AEROSTAR
AIRPORT HOLDINGS LLC

AEROPUERTO
INTERNACIONAL
LUIS MUÑOZ MARÍN
PUERTO RICO

Agustin Arellano
General Director
Aerostar Airport Holding

Date: 26 August 2013

Record of Changes

Change #	Description	Date of Change	Date of Entry	Approval
1	Initial Submission New IROPS		15 Oct 2013	

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Appendixes

INTRODUCTION

On February14, 2012, President Barak Obama signed the FAA Modernization and Reform Act of 2012 (the "Act") into law. Among other things, the Act requires U.S. carriers that operate scheduled passenger service or public charter service using any aircraft with a design capacity of 30 or more seats, and operators of large hub, medium hub, small hub, or non-hub U.S. airports, to submit contingency plans for lengthy tarmac delays to the Secretary of Transportation for review and approval.

Under the statute airport contingency plans must contain a description of how the airport operator, to the maximum extent practicable, will: (1) provide for the deplanement of passengers following excessive tarmac delays; (2) provide for the sharing of facilities and make gates available at the airport in an emergency; and (3) provide a sterile area following excessive tarmac delays for passengers who have not yet cleared U.S. Customs and Border Protection.

Passenger Needs

Needs of passengers, both on board aircraft on the ground or in the airport terminal during lengthy delay or other IROPS events, vary and normally require the attention of more than one party to be met. By understanding the needs of passengers during such delays, the Luis Muñoz Marín International Airport, diversion airports, airlines, government agencies, and other aviation service providers can take appropriate steps to anticipate and address such needs.

Causes of IROPS Events

Causes of IROPS events can include a number of conditions such as extreme weather, geological events, reduction of airport facility capacity, aircraft mechanical problems, and labor issues among others. The impacts of IROPS events include flight delays, cancellations, and diversions resulting in potentially adverse impacts on passengers and other airport customers. In addition to impacts on passengers, IROPS events also have an impact on airport operations. There are four phases of impact during an IROPS event that must be planned for:

- ¬ Surge
- ¬ Capacity
- ¬ Off-hours
- ¬ Extended stay

Each IROPS event is unique, and airlines, diversion airports, government agencies, and other aviation service providers will benefit from the Luis Muñoz Marín International Airport IROPS Contingency Plan accounting for diverse IROPS characteristics by adapting to changing conditions.

Planning for Contingency Response

The purpose of the Luis Muñoz Marín International Airport IROPS response management process is to identify and document actions requiring coordination between two or more aviation service providers. Joint actions are identified that reflect both current individual contingency plans and areas of recommended communication, collaboration, and coordination between service providers (Refer to the AEP).

An official copy of the IROPS Contingency Plan will be located at the General Director's office, and is available for inspection.

Promulgation

The Luis Muñoz Marín International Airport has prepared this Irregular Operations Contingency Plan in accordance with the requirements of the Department of Transportation and the FAA Modernization and Reform Act of 2012.

Agustín Arellano
CEO Aerostar Airport Holdings LLC
Luis Muñoz Marín International Airport

Date: 15 October, 2013

CHAPTER I – EXECUTIVE BUY-IN/GET ORGANIZED

PURPOSE

Activities described in this chapter provide for:

A. The establishment of the Luis Muñoz Marín International Airport IROPS Contingency Response Committee

B. Establishment of 24/7 contact/notification list

C. Documentation of procedures with airlines, government agencies, and support organizations

D. Conducting workshops and training (including table-top exercises)

Establishment of the IROPS Contingency Response Committee

The Luis Muñoz Marín International Airport IROPS Contingency Response Committee has been established following the guidelines of the DOT's Model Contingency Plan. The goal of the committee is to establish and enhance contingency plans through collaborative decision making as established in the Airport Emergency Plan. This will ensure that actions result in a unified level of customer care across all Luis Muñoz Marín International Airport aviation service providers during IROPS events.

Members of the Luis Muñoz Marín International Airport IROPS Contingency Response Committee include representatives of all local aviation and customer service provider organizations. Organizations and representatives are shown in the IROPS Contingency Response Committee table along with their 24/7 contact and notification information. Finally, workshops and training (including table-top exercises) will be executed annually combined with those required under the Airport Emergency Plan.

CHAPTER II – DOCUMENT CURRENT SITUATION

The IROPS data collection activities focus on:

A. Reviewing existing IROPS response plans from service providers, including airlines, government agencies, and support organizations

B. Local IROPS event history

C. Local customer needs

D. Local tracking of delayed aircraft

E. Local trigger events and communications plans

F. Local support for passengers on board, being deplaned, and in-terminal

G. Local tracking of inventory

H. Local skills availability

Reviewing Existing IROPS Response Plans

It is recognized that Luis Muñoz Marín International Airports have their own plans for response to IROPS events. It is also recognized that United States DOT's rules on enhancing airline passenger protections (14 CFR Part 259 – *Enhanced Protection for Airline Passengers*) require air carriers to adopt tarmac delay contingency plans and coordinate those plans with airports. The purpose of this section is to identify the several IROPS plans of local airlines, airport operations, and FBO organizations as they relate to areas of coordination between organizations.

The Review Existing IROPS Response Plans table describes both formal and informal understandings of coordination between these organizations, as well as individual organization Standard Operations Procedures (SOPs) related to IROPS response.

Reviewing Local IROPS Events and Assessing Local Situation

The IROPS Event History table describes the history of local IROPS events, including lengthy onboard ground delay events. It also describes the role of various service providers in providing passenger and other customer support during IROPS events. The purpose of this history is to provide a basis for identification and review of IROPS response activities with focus on areas needing process improvement.

