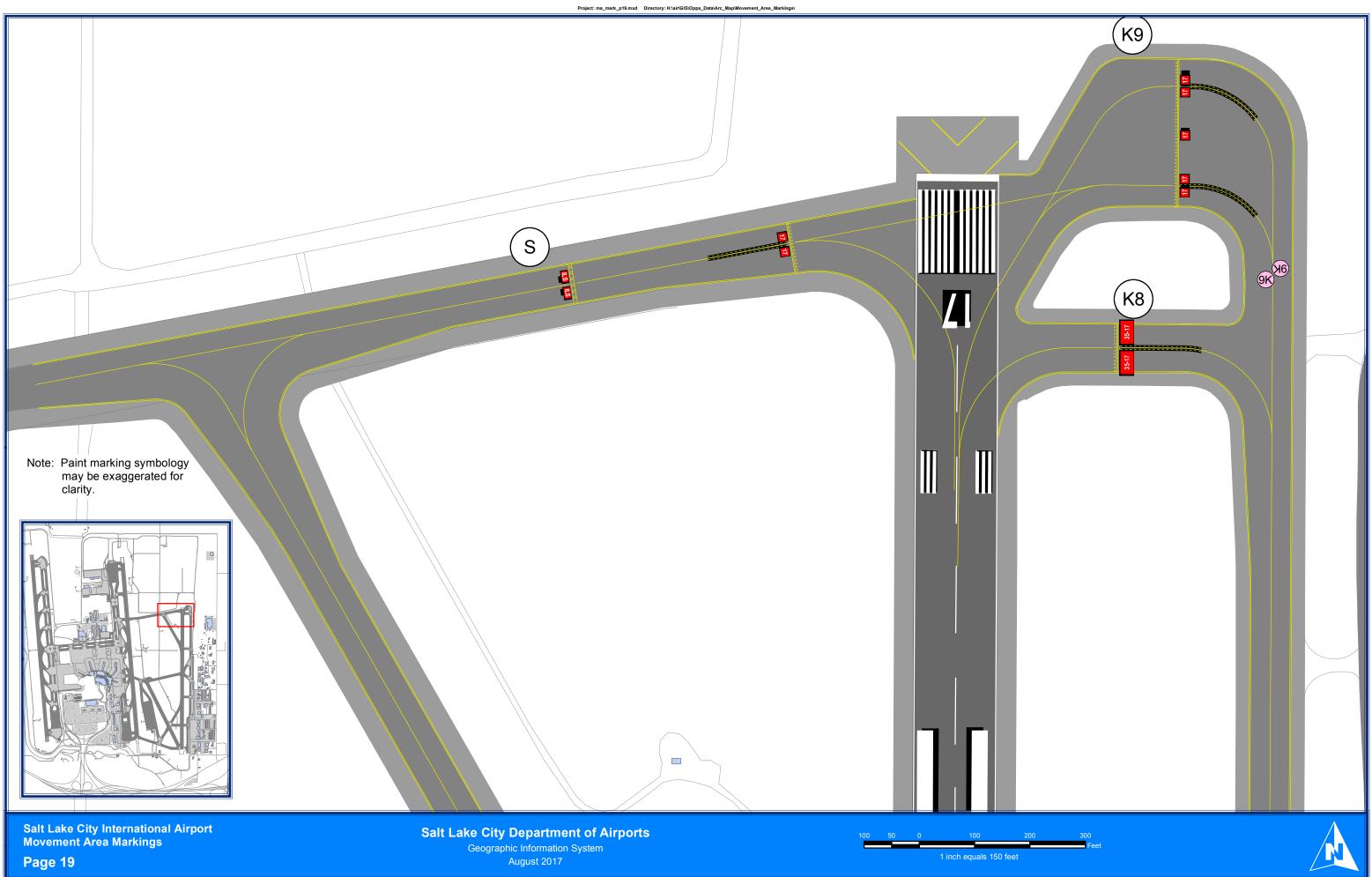


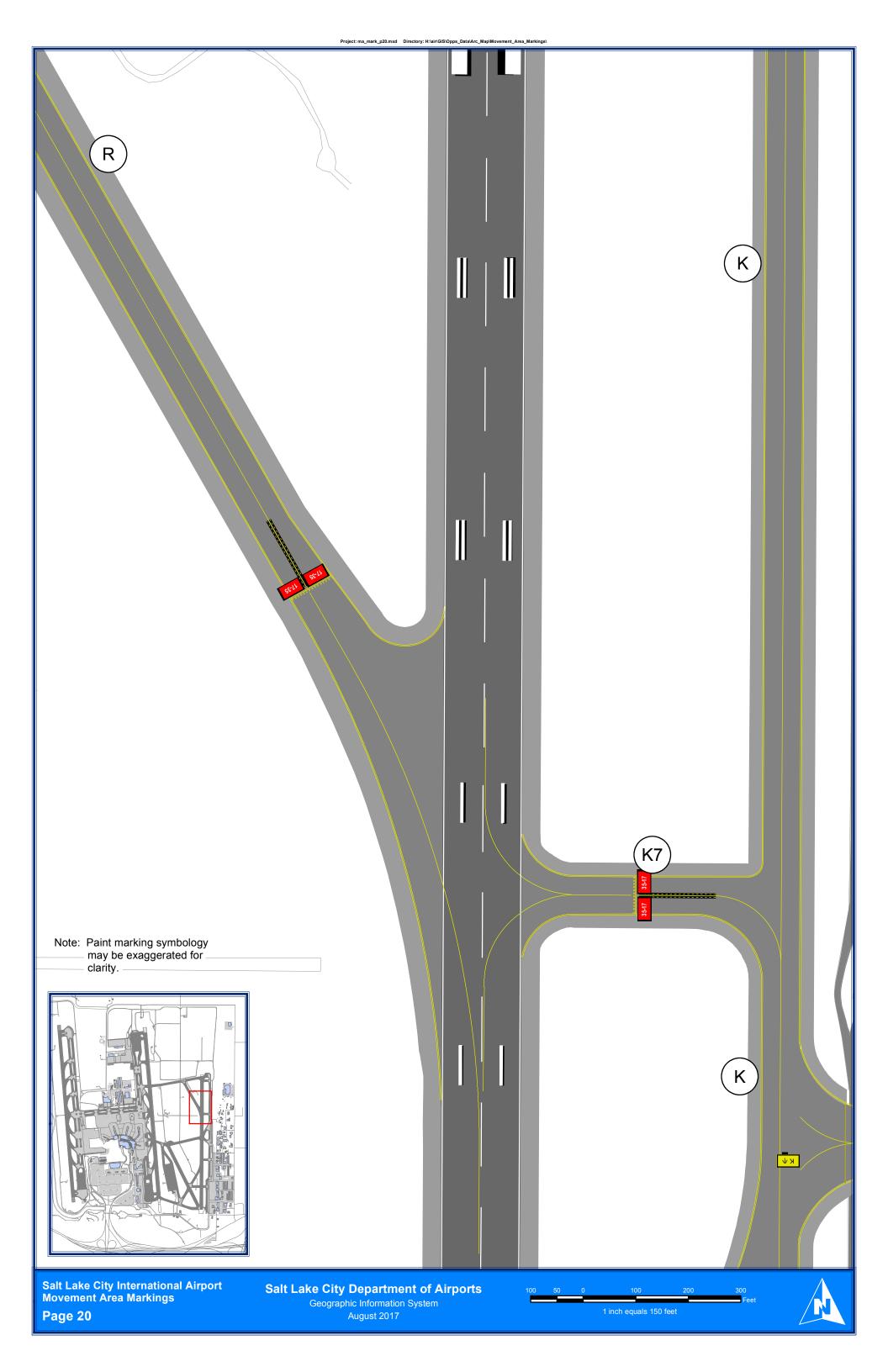


