Airport Cooperative Research Program

Report 65: *Guidebook for Airport Irregular Operations (IROPS) Contingency Planning*

Synopsis

Mead&Hunt

A note from the Federal Aviation Administration
Deputy Associate Administrator for Airports, Catherine M. Lang

Many of you in the airport and aviation community are aware of the extended tarmac delays encountered at airports in the northeast on October 29, 2011 associated with aircraft diversions necessitated by the very severe early winter snowstorm.

The Secretary of Transportation, Ray LaHood, convened a Diversion Forum on November 30 in Washington DC to bring together aviation and airport leaders to discuss those events and a way forward to more effectively manage diversions in the future.

I was pleased to facilitate the airport breakout session at the Forum and acknowledge the participation of many from the aviation community.

I would also like to make everyone aware of an important study that is nearly completed under the Airport Cooperative Research Program. The ACRP project 10-10 is producing a "Guidebook for Airport Irregular Operations Contingency Planning." I expect that the Guidebook will contain very useful information for airports to help them plan for winter diversions as well as other irregular operations. It should be published and available before the end of February.

In the meantime, the ACRP Office at the Transportation Research Board has provided this synopsis of the forthcoming report.

http://onlinepubs.trb.org/onlinepubs/acrp/docs/ACRP10-10.Update.10Dec2011.pdf

www.TRB.org/ACRP

During the November 30, 2011, forum with airlines, airports, and government officials, the Federal Aviation Administration (FAA) pledged to make immediate changes to eliminate lengthy tarmac delays due to Irregular Operations (IROPS) during this holiday season. The following information explains how the ACRP Project 10-10, "*Guidebook for Airport Irregular Operations (IROPS) Contingency Planning"* research aligns with the FAA goals and sets forth plans that airports can begin using to enhance coordination and collaboration with airlines and other aviation service providers.

What is the ACRP?

The Airport Cooperative Research Program, or ACRP, is an industry-driven, applied research program that develops near-term, practical solutions to problems faced by airport operators. The ACRP is managed by the Transportation Research Board (TRB) of The National Academies and sponsored by the FAA. The research is conducted by contractors who are selected on the basis of competitive proposals.

What is ACRP Project 10-10, "*Guidebook for Airport IROPS Contingency Planning"*? – Soon to be published as *ACRP Report 65*

ACRP Project 10-10, "*Guidebook for Airport Irregular Operations (IROPS) Contingency Planning"* is a research project whose objective is to prepare a practical airport IROPS response planning document for commercial passenger service airports of all sizes to improve customer service during times of adverse weather and unplanned conditions. The findings will be published as *ACRP Report 65*.

ACRP *Report 65* will focus on responses to situations that involve:

- Tarmac delays;
- Passenger surges in terminals and security areas;
- Terminal passenger capacity;
- Off-hour conditions related to staffing for key areas such as access through security and staffing for Transportation Security Administration (TSA) and Customs and Border Protection (CBP) functions, as well as for concessions;
- Passenger conditions during extended stays both in terminals and off-site; and
- Planning for special needs passengers.

Users of the guidebook will be given step-by-step instructions on how to prepare and/or refine their IROPS contingency plans. The flexibility of the guidebook material will enable airports to either make improvements to existing IROPS contingency plans or create a completely new plan, and it will be scalable to relate to large, medium, and small airports. The guidebook will focus on collaboration and coordination to ensure that customer needs are met.

The guidebook will draw from the U.S. Department of Transportation's (U.S.DOT's) *Model Plan for Lengthy Airline Onboard Ground Delays*, created by its national task force. However, additional research was performed by the ACRP Project 10-10 team to round out the guidebook, including:

- Administering a survey that addresses 400+ airports' current and future technologies;
- Assessing summary material from airport IROPS response workshops held across the nation, independent of this research project;
- Hosting focus groups and site visits;
- Assessing IROPS response planning requirements; and
- Identifying examples of IROPS response planning best practices from airports around the country.