IROPS Event History	
Date/Time	Event Description

Passenger Needs during an IROPS Event

The Passenger Needs focuses on needs of passengers and other customers during IROPS events, with special focus provided for special needs passengers. The needs analysis is provided by consideration of general information of customer needs during IROPS events including availability of all elements of 14 CFR Part 382 requirements of the Americans with Disabilities Act:

- ¬ Availability of means for deplaning

- ¬ Requirements for inter-terminal transportation

- ¬ Accessible facilities and services

- ¬ Boarding assistance using mechanical lifts, ramps, or other suitable devices

- ¬ Special-needs passenger considerations (wheelchairs, oxygen, etc.)

Tracking of Delayed Aircraft

The goal of effective tracking of delayed aircraft in the air and on the ground between airlines, ATC services, and the airport is that it provides accurate, complete, and timely information in regard to expected flight delays and developing local situations. Also, this is beneficial for providers to mitigate potential situations and for passengers to revise travel plans. It is recommended that various service provider organizations work in tandem to accurately track delayed aircraft to advance overall situational awareness, improve communication, and ultimately result in superior response to customers.

When aircraft status in the air and on the ground is tracked by both airlines and the FAA and status of significantly delayed and/or diverted flights is shared with the airport, the result is shared situational awareness among the key aviation service providers. The following list includes agencies that can provide tracking aircraft information:

- **Government agencies:** ATC services

- **Airport:** Operations

- **Airlines:** All airlines operating at an airport

- **Web Pages:** FAA, Flight Aware

Trigger Events and Communications Plans

Effective response to an evolving IROPS event depends on timely shared situational awareness among all aviation service providers. Relevant IROPS information includes the early identification of a potential IROPS situation and the evolving IROPS condition as the event evolves.

Key elements of communication during an IROPS event require coordinated IROPS response actions by airport operations, the airlines, ATC services, and by affected diversion airports to track and share aircraft status both in-air and on-ground. Based on the situational need, additional communications among other organizations such as the TSA, CBP, concessions, and ground transportation may also be required.

Each airline has its own guidelines for establishing triggers. These triggers are usually included as part of the individual airline's IROPS plans published in compliance with the United States DOT's "3-Hour Rule" for domestic operations and "4-Hour Rule" for international operations.

At trigger points, airlines generally consider the following factors when making a determination:

- National weather
- Crewmember resource planning
- Airfield situation
- Gate availability
- Hardstand availability
- Passenger disposition

Support for Passengers

The key goal of the Luis Muñoz Marín International Airport IROPS plan is to ensure focus on coordinated support of passengers and other customers during an IROPS event. This focus includes, but is not limited to, the three areas identified as being United States Congressional concerns for the provision of:

- Support for deplaning of passengers from aircraft
- Sharing of facilities, including making gates available
- Having a sterile area available for passengers who have not yet cleared CBP

Tracking Inventory

This section describes guidance for planning and developing procedures across local organizations identifying resources (equipment and supplies) held by an airport service organization beyond those which have been planned for shared use, but that could be made available for use if requested by another Luis Muñoz Marín International Airport

organization during an IROPS event. The AEP contains the inventory available for use in case of any IROPS event. The following list includes agencies and vendors considered for tracking resource:

- **Airlines:** All airlines operating at an airport

- **Government agencies:** FAA, TSA, CBP

- **Concessionaires:** Snack stands, restaurants, stores

- **Fixed based operator:** Local FBO

- **Ground transportation:** Rental cars (on- and off-site), taxis, local mass transit, bus companies

- **Overnight accommodations:** Hotels, churches, Red Cross

- **Military installations:** Puerto Rico Air National Guard

- **Emergency response:** ARFF, LEO, EMT

CHAPTER III – STABLISHED PROCEDURES

COOPERATION PROCEDURES

There are a group of service providers that are considered to be typically found at airports that are vital in local IROPS planning efforts. Coordination with these entities is critical in order to establish procedures that will be followed during an IROPS event.

When severe weather is forecasted or anticipated or long tarmac delays are likely to occur due to any other irregular operation at the airport, Aerostar Airport Holding will consider implementation of preventive measures to reduce the probability of long tarmac delays. In the event that the airport experience flights subjects to tarmac delays Aerostar Airport Holding has established the following procedures to comply with the new Tarmac Rule:

1. All remaining/grounded aircraft (if any) occupying any gate position will be required to relocate such aircraft to the nearest available apron (either Apron 1 or apron 4).

2. At 1.0 Hours (Arrivals) – Aerostar Airport Holding will give priority to all international flights that have landed a gate position within 60 minutes of arrival. N2 and N3 taxiways will be used to hold aircraft until gates become available.

3. At 2.0 Hours (Departures and Arrivals) – if situations goes beyond the 120 minutes and no jet bridges are available for passengers deplaning, arriving aircraft will be relocated to either apron 1, 4, 5, or 6 and ground support equipment's and EMS personnel will be provided if necessary or requested.

4. At 3.0 Hours for Domestic and 4.0 hours for International flights (Departures and Arrivals) – Aircraft must be at gate with the doors opens or at remote parking (Any apron available) with air stairs connected.

According to the Rules, the following two exceptions exist that would relieve a carrier for from having to comply with the Rule: (1) If in the judgment of the Pilot in Command (PIC) there is a safety or security reason not to return; (2) If in the opinion of the FAA Air Traffic Controller movement of an aircraft subject to this rule would cause operational difficulties.

Airlines

It is recognized that the DOT has issued a rulemaking that requires airlines to adopt tarmac delay contingency plans and coordinate them with both scheduled airports they serve and their diversion airports.

FAA

It is recognized that FAA has issued directives to air traffic personnel pertaining to aircraft making tarmac delay requests related to United States DOT's 14 CFR Part 359 *Enhanced Protection for Airline Passengers*. The FAA has also established procedures allowing airports access to aircraft flight status.

