UTC RESEARCH PROJECT DESCRIPTION

PROJECT NUMBER
03108

PROJECT TITLE
Runway Topography Considerations in Airport Licensing

PRINCIPAL INVESTIGATOR
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PROJECT OBJECTIVES
Inspect Alabama’s general use airports to determine if safety-related runway topographic features exist that compromise licensing. Data will be posted to the ALDOT Aviation Bureau licensing web site.

MODAL ORIENTATION OF PROJECT
Aviation Transportation

PROJECT ABSTRACT
Topographic deficiencies near runways may compromise FAA funding for runway pavement as well as other airport improvements. This one-year project will inventory Alabama’s general use airports to determine if topographic features exist in the runway environment that may compromise safety and future licensing. Data from this study will be included in the ALDOT Aviation Bureau home page and a determination will be made concerning the relative severity of the problem in Alabama’s general use airports.

TASK DESCRIPTIONS
Task 1 - Inventory runway topographies for 72 Alabama general use airports.
Task 2 - Incorporate these topography inventories into the ALDOT Aviation Bureau licensing database.
Task 3 - Determine if a runway area topography “factor” should be established in the revised weighted licensing procedures for Alabama’s general use airports.
MILESTONES AND DATES
- Task 1    August 1, 2003
- Task 2    October 1, 2003
- Task 3    December 31, 2003

TOTAL BUDGET
One-year project:  $50,000

STUDENT INVOLVEMENT
A graduate student at the Master’s level and an upper-division undergraduate student will be used in this project.

RELATIONSHIP TO OTHER RESEARCH PROJECTS
The need for this project was identified during activities associated with the UTCA project “Web-based Airport Licensing” (Project 02101).

TECHNOLOGY TRANSFER ACTIVITIES
This project will generate a final report, inclusion in the ALDOT Aviation Bureau web-based inspection/ licensing software, a thesis, and a technical paper. The latter will be submitted to the Transportation Research Record for peer review and publication.

POTENTIAL BENEFITS OF THE PROJECT
1. Topographic features will be included in the inspection/licensing procedure for airports in Alabama.
2. Airport operators can be cognizant of topographic features that could compromise FAA funding.
3. ALDOT and University specialists will be brought closer together to create better working relationships in a common cause.

TRB KEYWORDS
General-use airports, airport inspection, airport licensing, runway topography