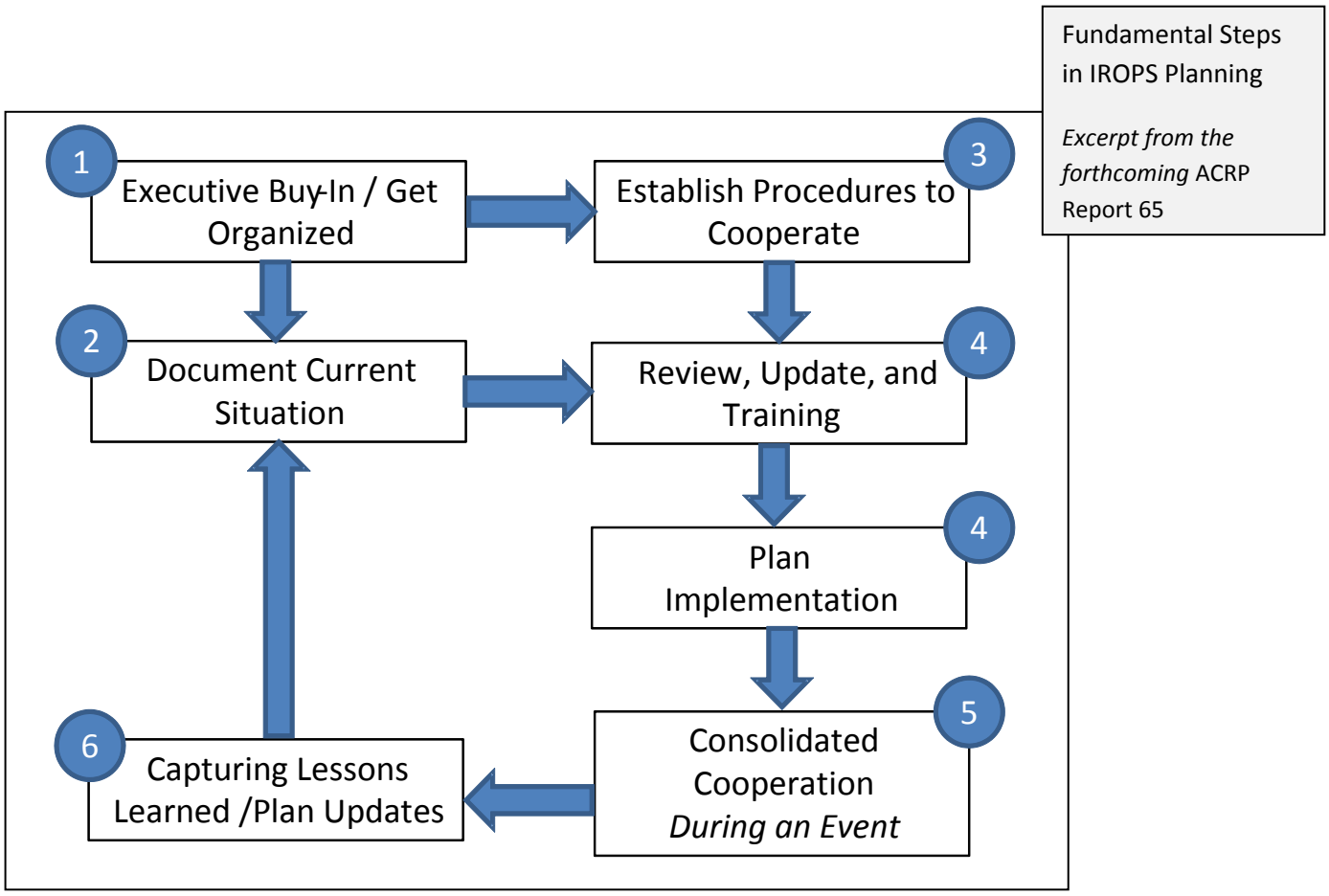
The first draft of the guidebook was recently completed. Five airports of varying size across the country tested the guidebook to provide local validation of the guidebook's usefulness in the planning process. The test program airports were John F. Kennedy New York International Airport, Salt Lake City International Airport, General Mitchell Milwaukee International Airport, Fort Wayne International Airport, and Waco Regional Airport. The guidebook is currently being reviewed and realigned to consider any new findings and suggestions from these five airports. The final guidebook is anticipated to be issued in the second quarter of 2012 and published as *ACRP Report 65*.