CBP

It is recognized that CBP has issued guidance to directors of field operations concerning passengers on diversion flights, including those into airports not normally staffed by CBP.

TSA

It is recognized that the Department of Homeland Security has issued procedures to TSA Federal Security Directors concerning establishing and utilizing secure areas using procedures in the Airport Security Program.

Concessions

Concessions at Luis Muñoz Marín International Airport have been requested to agree to provide service during IROPS events, including those resulting in extended passenger stay in the terminal area. Key considerations include agreement to remain open during extended hours and support for special-needs passengers, including new infant supplies.

Ground Transportation

Ground transportation organizations at Luis Muñoz Marín International Airport have been requested to agree to provide service during IROPS events, including those resulting in extended passenger stay in the terminal area. Key considerations include agreement to provide service during extended hours and procedures for obtaining additional resources when required.

Other Providers to Consider

Above and beyond the service providers identified in the previous section, several other entities should be coordinated with, as appropriate to Luis Muñoz Marín International Airport. The list below highlights some of these service providers available during IROPS events.

- Alternate transportation providers (mass transit, bussing companies, off-site rental car agencies)
- Overnight accommodations (nearby hotels*)
- Military installations: Puerto Rico Air National Guard
- FBOs
- Re-fuelers
- Off-site restaurants
- Emergency response (LEO, fire, EMT)
- Red Cross
- FEMA
- Special needs service providers (wheelchairs, oxygen, etc.)

CHAPTER IV – REVIEW, UPDATE, AND TRAINING

The Luis Muñoz Marín International Airport IROPS Plan will be updated periodically throughout the year with improved practices, procedures, and coordinated response. In order for this to happen, the IROPS Contingency Response Committee should host coordination workshops and training at least every 6 calendar months.

IROPS Coordination Workshops

Periodic IROPS coordination workshops are held at Luis Muñoz Marín International Airport providing a common format and venue for periodic review and confirmation/update of local IROPS plans. The Luis Muñoz Marín International Airport will determine the frequency and specific agenda for these meetings, as appropriate.

The goals of the IROPS coordination workshop are threefold:

- To explain why planning for mitigating the effects of IROPS events on passengers is critical.

- To allow participants to identify areas during lengthy delays that could benefit from increased coordination. This group discussion is helpful for expressing the underlying concepts and objectives in terms familiar to airport departments and key stakeholders.

- To allow your airport participants to have an opportunity to buy into the planning process for mitigating effects of IROPS events on passenger service by having their individual concerns made a part of the coordination process

Attendees for this workshop may include individuals from the following agencies and vendors:

- **Airlines:** All airlines operating at an airport
- **Government agencies:** FAA, TSA, CBP
- **Concessionaires:** Snack stands, restaurants, stores
- **Fixed based operator:** Local FBO
- **Ground transportation:** Rental cars (on- and off-site), taxis, local mass transit, bus companies
- **Military installations:** Puerto Rico Air National Guard
- **Emergency response:** Fire, LEO, EMT

IROPS Coordinated Frontline Training

Periodic coordinated frontline training for IROPS response is held at Luis Muñoz Marín International Airport. In addition to emphasis on actions requiring coordination of two or more organizations, this training provides an opportunity to test new policies, practices, and procedures. During the annual Table Tops at Luis Muñoz Marín International Airport, IROPS training and/or procedure updates will be reviewed with appropriate airport departments.

CHAPTER V – CONSOLIDATED ACTION PLANS DURING THE EVENT

The joint actions occurring during an IROPS event are described in the following diagram. The Luis Muñoz Marín International Airport IROPS Contingency Response Committee ensures the capability for coordinating shared aircraft status information. Notification of relevant aspects of aircraft status are provided to appropriate aviation service provider organizations during an IROPS event by the Luis Muñoz Marín International Airport communication center or point of contact, as appropriate.
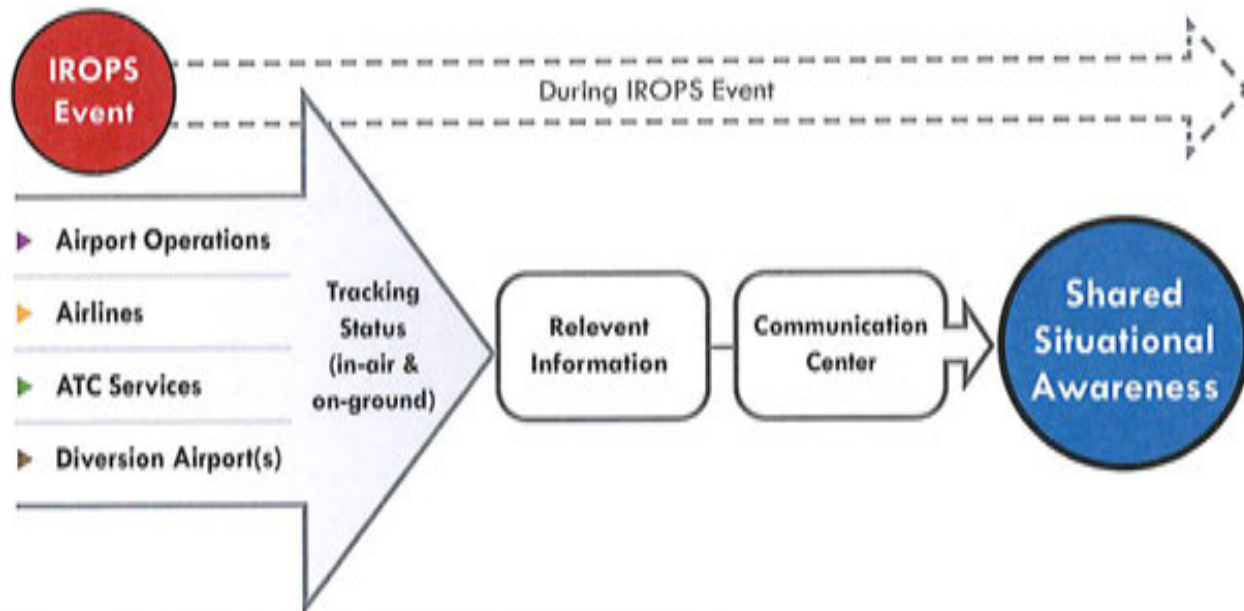

Figure 1: Joint Actions during an IROPS Event.

