Airfield Concrete Pavement Restoration (CPR) Workshop Introduction

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There's plenty of room for all God's creatures.
Right next to the mashed potatoes.
SASKATOON
STEAKS • FISH • WILD GAME
477 HAYWOOD ROAD
FAIRWAY

- **Welcome to our workshop**
  - Informal so Ask Questions at any time
  - Presentations will be put on CAC's website
  - Handouts
    - Agenda of workshop
    - Copy of Design and Control of Concrete Mixtures for each organization
    - CD of Airport related material
  - Websites
    - www.iprf.org
    - www.faa.org
    - www.cement.ca
    - www.pavement.com
    - www.astm.org
    - www.igga.net

- **Airfield Concrete Pavement in Canada**
- **Distress Identification and Types**
  - FAA Distress Classification
  - ASTM Distress Classification
- **Review of pavement distress photos**
- **Best Practices for Construction of Airfield PCC Pavements**

Airfield Concrete Pavement in Canada

- **Aprons**
  - Majority of Canadian Airports use PCCP
- **Taxiways**
  - Combination of PCCP, ACP and composite pavement
- **Runways**
  - Majority of Canadian airports use asphalt (many US airports us PCCP)
  - Exposed Concrete runways
    - Vancouver
    - Dorval
    - Bagotville
  - Asphalt overlays of some PCCP runways

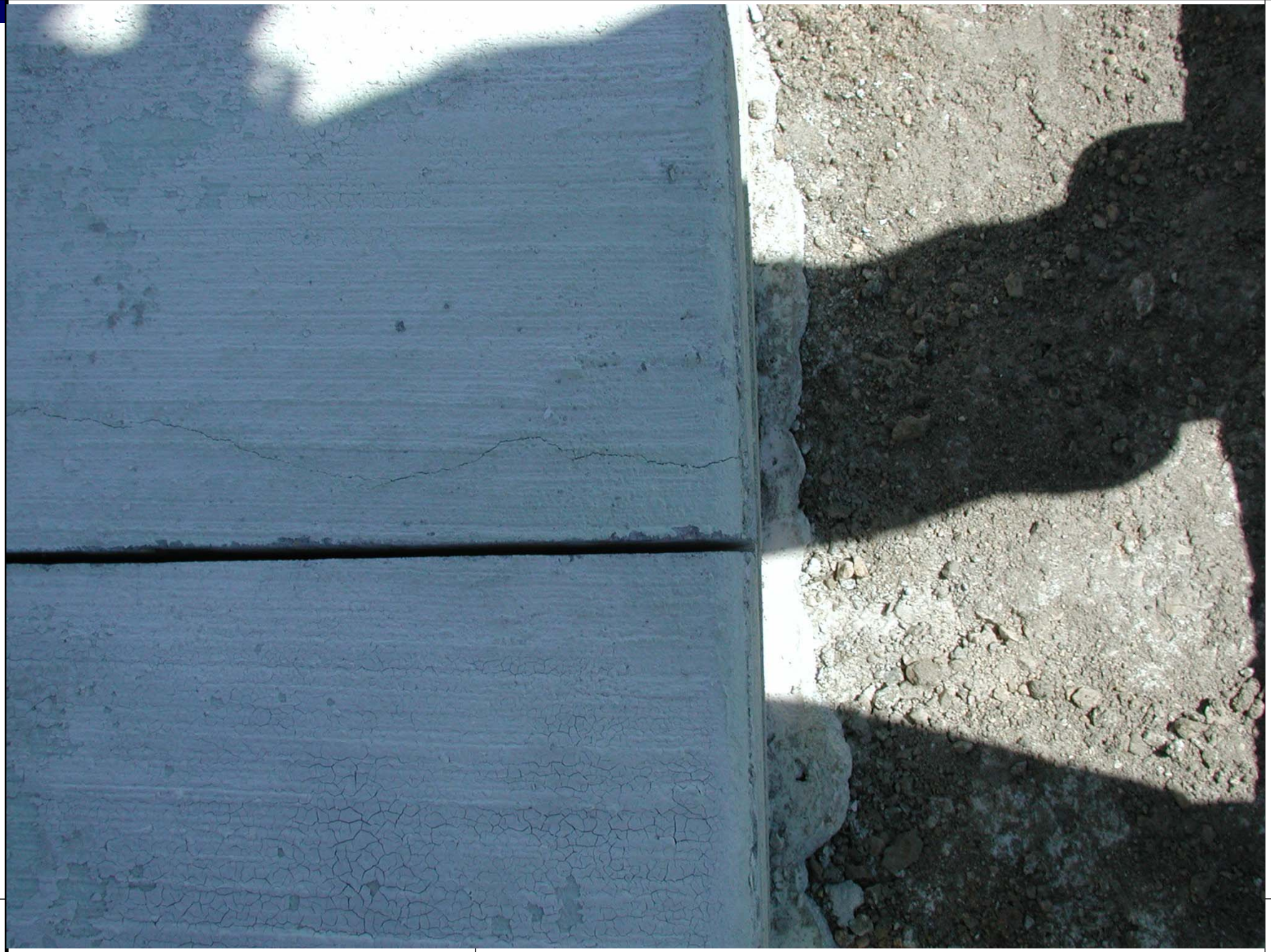
- **FAA Distress Classification from Guidelines and Procedures for Maintenance of Airport Pavements (Advisory Circular No: 150/5380-6A):**
  - Cracking
    - Longitudinal, transverse and diagonal
    - Corner breaks
    - Durability “D” cracking
    - Joint Seal damage
    - Shattered slab
  - Disintegration
    - Scaling, map cracking and crazing
    - Joint spalling
    - Corner spalling
    - Blowups