Why should your airport develop its own IROPS Contingency Plan?

While recent changes to the U.S.DOT rules concerning the requirement for air carriers to coordinate their Tarmac Delay Contingency Plans directly with airports apply only to airlines, your airport's participation in the response efforts of airlines is crucial to helping prevent the types of egregious IROPS incidents that have happened in the past and that resulted in significant passenger harm and public relations nightmares for airports. Such incidents have been considerably reduced in number at airports that have developed and implemented their own comprehensive, coordinated plan for dealing with IROPS situations. Participation by airport operators involves a variety of areas, including facilitating communication and providing facilities as well as services to support airline response efforts. Your airport's IROPS Contingency Plan will ensure that your support efforts are properly aligned with the FAA's, TSA's, CBP's, and airlines' response efforts, and that the airport community's overarching goal of mitigating the hardships on passengers during IROPS situations is realized.

What can your airport do <u>today</u>? A preview of *ACRP Report 65.*

The guidebook recommends starting your airport's IROPS response planning today. Advanced planning is necessary so you can establish local agreements for cooperation and collaboration between various aviation service providers before potential IROPS events occur. Suggested IROPS planning steps to achieve cooperation and collaboration have been condensed from the forthcoming *ACRP Report 65: Guidebook for Airport Irregular Operations (IROPS) Contingency Planning*, and are provided in the figure below for your use.



1. **Executive Buy-in / Get Organized:** First, you should establish executive buy-in from your airport and each of your local aviation service provider organizations. These should include airport operations, airlines, concessions, ground transportation, local accommodations, government agencies (Transportation Security Agency – TSA, Federal Aviation Administration – FAA, Customs and Border Protection – CBP), fixed-base operators (FBOs), refuelers, military (if a joint-use facility), executive management liaison, and emergency response. Next, your airport should create an IROPS Contingency Response Committee that includes representatives from your local providers (above). The Committee should be led by an IROPS Chairperson, who typically is a representative of your airport. The goal of your airport's Committee will be to establish and enhance contingency plans for local service providers through their collective, cooperative, and collaborative decision making.

2. **Document Current Situation:** Your airport's IROPS Committee should identify and gather important response plan information from service providers to ensure collaboration and cooperation. These response plans from individual organizations should be evaluated for adequacy during four categories of IROPS impact situations, which are *surge, capacity, off-hours,* and *extended stay.* Each of these unplanned situations should be considered for impacts involving aircraft and passengers. For example, planning for an off-hours situation involving both aircraft and passengers should consider unplanned aircraft arrivals, the ability to meet passenger needs such as concessions, staff access to secure side, and the availability of CBP and TSA staffing. The collective comparison of current IROPS Contingency Response Plans between service providers should include a review of local IROPS events history, identification of customer needs, evaluation of how to track delayed aircraft, the tracking of equipment inventory, and the determination of skills availability. Key airport implementation should include maintaining and sharing local contact and email distribution lists.

3. **Establishing Procedures to Cooperate:** Your airport will need to determine how to establish cooperation with local service providers in order to meet passenger needs. These include concessions, ground transportation, and government agencies (FAA, TSA, and CBP) as related to their staffing and resource capabilities. Cooperation is needed for responding to after-hours operation; surge in the number of passengers in the terminal and/or needing transportation to local accommodations; and consideration for diverted flights, including international flights into airports without a CBP presence. Every airport should establish a local process to monitor and maintain its overall airport capacity status during an evolving IROPS event.

