Airport considerations and airport solutions

Session 5
Presentation 3
King Abdulaziz International Airport Jeddah
Operational Management of Runway Repavement Project

Dr. Daniel Kösters, Director Airside Operations Improvement
Regional Runway Safety Seminar, Amman, 15 May 2012
Jeddah Airport, Facts & Figures

- No 1 Airport in KSA in terms of PAX
- 2011:
  - More than 22 Mio PAX
  - More than 160,000 MVTS
- Airfield Upgrade Project nearly completed
- Major Development Project Ongoing, Phase 1:
  - 30 Mio Passenger Terminal
  - ATC / Apron Control Tower
  - Aprons, Taxiways, Main Fire Station, Support Facilities etc.
- Fraport as Management Service Provider (MSP)
Jeddah Airport, Ground Movement Chart

- No 1 Airport in KSA in terms of PAX & MVTS
- 2011:
  - Airfield Upgrade Project nearly completed
- Major Development Project Ongoing, Phase 1:
  - 30 Mio Passenger Terminal
  - ATC / Apron Control Tower
- Fraport as Management Service Provider (MSP)
Repavement works: The problem

- East Runway 34R/16L main landing runway
- Asphalt with concrete turn pads at both ends
- After complete rehabilitation operational since 2008
- Within 4 years of operation significant rubber accumulation in 34R TDZ
- Even after rubber removal works friction values did not meet requirements
Repavement works: The problem
Collaborative Decision

KAIA Airport Operations

KAIA Safety & Quality Assurance

GACA ANS / ATC

GACA Safety & Economic Regulation

KAIA Technical Departments (Engineering / Maintenance)

Construction Company

Resurfacing / repavement required
Repavement works: The plan

- Repave 1600 m starting from 34R threshold
- 30 m width, 15 m each direction from CL
- 50 mm milling / repaving
Repavement works: Challenges

- Center Runway 34C/16C closed for rehabilitation
- Nighttime & weekend traffic peaks
- RSAF movements on RWY 34R/16L (e.g. training)
- Ground movement restrictions due to ongoing Airfield Upgrade Project
Repavement works: Solution

- Precise phasing
  - 10 construction zones
  - 12 working hours (daytime 0700 – 1900 LT) per zone
  - Runway operational: Nighttime, Wednesdays, Fridays
Repavement works: Facilitation

- Construction company on site for ongoing Airfield Upgrade Project
  - Easy and fast mobilization of staffs and equipment
  - Familiar with airport infrastructure & procedures
- Easy runway access via partially closed parallel Taxiway November
- East Runway 34R/16L is CAT I Runway only
  - No runway centerline lights
Repavement works: Daily Schedule

- 0700 LT: RWY closure as published by NOTAM
- ca. 0700 LT (Start): Dismantling of AGL (exits, entries)
- ca. 0715 – 1100 LT: Milling and removal of old pavement
- ca. 1100 – 1500 LT: Repaving / Reasphalting
- ca. 1500 – 1800 LT: Remarking and installation of AGL
- ca. 1830 LT: Clearing of RWY
- ca. 1800 – 1900 LT: Lighting & Marking & FOD inspection
- 1900 LT: RWY opening
THANK YOU