MONITORING IROPS EVENTS INDICATORS

While some IROPS events are unpredictable (such as power outages, security breaches), many can be handled successfully if service providers are actively anticipating an event. Certain actions taken by service providers on a constant basis can position them well to handle an IROPS event should one occur. Some examples of these actions include tracking aircraft status and tracking weather patterns. Each of these is discussed in more detail in the following sections.

Aircraft Status

Aircraft status in the air and on the ground is tracked by both airlines and the FAA to provide accurate, complete, and timely information in regard to expected flight delays and developing local situations. The Aircraft Status table describes Luis Muñoz Marín International Airport procedure checklists for tracking aircraft during IROPS events.

Tracking Weather

Weather patterns are tracked by the airport, airlines, and the FAA to predict potential impacts to aircraft operations and to carry out alternate operating procedures (such as diverting flights to alternate airports) to maintain the safety of the crew and passengers as well as operations staff out on the airfield.

EXECUTING IROPS PLANS ANS PROCEDURES

In Section 3.1 of this plan, procedures were established with service providers, including concessions, ground transportation, the FAA, CBP, and TSA. This section provides specific procedures that are to be executed at the time of an IROPS event. The following paragraphs outline procedures for each of the service providers.

IROPS Communications Plans

Relevant IROPS information, including status and related situational information, is communicated among appropriate Luis Muñoz Marín International Airport organizations during an IROPS event.

Passenger Support Plans

Support procedures for passengers and other customers at Luis Muñoz Marín International Airport during IROPS events include focus while they are on board aircraft, during their deplaning, in the terminal, and when they need ground transportation.

Procedures with Airlines

Airlines operating out of Luis Muñoz Marín International Airport have implemented procedures pertaining to the DOT "3-Hour Rule" and "4-Hour Rule" relating to IROPS event response.

Procedures with FAA

The FAA organization at Luis Muñoz Marín International Airport has implemented procedures pertaining to tarmac delay requests related to United States DOT's 14 CFR Part 359 Enhanced Protection for Airline Passengers.

Procedures with CBP

Luis Muñoz Marín International Airport has implemented procedures with CBP relating to response to IROPS events. The Execute IROPS Procedures with CBP table describes Luis Muñoz Marín International Airport CBP actions specific to IROPS events.

Procedures with TSA

The TSA organization at Luis Muñoz Marín International Airport has implemented procedures concerning establishing and utilizing secure areas using procedures in the Airport Security Program.

Concessions Procedures

Concessions at Luis Muñoz Marín International Airport have agreed to provide specific support during IROPS events.

Ground Transportation Procedures

Ground transportation organizations at Luis Muñoz Marín International Airport have agreed to provide specific support during IROPS event.

CHAPTER VI – CAPTURE LESSONS LEARNED AND UPDATING PLAN

Since recovery from an IROPS event is critical to the continual improvement of the Luis Muñoz Marín International Airport IROPS plan, this chapter is divided into two sections: Debrief after an IROPS Event and Lessons Learned. The following tables describe procedures for these actions, including incorporation of lessons learned into the update of Luis Muñoz Marín International Airport IROPS Contingency Plan, as appropriate.

After an IROPS Event

After an IROPS event, it is important to have a timely and comprehensive assessment of the event. The Luis Muñoz Marín International Airport will coordinate this debriefing meeting and include all aviation service providers as well as the IROPS Contingency Response Committee.

Lessons Learned

As part of the debriefing, it is important to catalog the lessons learned from the individual IROPS events. The Luis Muñoz Marín International Airport will coordinate these lessons learned and provide them to the aviation service providers as well as the IROPS Contingency Response Committee members.

APPENDIX I: GENERAL FUNCTIONS BY CATEGORY

GENERAL FUNCTIONS BY CATEGORY

Category	Solution Type	Function	Phase			Ops		Stakeholder		
			Before	During	After	Airside	Landside	Airport	Air Carrier/ Ground Handler	FAA
Integration/ Strategy	Consulting services	Provides professional consulting support for defining technology integration strategy before an event, and revises strategy based on lessons learned after an event.	X		X	X	X	X		
	Data integration services	Provides professional data integration services before an event to enable the sharing of information among various technology solutions, and modifies data integration strategy based on lessons learned after an event.	X		X	X	X	X		
	System integration services	Provides professional systems integration services before an event to enable the sharing of information among various technology solutions, and modifies system integration strategy based on lessons learned after an event.	X		X	X	X	X		
IT Support	IT system management	Provides for the ongoing and emergency response management and maintenance of technology assets and systems.	X	X	X	X	X	X	X	
Data Management	Airport operational database	Serves as a central data repository for airport operational systems to enable the sharing of information among various technology solutions before, during, and after an event.	X	X	X	X	X	X		