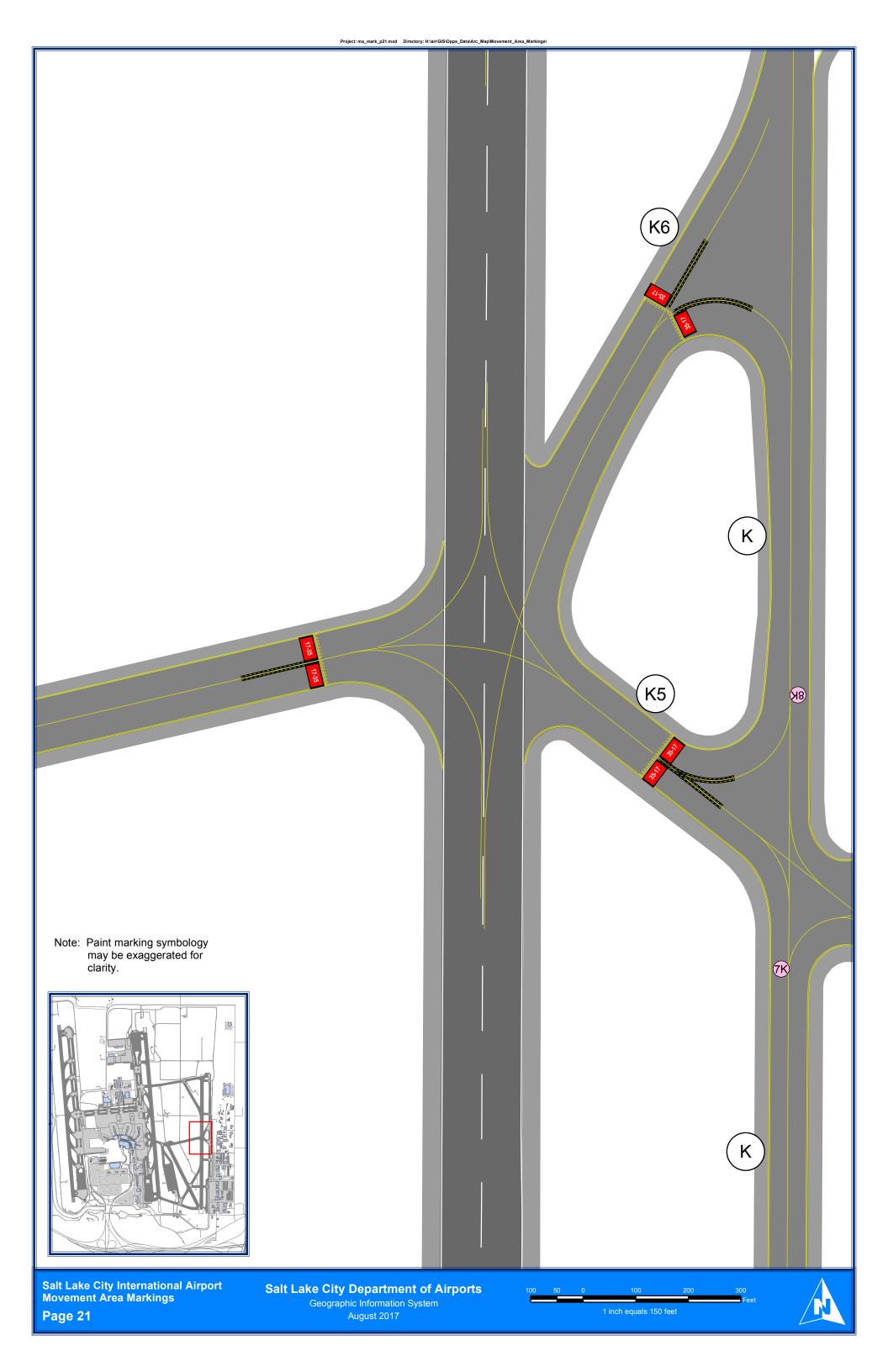


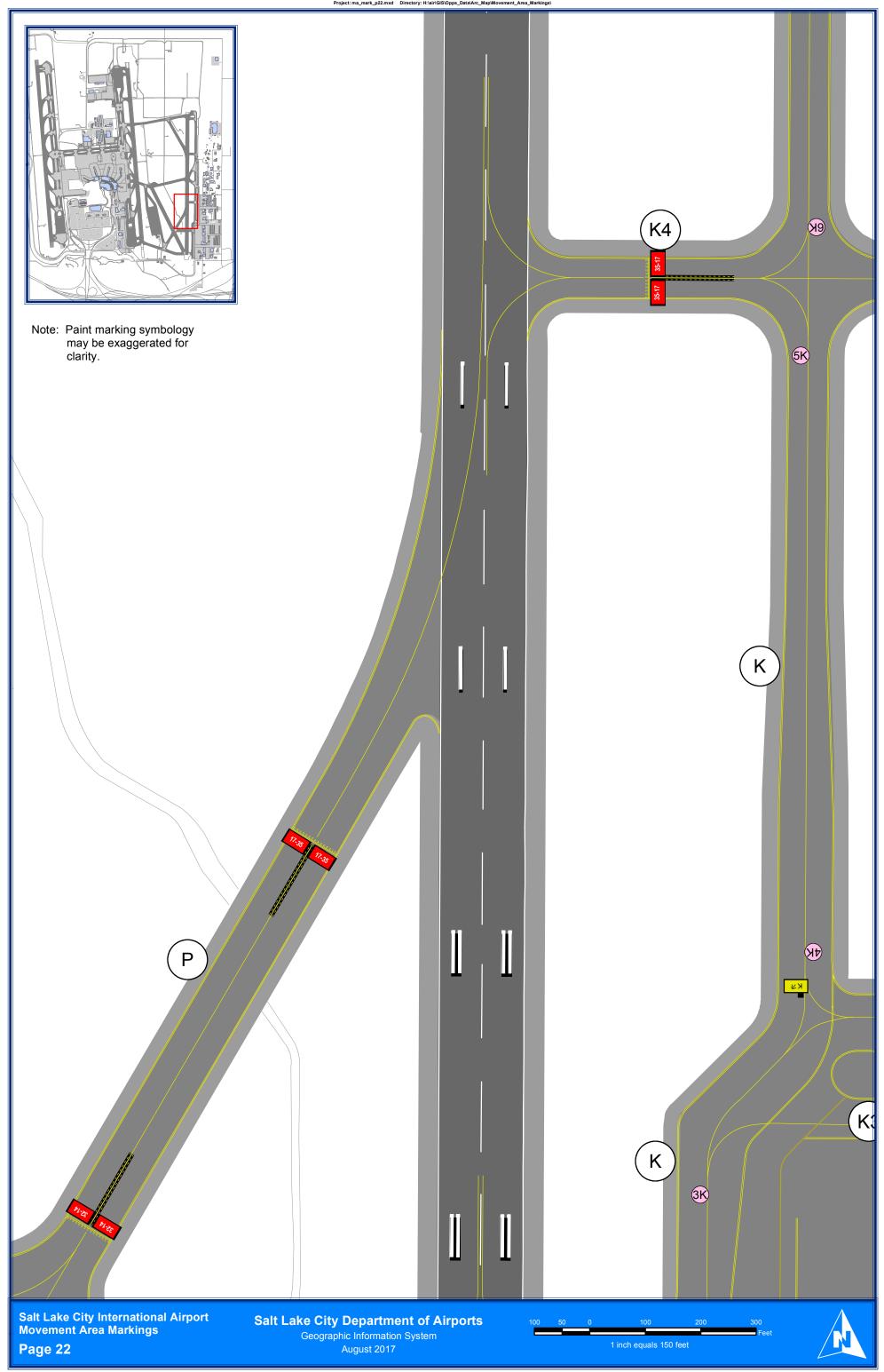


