ACRP Problem No. 12-04-01

Evaluation of Alternative Organizations for Emergency Management for Airports

ACRP Staff Comments: No comments offered.

TRB Aviation Group Committees Comments: AVIATION SECURITY & EMERGENCY MGT CMTE: Recommended. A review of current practices and applied lessons from the airport operations and emergency response community to develop reference materials is worthy of support. The need is a bit overstated. Nonetheless, the proposer will find it challenging to create guidelines, a model, or even a robust decision tool that will apply broadly.

Review Panel Comments: Recommended — There is value in finding potential alternatives, even if the timing isn't ideal because of the recent mandate to rewrite AEPs. Any tool(s) that can help directors at small airports gather information is worthwhile. This is likely a need for small/medium-sized airports, but not necessarily for big airports, as small airports don't have emergency management staff to help in this arena. This problem statement could be blended with 12-04-04 and 12-04-08, with 12-04-04 being the primary one. But the focus should be in emergency management planning.

AOC Disposition: No funds allocated. No discussion.
I. PROBLEM TITLE
Evaluation of Alternative Organizations for Emergency Management for Airports

II. RESEARCH PROBLEM STATEMENT
In about the past five years and especially since the issuance of AC 150/5200-31C Airport Emergency Plans on 19 June 2009, most commercial airports and many large general aviation airports have been reconsidering their internal organization and external relationships for emergency management. There are a number of alternative arrangements, some of which appear to be more effective or promising than others.

III. OBJECTIVE
To provide airports with effective and cost-effective models for internal and external organization for emergency management.

IV. RESEARCH PROPOSED
Use literature review, document review, interviews, and workshops/focus groups to:

1. Identify basic types of alternative organizational arrangements for emergency management at airports.
2. Establish definition and criteria for evaluating effectiveness of emergency management at airports.
3. Evaluate a sufficient number of representative airports to be able to validate the definition and criteria.
4. Apply the criteria to the major basic alternative organizational models for emergency management at airports.
5. Create decision tool to help airports choose most effective and most cost-effective emergency management model for their situations.

V. ESTIMATE OF THE PROBLEM FUNDING AND RESEARCH PERIOD
Recommended Funding: $350,000
Research Period: 18 months

VI. URGENCY AND PAYOFF POTENTIAL
Most airports have struggled with the rewrite of their airport emergency plans (AEPs), and many have found it necessary to reconsider their internal organization and external relationships for emergency management. Given the relatively small size of EM staffs at airports and their coordination, training, and communications role, the typical costs of EM to an airport are small. However, poorly done EM in an accident, incident, emergency, or disaster can expose the airport to huge costs and liabilities. Optimizing an airport’s EM organization and capability has a huge benefit-to-cost ratio.

VII. RELATED RESEARCH
Smith, J. F. (2010). Airport disaster preparedness in a community context. Presentation at Transportation Research Board Annual Conference, January 12, 2010,
Smith, J. F. Keeping airports functional during disasters. Webinar for American Society of Civil Engineers.


VIII. PERSON(S) DEVELOPING THE PROBLEM

James F. Smith
Principal, Smith-Woolwine Associates Inc.
385 Sam Reed Rd NW, Floyd, VA 24091
540-763-3068
Cell 540-239-1206
Fax 540-763-2068
jfsmith@swva.net

IX. PROCESS USED TO DEVELOP PROBLEM STATEMENT

This problem statement was developed by an individual (James F. Smith) and is based on his research and professional experience.

X. DATE AND SUBMITTED BY

James F. Smith
Principal, Smith-Woolwine Associates Inc.
385 Sam Reed Rd NW, Floyd, VA 24091
540-763-3068
Cell 540-239-1206
Fax 540-763-2068
jfsmith@swva.net
February 24, 2011

Submit to: Michael R. Salamone, C.M.
Manager—ACRP
Transportation Research Board
500 Fifth Street., N.W.
Washington, D.C. 20001
202/334-3224
FAX 202/334-2006