4. **Review, Update, and Training for Plan Implementation**: After determining what improved procedures are necessary and beneficial to IROPS planning, your airport should conduct coordinated training exercises to ensure these plans are understood by all involved service providers. Table-top exercises are recommended to utilize considerations of both local IROPS events and events involving other regional airports. A key element of these exercises should be testing for impacts from each of the four IROPS situation types, which are *surge, capacity, off-hours,* and *extended stay.*

5. **Summary of Consolidated Cooperation Actions to Be Taken *During* IROPS Events**: When your airport is experiencing an IROPS event, three actions are critical: *communication, coordination*, and *collaboration*. This requires your local service providers to work together to communicate aircraft status in the air and on the ground, as well as execute IROPS procedures. Your airport IROPS Committee needs to ensure the capability for coordinating shared information for both aircraft status and airport capacity.

6. **Capturing Lessons Learned and Plan Updates as Required**: Your airport should host an after-action meeting to review performance effectiveness as soon as is practical following return of operations to a normal state. Part of the recommended debriefing procedures should be the identification of lessons learned. The airport IROPS response planning documentation should be reviewed by the IROPS Contingency Response Committee and updated as appropriate.

What tools can assist you <u>now</u>? *The Diversion Checklist* and *Sample Equipment List.*

Extracted from the draft *ACRP Report 65: Guidebook for Airport Irregular Operations (IROPS) Contingency Planning,* the following diversion checklist and equipment list will help you in the event that an aircraft is diverted to a reliever airport. This checklist demonstrates the steps that should be taken by airlines, the diversion airport, and public safety as outlined below: before, during, and after a diversion event. The sample equipment list will assist you in creating your own list of resources you can utilize during an aircraft diversion.

AIRLINE DIVERSION CHECKLIST

(EDIT AS NECESSARY TO MEET YOUR AIRPORT'S NEEDS)

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 point of contact (POC) and ensure 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 DIVERSION CHECKLIST

(EDIT AS NECESSARY TO MEET YOUR AIRPORT'S NEEDS)

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 is 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 attached 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 a 24/7 phone numbers.

During:

Operations Center:

- ☐ Notify:
  - ☐ Airport duty manager in charge
  - ☐ Law enforcement officer (LEO) in charge
  - ☐ Federal security director (FSD)
  - ☐ Senior duty manager (or deputy aviation director – airside operations)
  - ☐ 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, 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.

Airport Operations Manager:

- ☐ 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 (PAX) 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 consider:
  - ☐ 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 the air traffic control tower (ATCT) 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 reboarded 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 stem checkpoint to prevent reentry of unscreened passengers
- ☐ Coordinate provisions with the airport's concessions.
- ☐ Ensure 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 rentail
  - ☐ Parking
  - ☐ Military (if on-site)
  - ☐ FBO

PUBLIC SAFETY DEPARTMENT DIVERSION CHECKLIST

(EDIT AS NECESSARY TO MEET YOUR AIRPORT'S NEEDS)

Before (if notified prior to aircraft landing):

- ☐ Notify airport operations specialist on duty.
- ☐ 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.

(SAMPLE) EQUIPMENT LIST

(EDIT AS NECESSARY TO MEET YOUR AIRPORT'S NEEDS)

Sample Equipment List	Airline	Airline	Airline	Airline	Airline	Airport	Other
737 TB							
757 TB							
767 TB							
A319/320 TB							
AIRBUS TB							
A320 TB							
MD80/90 TB							
CRJ200 TB							
CRJ700/900 TB							
E190 TB							
Q-400 TB							
UNIVERSAL TB							
737 PUSHUP STAIRS							
737 AIR STAIRS							
757 CABIN ACCESS STAIRS							
757 PSGR STAIRS NON-MOTORIZED							
767 STAIRS							
767 PUSHUP STAIRS							
747/777 STAIRS							
A320 DIESEL POWERED AIR STAIRS							
A320 PUSHUP STAIRS							
MD80 GALLEY ACCESS STAIRS							
AIR START							
AIR START WIDEBODY CAPABLE							
GPU							
BOTTLE AIRSTART							
LAVATORY SERVICE CART							
LAV TRUCK, WIDEBODY CAPABLE							
POTABLE WATER CART							
CABIN SERVICE LIFT TRUCK WIDEBODY OK							
PUSHBACK TRACTOR, WIDEBODY CAPABLE							
PUSHBACK TUG							

