ACRP Problem Statement: 53   **Recommended Allocation:** $250,000

Airside Planning, Design, and Operations Electronic Resources Library

Click here to see problem statement in IdeaHub: http://ideascale.com/t/UKsrZBS7U
(Note: you must be a registered user in myACRP/IdeaHub.)

TAGS: Airport Planning, Airside, Construction, Design, Emergency Management, General Aviation, Information Technology, Legal, Maintenance, Noise Impacts, Operations, Safety, Security

STAFF COMMENTS

ACRP already has a few electronic resource libraries that could possibly serve as models for the proposed research. If this expands on Web Resources 2, the funding could be less.

AVERAGE INDUSTRY RATING SUMMARY

	Committees[1]	Airport Community[2]
Achievable	3.50	4.11
Applicable	3.50	4.39
Implementable	4.00	4.17
Understandable	4.00	4.44
OVERALL	3.75	4.28

Notes: 1. Includes TRB aviation committees and committees from ACI-NA and AAAE.
*   2. Includes airport employees serving on active ACRP project panels.*

CLICK HERE TO SEE DETAILED INDUSTRY RATINGS
CLICK HERE TO SEE DETAILED INDUSTRY COMMENTS

ACRP OVERSIGHT COMMITTEE (AOC) DISPOSITION

The average AOC rating among its voting members was 2.8 on a scale of 1 to 5. There was discussion about how to keep this and other electronic resources current. The problem statement was not selected for ACRP funding and will be returned to the idea collection phase of ACRP's IdeaHub.

ACRP Problem Statement: 53

Airside Planning, Design and Operations: Electronic Resources Library

TAGS: Airport Planning, Airside, Construction, Design, Emergency Management, General Aviation, Information Technology, Legal, Maintenance, Noise Impacts, Operations, Safety, Security

OBJECTIVE

The objectives of this research project are to:
- Create an electronic resources library – preferably a website. This searchable electronic library should provide an inventory of available publications including the abstracts and index of ACRP research documents and non-ACRP research documents related to airside planning, design and operations.
- Recommend a process for keeping the website up-to-date.
- Identify which of the related ACRP documents should be updated. If updates or additional research are needed, propose problem statements for future consideration.
- Recommend a process for keeping these ACRP documents up-to-date.

The final deliverable should include:
- An electronic resource (preferably a website);
- A detailed manual for facilitating the management and update of the electronic resources library, as well as all the documents and files used for designing and implementing the library;
- A report on the continuous update process for the electronic resources library and the related ACRP documents.

BACKGROUND

The technical documentation on airside planning, design and operations is vast and include several layers Federal and Statewide regulations, FAA orders and advisory circulars, ACRP publications, ICAO documents, ACI handbooks and common agreements (e.g. AACG and BACG), IATA manuals, NFPA codes and standards, research documents, and publications on best practices and lessons learned. These references are not all well-known by the airport operators, the stakeholders, and the practitioners in general. There is a need for a comprehensive inventory of the relevant sources, and a consolidation in an online library.

A similar research effort is underway for passenger terminal design. ACRP Project 07-15 "Airport Passenger Terminal Design: Electronic Resources Library" intends to create a self-contained (e.g., CD-ROM or other media) searchable electronic library of available documents including the abstracts and index of ACRP research documents and non-ACRP research documents related to airport terminal planning and design. Include rationale for their inclusion. Also, a review of the related ACRP publications will be performed, and recommendations will be made on the needs for updating them.

This idea is a parallel and complementary approach on airside/airspace issues. The development of future ACRP online resources library should be consistent and could be based on a single platform for simplifying the access and enhancing its visibility. This could be achieved through a single, consolidated online library providing the airport community with an inventory the technical literature for all the different parts and functions of the airport.

APPROACH TO RESEARCH

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The litterature on airside planning, design and operations is vast and include several layers of Federal and Statewide regulations and guidance, FAA orders and advisory circulars, ACRP publications, ICAO documents, ACI handbooks and common agreements, IATA manuals, NFPA codes and standards, research documents, and publications on best

practices and lessons learned. An Electronic Resources Library (ERL) can help the airport community to find all documents applicable to a particular topic.

SYNERGIES WITH ACRP PROJECT 07-15

This ERL could be an extension of the existing ACRP Airport Passenger Terminal Design Electronic Resources Library. The development of future ACRP online resources library should be consistent and could be based on a single platform for simplifying the access and enhancing its visibility. This could be achieved through a single, consolidated online library providing the airport community with an inventory the technical literature for all the different parts and functions of the airport.

OBJECTIVES

The final objective is to provide the airport community with an electronic resources library. This searchable electronic library should provide an inventory of available publications including the abstracts and index of ACRP research documents and non-ACRP research documents related to airside planning, design and operations.

PROPOSED TASKS

The research shall include:
a.   Identifying the relevant resources to be indexed,
b.   Proposing a technical solution for an electronic resources library (CD-Rom/.iso file, website, etc.),
c.   Recommending a process for managing and keeping up-to-date the library,
d.   Developing a user-friendly electronic resources library easy to manage and update,
e.   Identifying the ACRP documents to be updated or the additional research efforts required, and
f.   Developing the related problem statements,
g.   Recommending a process for keeping up-to-date the related ACRP documents.

Especially if this ERL is merged with the Airport Passenger Terminal Design Electronic Resources Library, it is recommended to add specific tasks on library management and user interface:
h.   Advanced FAQ and AI/chatbot to answer queries,
i.   Crowdsourcing methodology / de-centralized resource management and inputs.

COST AND JUSTIFICATION

The estimated funding is $300,000.

This budget is based on a benchmark of similar ACRP project, and especially Project 07-15. Costs might be reduced by developing this airfield ERL as an extension of the existing ACRP Airport Passenger Terminal Design Electronic Resources Library.

The estimate research duration is 15 months.

The final deliverable shall include:
•   An electronic resource (website);
•   A detailed manual for facilitating the management and update of the electronic resources library, as well as all the documents and files used for designing and implementing the library;
•   A report on the continuous update process for the electronic resources library and the related ACRP documents.

RELATED RESEARCH

- ACRP Project 07-15 – Airport Passenger Terminal Design/Electronic Resources Library:
https://crp.trb.org/acrp0715/
- The French Civil Aviation Technical Center (DGAC/STAC) maintains an electronic resources library (in French) for all the different parts and functions of the airport: http://www.libelaero.fr/

- Skybrary Aviation Safety by Eurocontrol: https://www.skybrary.aero/index.php/Main_Page

IDEA CREATOR
Person who first shared the idea with the IdeaHub community.

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OWNER/SUBMITTER
Person who volunteered to be responsible for developing the idea into a problem statement.

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