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AIRPORT COOPERATIVE RESEARCH PROGRAM

ACRP SYNTHESIS 73

Emergency Communications Planning for Airports

A Synthesis of Airport Practice

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Cover figure: Triennial Exercise at Rochester International Airport, August 2015 (photo: Peggy Gray).

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FOREWORD

Airport administrators, engineers, and researchers often face problems for which information already exists, either in documented form or as undocumented experience and practice. This information may be fragmented, scattered, and unevaluated. As a consequence, full knowledge of what has been learned about a problem may not be brought to bear on its solution. Costly research findings may go unused, valuable experience may be overlooked, and due consideration may not be given to recommended practices for solving or alleviating the problem.

There is information on nearly every subject of concern to the airport industry. Much of it derives from research or from the work of practitioners faced with problems in their day-to-day work. To provide a systematic means for assembling and evaluating such useful information and to make it available to the entire airport community, the Airport Cooperative Research Program authorized the Transportation Research Board to undertake a continuing project. This project, ACRP Project 11-03, "Synthesis of Information Related to Airport Practices," searches out and synthesizes useful knowledge from all available sources and prepares concise, documented reports on specific topics. Reports from this endeavor constitute an ACRP report series, *Synthesis of Airport Practice*.

This synthesis series reports on current knowledge and practice, in a compact format, without the detailed directions usually found in handbooks or design manuals. Each report in the series provides a compendium of the best knowledge available on those measures found to be the most successful in resolving specific problems.

PREFACE

By Gail R. Staba Senior Program Officer Transportation Research Board All airports are faced with the challenges of dealing with the flow of accurate information during emergencies—flows within the airport's organization, between the airport and its response partners, and between the airport and the public, either directly or through the media. Changing technology affects all these flows, and airports are challenged to acquire and effectively use the technology.

Many airports find benefits from going beyond regulatory minima for communication plans. This is true of the FAR Part 139 airports as well as for the general aviation airports. An effective communication plan enhances not only safety but also customer service. The focus of the report is on emergency communications planning and is specifically designed for use by airport senior management, public information officers, and first responders and emergency managers.

The most direct and useful parts of this report are the sample communication plan tables of contents, field operations guides, and the checklist of effective communications plans. These materials were derived from a survey of 60 U.S. airports regarding their specific communications plans and procedures as well as from five highly detailed case examples and five additional focused interviews. The checklist is designed to assist airport managers, emergency managers, and planners in the development, implementation, and evaluation of effective communications plans or crisis communications plans.

James F. Smith, Smith–Woolwine Associates Inc.; Kimberly A. Kenville, University of North Dakota; John M. Sawyer, JMS Airfield Safety Consulting LLC; and Ricardo E. Garcia, collected and synthesized the information and wrote the report. The members of the topic panel are acknowledged on the preceding page. This synthesis is an immediately useful document that records the practices that were acceptable within the limitations of the knowledge available at the time of its preparation. As progress in research and practice continues, new knowledge will be added to that now at hand.

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Note: Photographs, figures, and tables in this report may have been converted from color to grayscale for printing. The electronic version of the report (posted on the web at www.trb.org) retains the color versions.

EMERGENCY COMMUNICATIONS PLANNING FOR AIRPORTS

SUMMARY

All airports face serious challenges when dealing with the flow of accurate information during emergencies—communication within the airport's organization, between the airport and its response partners, and between the airport and the public, either directly or through the media. Changing technology affects all these interactions, and airports must address the acquisition and effective use of new technologies. What is possible today is illustrated by the triennial exercise carried out at Rochester (Minnesota) International Airport in August 2015, when the airport and its partners incorporated the airport's comprehensive crisis communications plan and social media into the exercise.

The focus of this report is on emergency communications planning that can be used by airports of any type or size. It is specifically designed for use by airport senior management, public information officers (PIOs), and first responders and emergency managers. The most directly accessible parts of this report are the sample communication plan tables of contents, field operations guides (Appendices D–L), and the checklist of effective communications plans, designed to assist airport managers, emergency managers, and planners in the development, implementation, and evaluation of effective communications plans or crisis communications plans, which appears as Appendix M. These materials were derived from a survey of 60 U.S. airports regarding their specific communications plans and procedures, as well as from five detailed case examples and five additional focused interviews, detailed in chapter one and Appendix C.

