

# AIRPORT PAVEMENT Design & Evaluation WORKSHOP

## 2012

**January 30 - February 1**  
Tampa, FL

Specific details and hotel arrangements will  
be available at [www.ACConline.org](http://www.ACConline.org).

Reflects the changes  
to FAA A/C 5320-6E  
and provides hands-on  
experience with  
FAARFIELD, the FAA's  
pavement design software

Successful participants  
will have completed 18  
Professional Development Hours

**ACC**  AIRPORT CONSULTANTS COUNCIL  
**INSTITUTE**

# AIRPORT PAVEMENT Design & Evaluation

## WORKSHOP

### Course Objective

At the end of this course, successful participants will be able to describe the principles of airfield pavement design, develop airfield pavement designs for new or rehabilitation projects, and evaluate the structural capacity of existing pavements using the FAA's latest pavement design procedures and tools.

### Who Should Attend?

This course is aimed at engineers and practitioners responsible for the design or construction of new or rehabilitated airfield pavements. Participants need not have previous pavement design experience, but should be familiar with pavement engineering principles and pavement materials.

### Course Method

This course consists of a combination of lecture-discussion and pavement design workshops from airport consultants, FAA representatives and other industry leaders. Participants will need to bring a laptop to complete design workshops and will be provided with a CD-ROM of relevant FAA Advisory Circulars and airfield pavement design tools.

## PRELIMINARY AGENDA AS OF 8/3/11

### DAY ONE

7:30 – 8:00 am	REGISTRATION/CONTINENTAL BREAKFAST
8:00 – 8:20 am	<b>Course Introduction</b>
8:20 – 9:00 am	<b>Overview of Airfield Pavement Design</b> Evolution of Airfield Pavement Design Empirical Procedures Mechanistic-Empirical Procedures
9:00 – 9:10 am	BREAK
9:10 – 10:30 am	<b>Airfield Pavement Types and Pavement Performance</b> Overview of Pavement Types (Flexible, Rigid, Composite) Paving Materials Base/Subbase Materials Pavement Performance
10:30 – 10:45 am	BREAK
10:45 – 11:20 am	<b>Subgrade Soils and Granular Materials</b> Characterizing Pavement Materials Evaluating in Place Conditions Determining Inputs for Pavement Design Frost Protection Considerations
11:20 am – 12:00 pm	<b>Aircraft Traffic (Brill)</b> Characterizing Aircraft Loads in FAARFIELD Cumulative Damage Factor (CDF) Gear Naming Conventions Pass-to-Coverage Ratio (P/C)
12:00 – 1:00 pm	LUNCH
1:00 – 2:00 pm	<b>Flexible Pavement Design</b> Failure Mechanisms Required Input Variables Flexible Pavement Design Using FAARFIELD
2:00 – 2:15 pm	BREAK
2:15 – 3:30	<b>Workshop: Flexible Pavement Design</b>
3:30 – 4:45	<b>Rigid Pavement Design</b> Failure Mechanisms Required Input Variables 3-D Finite Element Model Rigid Pavement Design Using FAARFIELD
4:45 – 6:00	<b>Welcome Reception</b>

### DAY TWO

7:30 – 8:00 am	CONTINENTAL BREAKFAST
8:00 – 9:30	<b>Rigid Pavement Design Details</b> Slab Size Joint Considerations (Types, Spacing, Sealant) Load Transfer Reinforcing Steel
9:30 – 9:45 am	BREAK
9:45 – 11:15 am	<b>Workshop: Rigid Pavement Design</b>
11:15 am – 12:00 pm	<b>Pavement Design for Light Aircraft and Shoulder Design</b>
12:00 – 1:00 pm	LUNCH
1:00 – 1:45	<b>Current Airfield Pavement-Related Research</b>
1:45 – 1:55 pm	BREAK
1:55 – 3:00	<b>Overlay Design</b> HMA over HMA HMA over Rubblized PCC HMA over PCC PCC over PCC PCC over HMA
3:00 – 3:10 pm	BREAK
3:10 – 4:10	<b>Pavement Evaluation and Overlay Considerations</b> Pavement Evaluation Process Analysis of Existing Pavements Overlay Considerations Reflection Crack Control Measures
4:20 – 5:00	<b>Workshop: Overlay Design</b>

### DAY THREE

7:30 – 8:00 am	CONTINENTAL BREAKFAST
8:00 – 8:45 am	<b>Workshop: Overlay Design (continued)</b>
8:45 – 10:00 am	<b>ACN-PCN Procedure</b> Concept and Purpose Definitions How to Determine ACN and PCN Using FAA's COMFAA Program
10:00 – 10:15 am	BREAK
10:15 – 11:45	<b>Workshop: PCN Evaluation</b>
11:45 – 12:00	<b>Wrap-Up Session</b>

Registration fee includes 3 continental breakfasts, 2 lunches and opening reception.

Registration form & hotel information available at [www.ACOnline.org](http://www.ACOnline.org)