www.TRB.org/ACRP

During the November 30, 2011, forum with airlines, airports, and government officials, the Federal Aviation Administration (FAA) pledged to make immediate changes to eliminate lengthy tarmac delays due to Irregular Operations (IROPS) during this holiday season. The following information explains how the ACRP Project 10-10, "*Guidebook for Airport Irregular Operations (IROPS) Contingency Planning"* research aligns with the FAA goals and sets forth plans that airports can begin using to enhance coordination and collaboration with airlines and other aviation service providers.

What is the ACRP?

The Airport Cooperative Research Program, or ACRP, is an industry-driven, applied research program that develops near-term, practical solutions to problems faced by airport operators. The ACRP is managed by the Transportation Research Board (TRB) of The National Academies and sponsored by the FAA. The research is conducted by contractors who are selected on the basis of competitive proposals.

What is ACRP Project 10-10, "*Guidebook for Airport IROPS Contingency Planning"*? – Soon to be published as *ACRP Report 65*

ACRP Project 10-10, "*Guidebook for Airport Irregular Operations (IROPS) Contingency Planning"* is a research project whose objective is to prepare a practical airport IROPS response planning document for commercial passenger service airports of all sizes to improve customer service during times of adverse weather and unplanned conditions. The findings will be published as *ACRP Report 65*.

ACRP *Report 65* will focus on responses to situations that involve:

- Tarmac delays;
- Passenger surges in terminals and security areas;
- Terminal passenger capacity;
- Off-hour conditions related to staffing for key areas such as access through security and staffing for Transportation Security Administration (TSA) and Customs and Border Protection (CBP) functions, as well as for concessions;
- Passenger conditions during extended stays both in terminals and off-site; and
- Planning for special needs passengers.

Users of the guidebook will be given step-by-step instructions on how to prepare and/or refine their IROPS contingency plans. The flexibility of the guidebook material will enable airports to either make improvements to existing IROPS contingency plans or create a completely new plan, and it will be scalable to relate to large, medium, and small airports. The guidebook will focus on collaboration and coordination to ensure that customer needs are met.

The guidebook will draw from the U.S. Department of Transportation's (U.S.DOT's) *Model Plan for Lengthy Airline Onboard Ground Delays*, created by its national task force. However, additional research was performed by the ACRP Project 10-10 team to round out the guidebook, including:

- Administering a survey that addresses 400+ airports' current and future technologies;
- Assessing summary material from airport IROPS response workshops held across the nation, independent of this research project;
- Hosting focus groups and site visits;
- Assessing IROPS response planning requirements; and
- Identifying examples of IROPS response planning best practices from airports around the country.