Most airports in the study found that going beyond minimum regulatory requirements for communication plans offered substantial benefits. Many also reported that an effective communication plan enhances not only safety but also customer service.

A few airports have transitioned from a traditional airport emergency communications plan (ECP) to a comprehensive crisis communications plan (CCP) with the difference being that the CCP deals with mission-critical events not covered by the airport emergency plan (AEP). There is evidence in the survey data that many airports are considering this change.

Analysis of the data for this synthesis led to 12 conclusions:

- It is important that an effective AEP/CCP be flexible enough to deal with fast-evolving technological change.
- 2. The process of creating an ECP has benefits beyond its implementation, especially when the planning process includes stakeholders (on and off the airport) and is based on a frank hazards analysis covering both emergencies and "mission-critical" systems failures and events.
- 3. An effective AEP/CCP requires clear and scalable implementation procedures that promote the accurate and timely exchange of information within the airport and between the airport and its partners and customers.
- 4. A continually improving communications/crisis communications plan is not a static document, but evolves through exercises, evaluations, and application of lessons learned.
- 5. Training on the coordinated and effective use of communications tools is essential.
- 6. Airports benefit from doing more emergency communications planning than is required in an AEP or comparable for non-Part 139 airports.
- 7. Many airports in the study are moving in the direction of a single comprehensive EOP that incorporates communication planning.

- 8. A comprehensive stand-alone plan is best when incorporated in the airport's AEP and firmly anchored in the National Incident Management System (NIMS) and Incident Command System (ICS).
- 9. An airport's public information officer can manage the development, maintenance, and monitoring effort of the comprehensive emergency/crisis communications plan, but this requires close collaboration with airport operations, emergency management, and first responders.
- 10. Redundant and interoperable means of communications are essential.
- 11. Airports of any type or size can profitably leverage the communications capabilities of their emergency partners using NIMS and ICS as bases.
- 12. Effective emergency communications can make a conduit from safety to improved customer service. This is especially true regarding the fast-evolving use by airports of social media for emergencies and other crises.

The synthesis also suggested possible topics of further research, described in more detail in chapter nine, Conclusions and Suggestions for Further Research, including:

- 1. Use of social media in airports for communicating emergency information to passengers and the public.
- Data-mining techniques for social media that airport emergency managers can use to improve situational awareness.
- 3. Automated methods of maintaining and updating contact lists consistent across all airport platforms.
- 4. Training for the development, implementation, and evaluation of AEP/CCPs.
- 5. Public information roles and the training to fulfill them.
- 6. Models of AEP/CCP language for the accommodation of people with disabilities or who are non-English speakers.
- 7. Development of performance metrics for emergency communication.
- 8. Methods of training airport employees and partners in supplemental roles in emergency communications.
- Methods of promoting ADA compliance for all emergency communications including websites and social media.
- 10. Customer service-related or financial benefits that may accrue from airports' incorporating emergency management and communications into their strategic or business plan.

CHAPTER ONE

STATE OF THE PRACTICE

Emergency communications and crisis communications are essential tools for airports to stay in contact with employees, airlines, tenants, customers, first responders, mutual aid partners, and communities. Perhaps more than any other area of airport operations, emergency communications is being revolutionized by rapid technological and cultural change. This study will seek to answer four overarching questions about emergency and crisis communications planning at airports:

- 1. What is the planning process for emergency communications?
- 2. What is the resulting plan like?
- 3. How satisfied is the airport with the results?
- 4. What future directions or trends does the airport anticipate in its emergency communications plans and planning process?

During final data collection for this synthesis, the authors found a report on a full-scale exercise at Rochester (Minnesota) International Airport (RST) that was highly innovative and that showed the benefits pre-planning and imagination can yield for an airport's exercise program. RST's experience provides a snapshot of what was possible in August 2015. Furthermore, it illustrates the relationships linking airport emergency communications planning, training, exercising, continuous improvement, customer service, and resiliency. The following case example was developed for this study and also for ACRP Synthesis S04-17, *Tabletop and Full-Scale Emergency Exercises for General Aviation, Non-hub and Small Hub Airports.*

This case example is based on an article by Kristin Shaw, featured in the November/December 2015 issue of *Airport Improvement* magazine; and follow-up interviews with Tiana Rossow, RST's marketing and communications manager; and Ken Jones, the City of Rochester's emergency manager.