Category	Solution Type	Function	Phase			Ops		Stakeholder		
			Before	During	After	Airside	Landside	Airport	Air Carrier/ Ground Handler	FAA
Shared Aircraft Status	Airspace monitoring system	Provides overview of airspace environment around the airport using real-time data from the airport's radar system, for the purpose of scheduling airport resources.		X		X		X		
	Flight tracking/ management tool	Provides aircraft planning and management capabilities by monitoring real-time aircraft positions, airport status, and weather conditions.		X		X			X	
	Air traffic flow management	Provides capability to manage the complete range of aircraft operations from gate to gate, as well as provides operational and post operations metrics and performance analysis.		X	X	X		X	X	X
	Flight status data feeds	Provides data stream to support flight information displays and custom flight tracking solutions.		X			X	X		
	Surface detection system (ASDE-X)	Provides a traffic management system for the airport surface that maintains seamless coverage and aircraft identification to air traffic controllers.		X		X				X
	Surface management system	Provides a browser-based surface management system for efficient and cost-effective management and measurement of airside operations.		X	X	X		X	X	X
	Information web dashboard	Provides information dashboard over the Internet to facilitate collaborative decision making for airside and landside operations.		X		X	X	X		X
	Navigation system	Provides the operational information, altitude, and position necessary for aircraft guidance in all flight phases (in flight and on ground taxiing).		X		X			X	
	Consulting services	Provides professional consulting support for strategic implementation, implementation oversight, and improvement of shared aircraft status solutions.	X	X	X	X	X	X	X	X

Category	Solution Type	Function	Phase			Ops		Stakeholder		
			Before	During	After	Airside	Landside	Airport	Air Carrier/ Ground Handler	FAA
Communication of Status	Real-time aircraft data feed	Provides data stream to support flight information displays and custom flight tracking solutions.		X			X	X	X	
	Flight information display system - airport	Provides flight information on a monitor mounted in the airport using a real-time aircraft data feed or manual input.		X			X	X	X	
	Flight information display - internet	Provides flight information via the Internet using a real-time aircraft data feed or manual input.		X			X	X	X	
	Flight information display - mobile	Provides flight information to a mobile device using a real-time aircraft data feed or manual input.		X			X	X	X	
	Air traffic display - airport	Provides real-time air traffic information, including delays and cancellations, in graphical format using a monitor mounted in the airport.		X			X	X	X	
	Air traffic display - internet	Provides real-time air traffic information, including delays and cancellations, in graphical format via the Internet.		X			X	X	X	
	Message broadcasting system	Provides automated text-based message broadcasting to a predefined distribution list according to a predefined communication channel.	X	X			X	X	X	
	Emergency notification call system	Provides automated audio message broadcasting to a predefined distribution list.	X	X			X	X	X	
	Social media (Facebook, Twitter, blogs, podcasts, etc.)	Provides the ability to send ongoing communication to a mass number of subscribers via the Internet or mobile device applications and receive feedback.	X	X	X		X	X	X	
	Flight status alert - email, text	Provides automated text-based message broadcasting to a distribution list of subscribers via email or text message regarding a specific flight status.	X	X			X	X	X	

Category	Solution Type	Function	Phase			Ops		Stakeholder		
			Before	During	After	Airside	Landside	Airport	Air Carrier/ Ground Handler	FAA
Resource Management	Aircraft, gate, and concourse availability	Provides the ability to analyze the cause of delays in order to determine the most time-efficient usage of aircraft, gates, and stands.	X	X	X	X	X	X	X	
	Gate management system	Provides the ability to plan and maintain the scheduling, allocation, and real-time status of gates.	X	X		X	X	X	X	
	Ground handling staff management system	Provides the ability for scheduling and deployment of ramp personnel to optimize ground handling operations.	X	X		X		X	X	
	Ground handling resource management	Provides the ability for scheduling and management of ramp personnel and ground handling equipment to optimize ground handling operations.	X	X		X		X	X	
	Resource management system	Provides the ability to plan and maintain the scheduling, allocation, and real-time status of resources including gates, aircraft parking stands, check-in counters, airline back offices, kiosks, and baggage carousels.	X	X		X	X	X	X	
Passenger Handling	Consulting services	Provides professional consulting support for defining passenger handling strategy before an event, and revising strategy based on lessons learned after an event.	X		X	X		X		
	Passenger transport from aircraft	Provides physical mechanism for transporting passengers from an aircraft that is not docked at a gate to the terminal building.	X	X		X			X	
	Visual docking guidance system	Provides automated visual docking guidance for aircraft based on the active ramp environment to maximize safety and efficiency.	X	X		X			X	

| Category | Solution Type | Function | Phase | | | Ops | | Stakeholder | | |
			Before	During	After	Airside	Landside	Airport	Air Carrier/ Ground Handler	FAA
Baggage Management	Baggage sortation	Provides for the automatic verification of baggage and its destination for accurate and efficient routing.		X		X		X	X	
	Baggage tracking	Provides for the automated tracking of baggage from check-in to final destination.		X		X	X	X	X	
	Baggage recovery	Facilitates the efficient recovery of bags due to mishandling or disrupted aircraft operations.		X		X		X	X	
	Baggage reconciliation	Provides for the identification of passengers that have not yet boarded and prevents their baggage from being loaded.		X		X		X	X	
Passenger Processing	Common use passenger processing	Provides the ability to share check-in and gate resources among airlines for flexibility and efficiency in passenger processing.		X		X	X	X	X	
	Local departure control system	Provides the ability for airline operations without a locally accessible proprietary departure control systems to process passenger and baggage.		X		X	X	X	X	
Weather Detection	Weather display	Provides visual information regarding current weather conditions.		X		X	X	X	X	X
	Weather forecasting and reporting system	Provides the ability to analyze probable weather conditions to enable decisions to be made prior to and during an event.	X	X		X	X	X	X	X
	Instant alert weather system	Provides the ability to receive instant alerts at the desktop workstation for relevant weather events.	X	X		X	X	X	X	X
	Lightning detection system	Provides the ability to detect lightning in local and/or long range conditions.	X	X		X	X	X	X	X