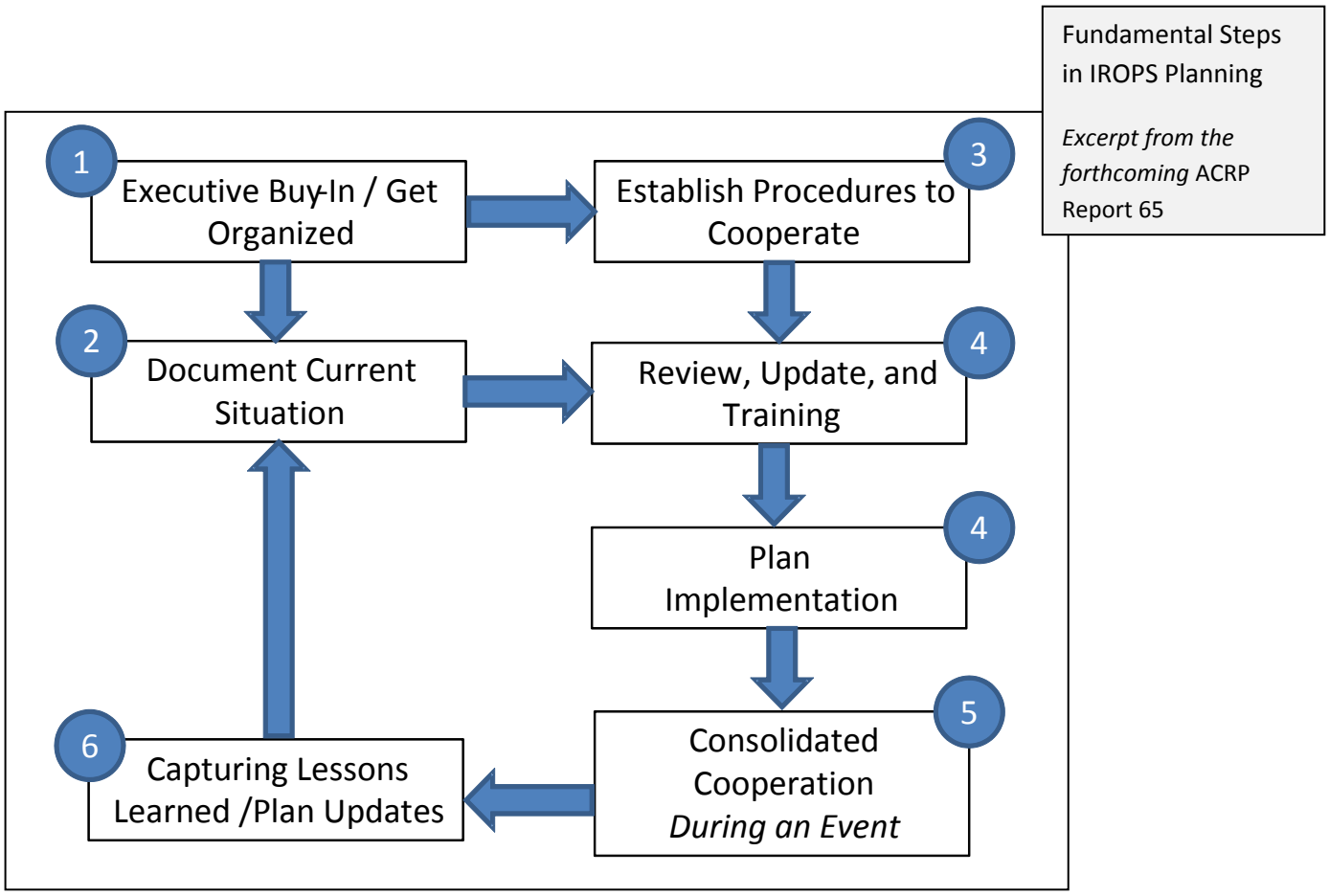
The first draft of the guidebook was recently completed. Five airports of varying size across the country tested the guidebook to provide local validation of the guidebook's usefulness in the planning process. The test program airports were John F. Kennedy New York International Airport, Salt Lake City International Airport, General Mitchell Milwaukee International Airport, Fort Wayne International Airport, and Waco Regional Airport. The guidebook is currently being reviewed and realigned to consider any new findings and suggestions from these five airports. The final guidebook is anticipated to be issued in the second quarter of 2012 and published as *ACRP Report 65*.

Why should your airport develop its own IROPS Contingency Plan?