With permission of the author and publisher of *Airport Improvement* magazine, the article was slightly amended to delete any explicit or implied endorsement of specific commercial products as dictated by the policies of the TRB. The original article can also be viewed online at http://www.airportimprovement.com/article/emergency-drill-rochester-intl-includes-social-media-simulation.

2015 RECERTIFICATION FULL-SCALE EXERCISE WITH EMPHASIS ON SOCIAL MEDIA USE, ROCHESTER, MINNESOTA (RST)—NAVIGATING SOCIAL MEDIA WITHIN AN AIRPORT EMERGENCY EXERCISE

Rochester International Airport (RST) recently enhanced its training regimen by adding crisis communication components to its latest full-scale safety exercise. Aircraft rescue and firefighting staff, ramp workers and other frontline employees were under scrutiny during the Minnesota airport's four-hour mock disaster; but employees handling media relations were also put to the test (Figure 1). To increase realism, RST added the wildcard factor of social media.

To put it mildly, social media has turned the field of crisis communications on its head. Whether an event is caused by a hurricane, inflight incident or trouble in the terminal, the public expects information and updates much faster and more often than it did just a few years ago. Typically, people learn details and see photos through Facebook, Instagram, and Twitter before airports issue official statements—often well before reliable facts and information are available.

Allowing RST's communications staff to experience the breakneck speed of social media during a staged training scenario helped them understand how news of airport disasters literally races forward.



FIGURE 1 Triennial exercise at Rochester International Airport, August 2015 (Peggy Gray photo).

Firsthand experience trying to keep pace with a story—and possibly get ahead of it—was deemed highly beneficial.

"We knew it would be a very good learning experience," says Rossow, the airport's marketing and communications manager. "In the real world, we needed to know how the communication would be conveyed."

Facebook Factor

Having conducted tabletop exercises in 2013 and 2014, the airport staged a full-scale training event in September that simulated an aircraft crash. For the media relations element, RST not only included its own communications staff, the airport also included employees from local fire and police departments; Red Cross; Mayo Clinic; Rochester Airport Company (the airport's management company, a subsidiary of Mayo Clinic); Rochester Emergency Management, and various city departments. To ensure it could mobilize even wider resources during an actual emergency, the airport also invited representatives from a variety of other organizations. The multi-agency communications team used a cloud-based application simulation [from a vendor] to train privately on social media tools without compromising security and safety. The system replicates the functionality of Facebook, Twitter, Instagram, YouTube, and web blogs, as well as more traditional media such as television, newspapers, and radio.

"Social media and other emerging digital technologies are playing an increasingly essential role in responses to natural disasters, terrorist attacks, civil and political unrest, criminal investigations, and military operations," says Mark Amann, senior vice president and chief executive officer of [the vendor] that RST utilized. "These technologies not only provide a unique opportunity for organizations to communicate directly with the public, but they also are a source for previously unavailable situational awareness and intelligence."

Down to the Nitty-Gritty

In addition to social media, RST's training scenario addressed scene command operations, triage and transport of victims, scene investigation, fatality management operations, family assistance, and joint information system operations (including mass-alerting public messages in multiple languages).

"In 2012, the triennial airport exercise tried to accomplish unified scene command, public information and family assistance, and we were partially successful," recalls Rochester emergency manager Jones. "For 2015, our goal was to emphasize the need for true unified operations at the scene, comprehensive family assistance operations, and joint public information center activities."

The exercise specifically tackled the common issues of conflicting command teams and uncoordinated public messages. When command teams did not appear to be working together, trainers used

"injects" to steer teams together and force them to work in a unified command structure. Family assistance center operations were extended to the community Emergency Operations Center (EOC) and hospital family support center. A new fatality management plan that was created after the 2012 exercise provided a live playing field to train medical examiner staff and police department investigators.

"This exercise was deeper and more challenging, and the teams benefited greatly," Jones reports.