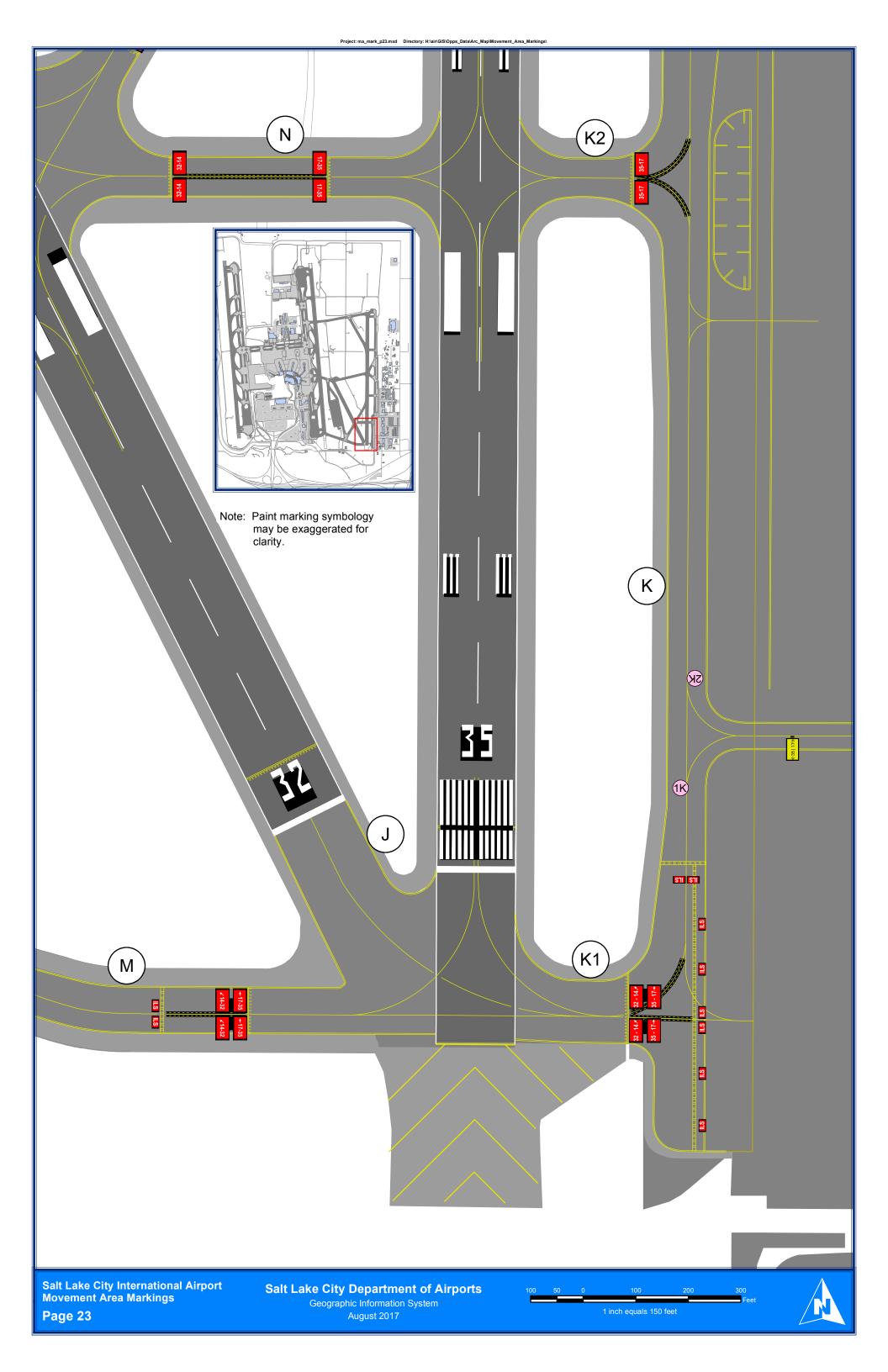












# **APPENDIX C2**

**Airfield Sign Plan** 

(12 pages)

#### Original Date: <u>1 November 2004</u>

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