While recent changes to the U.S.DOT rules concerning the requirement for air carriers to coordinate their Tarmac Delay Contingency Plans directly with airports apply only to airlines, your airport's participation in the response efforts of airlines is crucial to helping prevent the types of egregious IROPS incidents that have happened in the past and that resulted in significant passenger harm and public relations nightmares for airports. Such incidents have been considerably reduced in number at airports that have developed and implemented their own comprehensive, coordinated plan for dealing with IROPS situations. Participation by airport operators involves a variety of areas, including facilitating communication and providing facilities as well as services to support airline response efforts. Your airport's IROPS Contingency Plan will ensure that your support efforts are properly aligned with the FAA's, TSA's, CBP's, and airlines' response efforts, and that the airport community's overarching goal of mitigating the hardships on passengers during IROPS situations is realized.

What can your airport do <u>today</u>? A preview of *ACRP Report 65.*

The guidebook recommends starting your airport's IROPS response planning today. Advanced planning is necessary so you can establish local agreements for cooperation and collaboration between various aviation service providers before potential IROPS events occur. Suggested IROPS planning steps to achieve cooperation and collaboration have been condensed from the forthcoming *ACRP Report 65: Guidebook for Airport Irregular Operations (IROPS) Contingency Planning*, and are provided in the figure below for your use.



1. **Executive Buy-in / Get Organized:** First, you should establish executive buy-in from your airport and each of your local aviation service provider organizations. These should include airport operations, airlines, concessions, ground transportation, local accommodations, government agencies (Transportation Security Agency – TSA, Federal Aviation Administration – FAA, Customs and Border Protection – CBP), fixed-base operators (FBOs), refuelers, military (if a joint-use facility), executive management liaison, and emergency response. Next, your airport should create an IROPS Contingency Response Committee that includes representatives from your local providers (above). The Committee should be led by an IROPS Chairperson, who typically is a representative of your airport. The goal of your airport's Committee will be to establish and enhance contingency plans for local service providers through their collective, cooperative, and collaborative decision making.

2. **Document Current Situation:** Your airport's IROPS Committee should identify and gather important response plan information from service providers to ensure collaboration and cooperation. These response plans from individual organizations should be evaluated for adequacy during four categories of IROPS impact situations, which are *surge, capacity, off-hours,* and *extended stay.* Each of these unplanned situations should be considered for impacts involving aircraft and passengers. For example, planning for an off-hours situation involving both aircraft and passengers should consider unplanned aircraft arrivals, the ability to meet passenger needs such as concessions, staff access to secure side, and the availability of CBP and TSA staffing. The collective comparison of current IROPS Contingency Response Plans between service providers should include a review of local IROPS events history, identification of customer needs, evaluation of how to track delayed aircraft, the tracking of equipment inventory, and the determination of skills availability. Key airport implementation should include maintaining and sharing local contact and email distribution lists.

3. **Establishing Procedures to Cooperate:** Your airport will need to determine how to establish cooperation with local service providers in order to meet passenger needs. These include concessions, ground transportation, and government agencies (FAA, TSA, and CBP) as related to their staffing and resource capabilities. Cooperation is needed for responding to after-hours operation; surge in the number of passengers in the terminal and/or needing transportation to local accommodations; and consideration for diverted flights, including international flights into airports without a CBP presence. Every airport should establish a local process to monitor and maintain its overall airport capacity status during an evolving IROPS event.

4. **Review, Update, and Training for Plan Implementation**: After determining what improved procedures are necessary and beneficial to IROPS planning, your airport should conduct coordinated training exercises to ensure these plans are understood by all involved service providers. Table-top exercises are recommended to utilize considerations of both local IROPS events and events involving other regional airports. A key element of these exercises should be testing for impacts from each of the four IROPS situation types, which are *surge, capacity, off-hours,* and *extended stay.*

5. **Summary of Consolidated Cooperation Actions to Be Taken *During* IROPS Events**: When your airport is experiencing an IROPS event, three actions are critical: *communication, coordination*, and *collaboration*. This requires your local service providers to work together to communicate aircraft status in the air and on the ground, as well as execute IROPS procedures. Your airport IROPS Committee needs to ensure the capability for coordinating shared information for both aircraft status and airport capacity.