Although the previous full-scale exercise identified one person as the sole public information officer, this year's exercise used a community team to coordinate scene communications with social media messages and press releases.

"Tiana (Rossow) is the only person on the airport staff who handles communications, so in an emergency situation we would rely on the surrounding community to act as public information officers," explains Jones. "When you thrust people into an emergency situation, it's hard to get everyone together. In the exercise, we wanted to get them used to working together."

During the 2012 exercise, the team discovered that the public information officer became so engrossed in some aspects of rescue duty it became difficult to provide timely information to the media. In that case, Mayo Clinic was forced to handle media inquiries, which proved to be inefficient.

"With such a small staff, it's important for us to have community helpers in a case like this," says Rossow. "This simulation helped us get to know each other and ensure we have each other's contact information so we know who to rely on."

Given the opportunity to learn how to respond during an airport emergency, community resources outside of airport operations, such as personnel from the library or public utilities, could be great assets if we understand how to work together, Rossow elaborated.

During the exercise, the RST team established a Joint Information Center, which was specifically designated for members of the airport/community communications team, as well as a separate media center for outside newsgatherers on airport grounds. Team members also held a simulated press conference, with mock media members trained to ask tough questions like real reporters.

Facts & Figures

Project: Full-scale emergency simulation **Location:** Rochester (MN) International Airport **Timeline:** Planning began in spring for September drill

New Strategy: Communications staff practiced using social media during an emergency and leveraging local public information resources from outside the airport. Primary Exercise Participants: Airport personnel; fire and police departments; Red Cross; various city departments; Mayo Clinic; Rochester Emergency Management

Other Participants: Public works; public library; public utilities; public schools; Minnesota Department of Transportation; Department of Public Health, county sheriff's office

Unique Dynamic: City-owned airport is managed by Rochester Airport Company, a subsidiary of Mayo Clinic

"Using the simulation product, we could respond to radio and TV reports, and we got to follow Twitter and Facebook posts to practice how to respond after the incident," recalls Rossow. "Very quickly, you see how the airport can be affected by the public perception."

One of the biggest lessons was learning how to ensure a good flow of information without communicating too much. "Everything happens so quickly that you have to be able to react quickly, but not with anything that could be inaccurate," she explains. "You have to be able to confirm details before you put them out."

Not speaking on behalf of the airline was another key takeaway. "As the airport operator, there is very limited information we can speak about," Rossow relates. "We just want the public to know that we're communicating and involved."

[The simulation] also prompted the communications team to consider logistic details such as information technology resources necessary to operate remotely. "If I don't have access to my office, I need to know how to respond," she explains. "What would I need? Where is that backup location? How do I get more hands on deck to help with the fast-paced information that is flowing? Taking the time to think about that is important."

Navigating New Media

Following RST's full-scale exercise complete, participants are still reflecting on lessons learned in September. The power and speed of social media made an impression on the communications team. It is important that each airport undertaking its full-scale and tabletop exercises go beyond the usual training requirements under FAR Part 139, and really strive to incorporate new issues (social media) into their usual scenarios of aircraft incidents. This exercise has undoubtedly provided some impressive skill growth for RSA.

"Better decisions help us save lives and protect our employees and customers. These exercises are a great opportunity to fail in a risk-free event. We had a chance to make mistakes in a good way, and we learned so much from our mistakes. In the case of a real disaster, we are as prepared as we can be, and that's important," said Jones.

In follow-up interviews, synthesis authors reached out to Shaw, Rossow, and Jones.

Shaw is a staff writer for *Airport Improvement* magazine with experience in social media and marketing airport technology. When asked what words of advice she would give airports working with social media, she cautioned that an airport should not allow untrained personnel to respond using the airport's social media channels. With inexact procedures in place, communications could load one disaster on top of another. From her perspective working in the aviation industry, she thought a comprehensive crises communications plan (CCP), such as the one Rochester has put into place, would be most advantageous to airports with single point of contact. "It would prove difficult for airports to have multiple plans, especially when they have limited staff to deploy those plans."