**APPENDIX II: DURING AN EVENT FRONTLINE CHECKLIST
FOR SERVICE PROVIDER MANAGERS**

During an Event Action Table for Service Provider Management

Airport Operations Department

- ¬ Offer and render assistance as available to air carriers and tenants.
- ¬ Assist in selecting a parking location for the aircraft. Ground handlers are responsible for parking aircraft because airport operations personnel will not perform this function.
- ¬ Ensure diverted aircraft do not obstruct loading gates for scheduled incoming flights or trap parked aircraft already at a gate or hardstand. It is preferable that all carriers coordinate parking early to ensure orderly flow.
- ¬ Advice responsible ground handlers if parked aircraft must be moved.
- ¬ Assist with vehicle inspections and movement of personnel, vehicles, and equipment in and out of the airport operations area or the security identification display area (SIDA) to unload, load, and service diverted company equipment parked in the SIDA, or on cargo aprons, tenant ramps, or closed taxiways.
- ¬ Evaluate all actions from a customer service standpoint.
- ¬ If passengers must be deplaned to meet DOT requirements, coordinate response and necessary holding areas with airline, airport police, TSA, and CBP personnel.
- ¬ Coordinate with airport police, CBP, TSA, and airline supervisors all planned holding areas to segregate passengers (PAX) if they are deplaned.
- ¬ Ensure that holding area(s) have operable lavatories and otherwise meet DOT requirements.
- ¬ Ensure that the storm is monitored real-time and communicate updates to all agencies at least every 30 minutes.

Airport Operations Department

- ¬ Provide security for containment of international passengers in the sterile area as necessary.
- ¬ If any non-sterile area is used for holding international PAX, assist in providing security for PAX.
- ¬ If necessary, request mutual aid support. As necessary, contact other airport departments or airport tenant businesses directly for assistance.

Airport Fire-Rescue Department

- ¬ Provide space as needed to segregate passengers.
- ¬ Augment security efforts as needed.
- ¬ If necessary, request mutual aid.

Airport Marketing and Community Relations Department

- ¬ Coordinate with national/international news media and all involved parties to ensure proper release of public information as necessary.

Airlines

- Notify the CBP of any diverted international flights that are landing at the airport, regardless of the reason. International passengers will not be deplaned until adequate holding facilities have been coordinated with airport personnel.
- Ensure all decisions regarding deplaning and segregation of international passengers are made in concert with CBP personnel.
- Notify the TSA Coordination Center at least two hours prior to re-boarding when passengers have deplaned at the airport. Manual screening requires additional time needed for screening/re-boarding.
- Maintain an accurate passenger manifest at all times and present it to CBP personnel for immigration or accountability purposes.
- Coordinate any passenger needs (e.g., food, water, medicine, child care, health and hygiene) with CBP and all appropriate organizations as soon as possible. Comfort, health, and customer service needs must be proactively met.
- For situational awareness and ramp flow, advise airport operations when expecting the arrival of any diverted aircraft.
- Coordinate with ATC services, by way of flight crew communications, on where to direct diverted aircraft for ground handling purposes so as to avoid having a negative impact on the movement of other aircraft.
- Wherever possible, assist with ground handling support equipment to accommodate other diverted aircraft.
- Ensure that passengers and crew remain with quick-turn or gas and go aircraft.
- Ensure that flight crew communication to airport personnel (e.g., operations, Aerostar security) pass through local airline supervisory staff. This is a MUST.
- Before deplaning, advise passengers of their circumstances and plan for their care and accommodations. This advisory should come from the crew in coordination with station management. Airport personnel should also be informed.
- Ensure that deplaning passengers understand that they may remove their carry-on luggage, blankets, and pillows if they will later return and subsequently depart on the same aircraft.
- Communicate that passengers may be deplaned into the concourse in accordance with airline policies. It is critical that the airline advise passengers that if they leave the sterile area they will not be allowed to re-enter. Passenger and baggage screening services are unavailable when the TSA checkpoint is closed.
- Ensure that flight crews remain with passengers until alternate provisions are made. They will serve as the customer service representative to and advocate for their customers.
- Ensure ground handling and parking of aircraft and of those of airlines with which airlines have ground handling agreements.
- Make necessary arrangement if passenger transportation is needed from a remote parking location to the concourse or terminal. Vehicles must be operated by properly qualified driver/escorts when accessing any movement area, non-movement area, or the SIDA.

¬ Implement corporate aircraft diversion plan.

TSA

¬ Establish procedures to screen international passengers that have been out of a sterile area prior to re-boarding an aircraft whose destination is into a controlled sterile area.

¬ Consider mutual aid requests. Passenger screening and augmentation to monitor secure/non-secure areas may be needed in extreme situations.

ATC Services

¬ Establish aircraft ground control procedures to quickly, and safely park aircraft for unloading.

¬ Maintain open lines of communication with airlines and ground handlers operating at the airport.

CBP

¬ Authorize any aircraft servicing or crew movement on international flights. This authorization can be given in advance by CBP personnel via telephone if servicing/crew preflight inspection is critical and a CBP officer has not yet arrived at the diverted aircraft.

¬ Coordinate international diversion deplaning with airport personnel. Passengers will be deplaned and moved directly to the designated area. That location will be determined by the number of passengers on the diverted aircraft and available faculties. Every effort will be made to keep passengers segregated in the concourse for security, comfort, and rapid re-boarding.

¬ Ensure that security for the segregation of passengers and crew will be a coordinated effort by the CBP, TSA, and airport personnel.

¬ Ensure that due to personnel, equipment, and regulation issues, clearing passengers for entry into the United States will only be done as a last resort. Every effort will be made to move international passengers to their original destination for clearance purposes.