6. **Capturing Lessons Learned and Plan Updates as Required**: Your airport should host an after-action meeting to review performance effectiveness as soon as is practical following return of operations to a normal state. Part of the recommended debriefing procedures should be the identification of lessons learned. The airport IROPS response planning documentation should be reviewed by the IROPS Contingency Response Committee and updated as appropriate.

What tools can assist you <u>now</u>? *The Diversion Checklist* and *Sample Equipment List.*

Extracted from the draft *ACRP Report 65: Guidebook for Airport Irregular Operations (IROPS) Contingency Planning,* the following diversion checklist and equipment list will help you in the event that an aircraft is diverted to a reliever airport. This checklist demonstrates the steps that should be taken by airlines, the diversion airport, and public safety as outlined below: before, during, and after a diversion event. The sample equipment list will assist you in creating your own list of resources you can utilize during an aircraft diversion.

AIRLINE DIVERSION CHECKLIST

(EDIT AS NECESSARY TO MEET YOUR AIRPORT'S NEEDS)

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 point of contact (POC) and ensure 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 DIVERSION CHECKLIST

(EDIT AS NECESSARY TO MEET YOUR AIRPORT'S NEEDS)

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 is 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 attached 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 a 24/7 phone numbers.

During:

Operations Center:

- ☐ Notify:
  - ☐ Airport duty manager in charge
  - ☐ Law enforcement officer (LEO) in charge
  - ☐ Federal security director (FSD)
  - ☐ Senior duty manager (or deputy aviation director – airside operations)
  - ☐ 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, 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.

Airport Operations Manager:

- ☐ 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 (PAX) 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 consider:
  - ☐ 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 the air traffic control tower (ATCT) 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 reboarded 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 stem checkpoint to prevent reentry of unscreened passengers
- ☐ Coordinate provisions with the airport's concessions.
- ☐ Ensure 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 rentail
  - ☐ Parking
  - ☐ Military (if on-site)
  - ☐ FBO

PUBLIC SAFETY DEPARTMENT DIVERSION CHECKLIST

(EDIT AS NECESSARY TO MEET YOUR AIRPORT'S NEEDS)

Before (if notified prior to aircraft landing):

- ☐ Notify airport operations specialist on duty.
- ☐ 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.

(SAMPLE) EQUIPMENT LIST

(EDIT AS NECESSARY TO MEET YOUR AIRPORT'S NEEDS)

Sample Equipment List	Airline	Airline	Airline	Airline	Airline	Airport	Other
737 TB							
757 TB							
767 TB							
A319/320 TB							
AIRBUS TB							
A320 TB							
MD80/90 TB							
CRJ200 TB							
CRJ700/900 TB							
E190 TB							
Q-400 TB							
UNIVERSAL TB							
737 PUSHUP STAIRS							
737 AIR STAIRS							
757 CABIN ACCESS STAIRS							
757 PSGR STAIRS NON-MOTORIZED							
767 STAIRS							
767 PUSHUP STAIRS							
747/777 STAIRS							
A320 DIESEL POWERED AIR STAIRS							
A320 PUSHUP STAIRS							
MD80 GALLEY ACCESS STAIRS							
AIR START							
AIR START WIDEBODY CAPABLE							
GPU							
BOTTLE AIRSTART							
LAVATORY SERVICE CART							
LAV TRUCK, WIDEBODY CAPABLE							
POTABLE WATER CART							
CABIN SERVICE LIFT TRUCK WIDEBODY OK							
PUSHBACK TRACTOR, WIDEBODY CAPABLE							
PUSHBACK TUG							

Provided compliments of:

Mead & Hunt

For more IROPS contingency plan information, please contact:

Rose Agnew
Report 65 Author and
National Practice Leader
rose.agnew@meadhunt.com
314-604-6677