Shaw also thought it would be much easier for airports to drill using a single plan rather than multiple CCPs, and where mutual aid is initiated, a single plan and single point of contact would appear to be the most efficient use of resources. The main factors Shaw thought were important concerning the RST exercise included: (1) the airport has a plan; (2) it is involving the community and has the community's support; (3) it is daring to drill on new and difficult topics in order to "get it right" when the time comes; and (4) it is very clear concerning duties and what staff will answer communication media.

Rossow indicated that as she was relatively new to the marketing/communications position, she had very little time to be a major part of the exercise planning team, and that Jones took the lead by introducing the simulation of social media into the exercise. The city purchased the simulation in conjunction with the local healthcare system that is the management company of the airport, Mayo Clinic. Rossow suggested that important aspects to think about in the planning stages are that an airport has a limited amount of staff that can be utilized: When mutual aid is activated, there will

connections and build our recovery team."

be a Unified Command (UC) and Joint Information Center (JIC), so the better prepared the non-airport personnel can be, the better off the airport will be in the long run. Airport employees were manning the simulated disaster itself, while other city/county/Mayo employees were manning the UC/JIC, so "this exercise allowed us to make

Discussing the role of social media and emergency management, Jones indicated that people will seek substantiation when they hear a warning or find out that some sort of disaster has occurred. "When people hear a siren, they usually don't take cover but instead go outside to see what's going on" in order to validate what they have just heard. In the past, "people would ask friends or neighbors, but in today's world people want to sort out what they've heard and they turn to social media to validate the information. Therefore, the emergency manager has an opportunity to provide meaningful, credible information, and will have to utilize all types of social media; it is simply another communication tool."

Airport Demographics
NPIAS category: Non-hub primary airport
FAR Part 139: Yes
Number of passengers (2014): 237,341
Amount of cargo (2014): 25,000,000 pounds
Number of operations (2014): 107/day
Number of airport employees: 18
Number of airport employees (person-years) devoted
to exercise development and execution: divided between
planners and players; two planners on the airport side
of the house and two—three on the city EM side
Budget for exercises: No official budget, so items,
mobile trainer for exercise, and equipment had to be

Governance: City-owned but operated by subsidiary of Mayo Clinic

purchased on the day.

The goal of this exercise was to improve upon the 2012 exercise, which Jones thought was adequate; but to further the goal of continuous improvement, he wanted to improve the medical examiner's fatality management plan, coordinate with the airlines' family assistance plan, and the public information plan. The 2012 exercise indicated that having one person at the airport acting as a public information officer (PIO) in addition to other duties was not sufficient; so another goal was to broaden the Joint Information System (JIS) with city, county, and Mayo employees and their respective resources.

Jones purchased a one-year subscription to the simulation product for public information; including social media. The vendor came in on separate occasions to train on the product and run small scenarios during the year leading up to the airport's triennial exercise. Since then, the healthcare system in the city of Rochester has purchased the simulation software and is now the lead in a regional JIS effort.

In designing the exercise, RST and the city emergency manager used the DHS Homeland Security Exercise and Evaluation Program (HSEEP) as a guide, but adapted it where necessary. When asked if the exercise had an assessment component, Jones said scoring an exercise would be judgmental. "It is about continuous improvement;" and evaluating such exercises should be more realistic and concentrate not on a particular "score" but on continuously improving the training and exercising until the group feels confident with the item being tested, and then move to another item to refine.

SUMMARY

RST's example shows what any airport can do with emergency communications and exercises if it applies imagination, innovation, and careful pre-planning in an atmosphere of collegial cooperation with its emergency response partners and major stakeholders. RST has taken the maximum advantage of its relationships with the city and a famous medical institution, both of which have reputations for forward-looking applications of technology and training to emergency preparedness. The exercise was also exemplary in its extensive use of social media—both incoming and outgoing. Furthermore, the RST example shows the extensive benefits that using a comprehensive crisis communications planning process can give.

The RST example points toward future developments in crisis communications planning and the role of social media in emergency management at airports. RST used one tool that facilitates using of social media in emergencies, and recent history suggests that technology will continue to create such tools with ever-increasing capabilities. Social media will provide increased methods for monitoring, gathering, and analyzing data for situational awareness; and for acquiring actionable intelligence allowing response. Coordinating comprehensive CCPs and social media will yield major benefits to airport leadership teams, emergency responders, and to those responsible for public information.