¬ Ensure that the processing of passengers for entry at the airport port of entry is coordinated with the port of original destination. If authority to clear passengers is granted, they must be processed for entry with all carry-on and checked baggage. A separate clearance area will be set up where both electronic processing and luggage search can be accomplished with the appropriate level of privacy. To do so, TSA requires a minimum of two hours advance notice.

APPENDIX III: DURING AN EVENT FRONTLINE CHECKLIST

DURING AN EVENT FRONTLINE CHECKLIST

AIRPORTS

Communication

☐ Media and communication plan activated

Terminal

☐ Capacity provided for large number of passengers

☐ Rest areas provided/blankets

☐ Lavatory service

Parking/Ground Transportation

☐ Ground transportation plan activated

Passenger Essential Provisions

☐ Food / hydration (concessions plan activated)

☐ Retail (concessions plan activated)

☐ Lodging (hotels notified)

Additional Staffing

☐ Employee transportation
☐ Supplement staffing
☐ Assistance desk
☐ Special services
☐ Medical response
☐ Tracking aircraft
☐ Coordination with relief organizations

Equipment

☐ Gate sharing

☐ Hard stands

AIRLINES

Deplaning

- ☐ Onward transportation
- ☐ Coordination with airport operations

Ground support equipment (e.g., gates, hardstands, tugs, towbars, AC) requested

Passenger Care

- ☐ Lodging
- ☐ Baggage
- ☐ Compensation
- ☐ Information/communication
- ☐ Food/hydration
- ☐ Cleanliness
- ☐ Special services

FBO

- ☐ FBO support equipment provided

GOVERNMENT AGENCIES

ATC Services

- ☐ Priority treatment for delayed flights if requested by the aircraft operator or a designee (pilots, dispatchers, etc.)

CBP

- ☐ Activate plan for after-hour capabilities
- ☐ Creation of ad hoc sterile areas via memorandum of understanding (MOU) activation

TSA

- ☐ Creating of ad-hoc sterile areas via MOU activation
- ☐ Escort plans activated
- ☐ Re-ticketing plan activated

CDC

- ☐ Plan activation for international flights subject to quarantine
- ☐ Plan activation for diversion airports in the system

APPENDIX IV: AIRCRAFT DIVERSION CHECKLIST

DIVERSION CHECKLIST

AIRLINE

Before:

- Notify airport operations. Include:
    - Airline
    - Approximate arrival time
    - Approximate departure time – if available
    - Reason for potential diversion
    - Intentions (examples: gas and go, extended delay, or unknown)
    - Potential services needed
    - Number of passengers on board

During:
- Communicate plane's intentions to airport operations.
- Confirm airport operations and ensure that the duty manager will assist with communication.
- If necessary, ask for assistance. Determine who will coordinate passenger accommodations, including:
    - Food
    - Transportation
    - Lodging
    - Security
    - Special Needs
- Communicate status to necessary service providers at least every 30 minutes.

After:
- Supervisor – obtain feedback from employees about what went well, what did not, and what changes could be made.
- Manager and supervisor join post-diversion conference call with airport.

AIRPORT OPERATIONS

Before:

- Create a 24/7 email contact/distribution list of major airport stakeholders in your region, including diversion airports, to communicate status and track diverted flights. For hubs and large airports, establish a conference call with key stakeholders 24 to 48 hours prior to severe weather forecasts to facilitate communications and coordination (i.e., National Weather Service, FAA, airlines, CBP, TSA, and airport departments).
- When notified by airline of a diversion, communicate to airlines that airport operations will be the point of contact during the event.
- Determine whether this is a regular diversion (airline and aircraft that are regularly serviced at airport).
    - If regular aircraft/airlines, determine and communicate equipment available to help service (see attached sample equipment list)
    - If airline has no representation at airport, determine potential services needed and communicate what equipment/options are available to service particular aircraft (see included sample equipment list)
- International diversions: Have a plan in place ahead of time with CBP to handle and/or offload passengers from international diversions, especially if there are no CBP officers or facilities present at an airport. At a minimum, coordinate with the regional CBP official and local law enforcement to share important CBP contact information, such as 24/7 phone numbers.

During:

Operations Center (OCC)

Notify:

- Airside Operations Manager
- Law enforcement officer (LEO) in charge
- Federal security director (FSD)
- Airport Safety Operations Responsible, Safety Chief (Airside)
- Concessions, if services are needed
- CBP (if international flight, need 24/7 contact information)
- Communicate with airlines frequently during event (at least every half hour).

- Remind airlines of available assistance, including:
  - Additional resources (If aircraft cannot taxi from its location, coordinate to use local FBOs and/or aircraft recovery service to have aircraft removed.)
  - Ability to contact resources for airlines if requested
  - Use of social media to inform passengers
  - Providing of flight information display systems (FIDS) updates

Communicate status to necessary service providers at least every 30 minutes.

Ascertain who is making the decisions about the status of an aircraft regarding loading and unloading of passengers, bags, and cargo. This is especially important if an airline is not represented at an airport; airport staff should find out from the flight crew some of the system operations centers (SOCs) or headquarters phone numbers so that they can contact someone in a position to make a decision at critical times (such as when the 3- and 4-hour rule is reached). This should be done as soon as the aircraft is grounded and parked.

