



U.S. Department
of Transportation

**Federal Aviation
Administration**

Advisory Circular

Subject: AIRFIELD PAVEMENT SURFACE
EVALUATION AND RATING MANUALS

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Initiated by: AAS-100

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Change:

1. PURPOSE. This Advisory Circular (AC) provides guidance on understanding and rating the surface condition of flexible and rigid airfield pavements. It describes types and causes of distress and provides a simple system to visually rate pavement condition on a scale ranging from excellent to failed.

2. BACKGROUND. The Federal Aviation Administration (FAA) evaluated options for improving the quality of information available to the Agency on airfield pavement conditions in response to Section 160 of the Wendall H. Ford Aviation Investment and Reform Act for the 21st Century (P.L. 106-181). The evaluation resulted in selecting an existing inexpensive pavement condition rating system to adapt for use on airfield pavements. The rating system is modeled after the University of Wisconsin's Pavement Surface Evaluation and Rating System (PASER). The rating system is meant as a source of information for rating pavements under the airport safety data program. The manuals will also assist airport managers in understanding the surface condition of airfield pavements.

These manuals were produced for the FAA by Engineering Professional Development, College of Engineering, University of Wisconsin-Madison.

3. APPLICATION. The FAA recommends the information and procedures contained in the manuals for use by airport staff and consultants directly or in combination with additional testing and data collection in a more comprehensive pavement maintenance management system.

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The information in this AC is not intended to decide the need or timeliness for pavement rehabilitation projects. These decisions should be determined as a result of more technical investigations that may include a detailed pavement condition index (PCI) study.

The manuals will help provide a degree of uniformity to field observations made by individuals collecting data for the Airport Master Record (FAA Form 5010). The data element description for Surface Type/Condition (Data Element 33 of the National Airspace System Resources database) has been revised to incorporate information from this AC.

The manual for asphalt airfield pavements is included in this AC as Appendix 1. The manual for concrete airfield pavements is included as Appendix 2.

4. RELATED READING MATERIAL. AC 150/5380-6, *Guidelines and Procedures for Maintenance of Airport Pavements*, and AC 150/5380-8, *Handbook for Identification of Alkali-Silica Reactivity in Airfield Pavements* provide additional guidance and technical information for identifying distresses in airfield pavements.

5. ONLINE AVAILABILITY. To view and download this AC, visit the FAA Web site at <http://www.faa.gov/arp/150acs.cfm>.

**APPENDIX 1--ASPHALT AIRFIELD PAVEMENT
SURFACE EVALUATION AND RATING MANUAL**

**APPENDIX 2--CONCRETE AIRFIELD PAVEMENT
SURFACE EVALUATION AND RATING MANUAL**