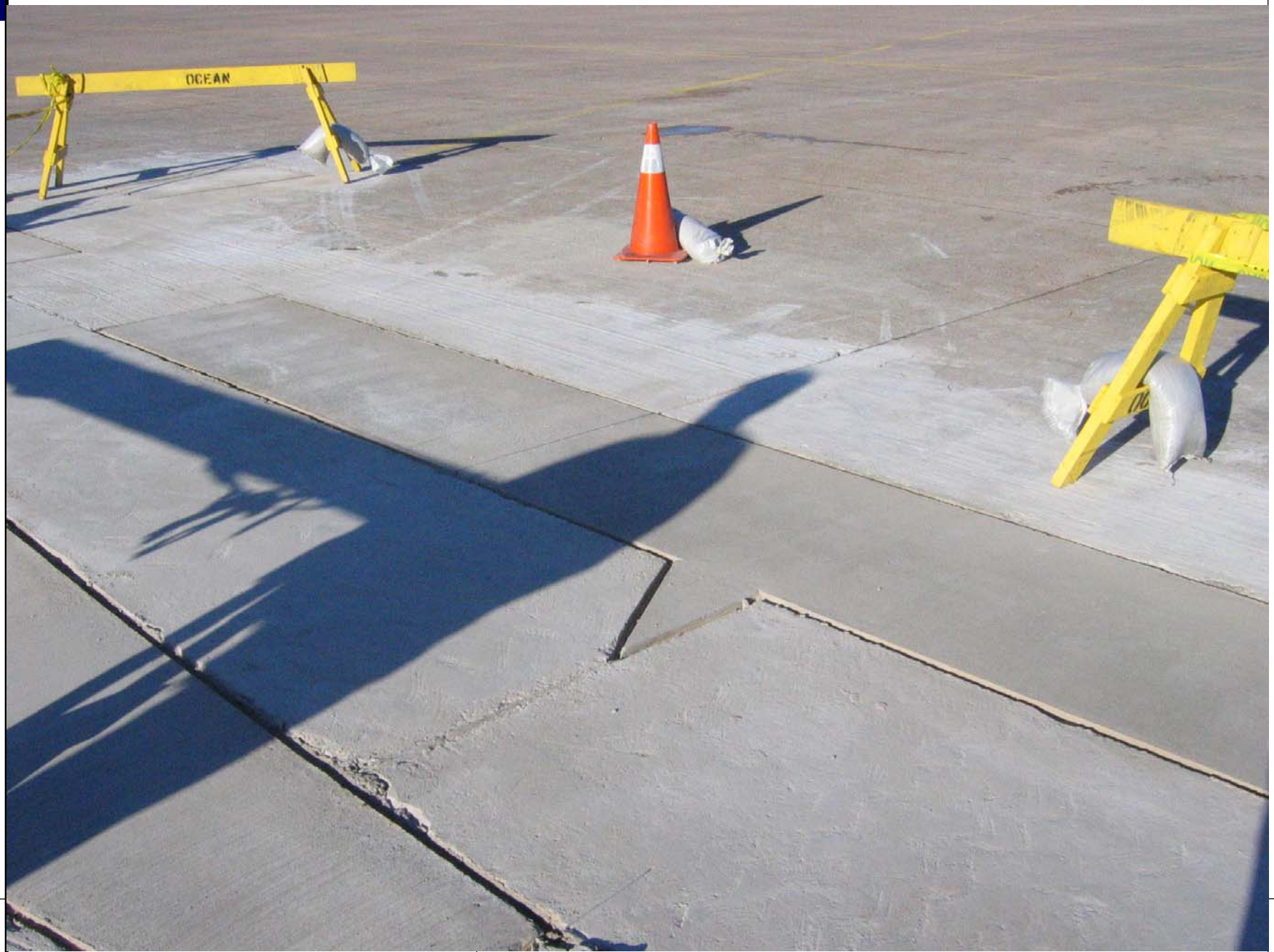
- **FAA Distress Classification continued**
  - Distortion
    - pumping
    - Settlement or faulting
  - Skid resistance
    - Polished aggregates
    - Contaminants

- **ASTM Distress Classification from ASTM D 5340 (15 categories for Pavement Condition Index):**
  - Blowup
  - Corner break
  - Longitudinal, transverse and diagonal cracks
  - Durability “D” cracking
  - Joint Seal damage
  - Patching (small 0.5 m^2)
  - Patching (large over 0.5 m^2) and utility cuts
  - Popouts

- **ASTM Distress Classification continued**
  - Pumping
  - Scaling, map cracking and crazing
  - Settlement / faulting
  - Shattered slab
  - Shrinkage Crack
  - Spalling – joint
  - Spalling - corner


CROWNE PLAZA

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An *IPRF* Research Report
Innovative Pavement Research Foundation
Airport Concrete Pavement Technology Program

Report IPRF-01-G-002-1

Best Practices for Airport Portland Cement Concrete Pavement Construction (Rigid Airport Pavement)

Program Management Office
1010 Massachusetts Avenue, N.W.
Suite 200
Washington, DC 20001

April 2003

Best Practice Manual Scope

- **Documents good construction techniques and practices**
- **Highlights elements of the PCCP paving process that have direct influence on end product quality**
- **Provides checklist on:**
  - Preconstruction Review
  - Inspection and Testing
  - Joint Sawing
- **Identifies practices that result in early age failures or poor long term performance**
- **How to get copy?**
  - Go to www.iprf.org/products/main.html

Thank You Very Much!