Aerostar Airport Operations Control Center (AOCC)

- When notified of a possible diversion, contact the applicable airline to determine the potential length of the delay.
- Record in diversion contact log:
  - Date/time
  - Air carrier name and contact information
  - Flight number
  - Aircraft type and tail number
  - Passenger count
  - Arriving from/original route
  - Parking location
  - Reason for diversion
  - ETA/ETD
  - Jet bridge use and departing flight number
  - Crew time left (international flights only)
  - Services needed
- Determine gate needs (coordinate a gate from which to deplane if delay exceeds 3 hours for domestic flights and 4 hours for international flights), whether airline will

accommodate aircraft at their regularly assigned gate(s), and can or will they accommodate other airlines. Gate options must take into consideration:

- Aircraft type/size
- Access to restroom facilities and restroom service needs
- Access to vending machines
- Access to drinking fountains
- Food and beverage services through tenant restaurant vendor
- Ability to restrict international passengers from mixing with domestic passengers*
- Airline support to contain passengers isolated from domestic passengers*
- No CBP processing available for international flights*

  *international flights only

- If no gates are available:
  - Coordinate with airlines and ATC services to direct aircraft to park at alternate parking location, escort marshaling/ground handling crew as necessary.
  - Coordinate with airline or ground handlers to provide access to aircraft for air stairs, refueling, lavatory services, ground power units (GPUs), and other ground service equipment (GSE)
  - Coordinate deplaning of passengers via air stairs and buses or via loading bridge at terminal when delay exceeds 3 hours (4 hours for international flights) and/or when airline requests access to terminal

- If the aircraft delay is a departure and the passengers are deplaned at the terminal:
  - Screening for passengers who leave the concourses must be provided or passengers must remain in the sterile area and food, beverage, and restroom facilities must be provided until the passengers are re-boarded for departure

- If the projected time at the gate is after the time that screening is closed:
  - Coordinate passenger screening operations to remain open or coordinate with the LEO to provide staffing of the checkpoint to prevent re-entry of unscreened passengers

- Coordinate provisions with the airport's concessions.
- Ensure that LEO is available to assist with disruptive passenger(s).

- Maintain contact with the airline representative to determine if the flight may be cancelled and, if so, the airline's intentions concerning its passengers.
- For international flights:
  - Coordinate with CBP port director for any concerns for passenger boarding/containment
  - Arrange for LEO to monitor passengers to prevent mixing with domestic passengers (must be local airline employee or air crew members when no local representative is available)
  - Establish visual or physical perimeter stanchions, seating, and so forth to contain passengers (perimeter should allow restroom access without escort)
- Communicate status to necessary service providers at least every 30 minutes.

After:

- Initiate conference call:
  - Obtain feedback on what went well, what didn't go well, and any changes that need to be made
- Type up notes from conference call – disseminate to all entities as lessons learned/action items.
- Check that the following entities attended conference call:
  - Airport operations
  - Airlines
  - FAA
  - TSA
  - CBP
  - LEO
  - Public safety
  - Concessions
  - Car rental
  - Parking
  - Military (if on-site)
  - FBO

PUBLIC SAFETY DEPARTMENT

Before (if notified prior to aircraft landing):

- Notify Aerostar AOCC
- Fill out diversion contact log.
- If warranted, notify additional personnel or entities such as concessions, FBO, and the like.
- For extended delays at the airport, determine the resources to accommodate the situation and call up resources as appropriate.

During:

- Obtain additional information about aircraft:
  - Tail number
  - Time landed
  - Any other pertinent information
  - Fill out diversion contact log
- Inform airlines of public safety assistance available.
- Communicate status to necessary service providers at least every 30 minutes.

After:

- Obtain feedback from officers regarding what went well, what didn't, and any changes that need to be made (similar to post-incident discussion).
- Join the post diversion conference call and provide input.

APPENDIX V: SEVERE WEATHER CONDITIONS CHECKLIST

Weather Checklist

Before:
- Contact your local NWS office Meteorologist-in-Charge or Warning Coordination Meteorologist (public telephone number lists follow)
- Discuss best method/number for contacting the office
- Discuss critical thresholds for your operations
  - Threshold for planning 2 - 5 days ahead of time, for example
    - Significant snow/ice
    - Significant winds
    - Significant thunderstorm outbreak
  - Thresholds for real-time decisions, for example
    - Onset of snow/icing
    - Amount of snow/ice/rain
    - Onset of significant winds
    - Onset of thunderstorms
- Determine best method of communicating weather information for strategic planning
- Routinely exercise this process to ensure smooth operations during an event

During:
- Contact local NWS office for updated information on weather events and impact
- Receive information from NWS office from predetermined sources

After:
- Provide feedback to NWS office on content and flow of weather information
- Review event for improvements in the process

APPENDIX VI: AFTER AN IROPS EVENT DEBRIEFING

AFTER AN IROPS EVENT DEBRIEFING

It is important to debrief the response to an IROPS event in order to discover lessons learned and improve passenger service during an event. This tool describes how to discuss and document lessons learned, as well as response actions needed by each service provider related to surge, capacity, off-hour, and extended delay situations.

Date_____

Brief description of event

Insert a brief description of event

_____

_____

_____

Causes:
- Local weather
- Diversion(s)
- Aircraft mechanical
- Aircraft crew
- ATC service system
- Other

Impacts

Surge: Potential impact caused by the rate of arrival of aircraft, timing of deplaning passengers, and subsequent movement of passengers through airport.
- Aircraft
- Passengers*

Capacity: Potential impact caused by the total number of aircraft that have arrived at the airport and of the number of passengers located in any particular areas of the airport
- Aircraft
- Passengers*

Off-hours: Potential impact caused by the time of day at which aircraft arrive at airport and the subsequent need to process passengers
- Aircraft
- Passengers*

Extended Stay: Potential impact caused by the duration of stay (often measured in days) that aircraft remain at the airport and that passengers are delayed before resuming their travel
- Aircraft
- Passengers*

*Including animals

Lessons Learned	Response Action	Response Party
Terminal • Communication center • Ramp • Gates • Concessions • Ground transportation		
Aircraft • Tarmac • Cockpit communication • Passenger deplanes • Additional service		
IROPS Actions • Communication issues • Procedure modifications • Equipment and resources • Service lapse • Operations and maintenance restock • New capability • Other		