Fast Construction at Hartsfield-Jackson Atlanta Airport

Runway 9L/27R 78-Hour Closure
September 10 @ 2300 to Sep 14 @ 0515

Runway 9R/27L 78-Hour Closure
October 7 @ 2300 to Oct 11 @ 0215

Kathryn Masters, Assistant Director of Project Development
Taxiway Connectors - Overview
RW 9L-27R Construction Activity Footprint

- TW Connectors
- A380 Upgrades
- Repairs 2012
- 27R Paving

CWM access via Gate 69
CWM, APAC, AW Access via Gate 54
RW 9R-27L Construction Activity Footprint

- TW Connectors
- A380 Upgrades
- Repairs 2012
- 27R Paving
- CWM access via Gate 69
Goals

- Center Airfield Taxiway Connectors (Driver for Closure)
  - C.W. Matthews – Concrete Placement of New Taxiway Connectors both Runways

- Upgrades for A380 Operations
  - C.W. Matthews – Asphalt Shoulder Widening Along Full Runway Length both Runways

- Airfield Repairs 2012
  - APAC – Concrete Slab Replacement of Keel Section Approach Runway 27R (adjacent to M18 and M20)

- Runway 27R Paving & Lighting
  - Archer Western – Concrete Slab Replacement on Taxiway LA
  - Archer Western – Tensar Paint Green Islands at Taxiways LA, LB, LC

- DOA Maintenance
  - Markings, Electrical, Grading Repairs (within the vicinity of both runways and adjacent taxiways)
Risks

- Safety First - IIF Focused
  - Many crews on and near Runways
  - Several hundred workers
  - Hundreds of pieces of equipment

- Weather
  - Rain = Lost Time

- Decision Making
  - Saturated sub-grade = impact to the critical path of the aggressive schedule
  - Quality Control & Quality Assurance
  - EOR & DOA Engineering Coordination

- Teamwork!
Access West End – Runway 9L

Vehicle Crossing Controlled by “Construction One”
Access East End – Runway 27R

“Construction One”  “Construction Two”  “Construction Three”

Barricades  Aircraft Crossings  Access  VM Signage

Note: Barricades placed across runway must be continuous across 2/3 of the runway with enough room on north end for vehicle crossings.
This crossing will be restricted to CWM concrete trucks (& CWM support vehicles) only coming to CATC project from the batch plant east of airport.

Contractor should expect heavy delays 8:30 – 11:00AM and 4:00 – 11:00 PM due to heavy aircraft traffic crossing.
RW 9L-27R CATC - Just Getting Started
RW 9L-27R CATC - Midway
RW 9L-27R CATC - Down to the Wire
RW 9L-27R CATC - Success
RW 9L-27R Pavement Replacement - APAC
RW 9R-27L CATC – Just Getting Started - CWM
RW 9R-27L  A380 - CWM
CATC – Substantially Complete!
Coordination

- Stakeholders
  - DOA Planning and Development
  - DOA Airfield Operations
  - DOA Maintenance
  - DOA Security
  - FAA ATCT
  - Airlines
  - C.W. Mathews Contracting Co. Inc.
  - APAC Tennessee
  - Archer Western Contractors, Ltd.
  - Hosts of Subcontractors & Vendors
RW 9L-27R Wrap Sheet

- After 77Hrs-45min Runway 9L-27R was released to ATCT at 5:15 am on September 14, 2012

- Final Statistics
  - Over $6 million in Construction Value Spent ($64,000/hour)
  - 4 Separate Construction Projects
  - 3 Prime Contractors
  - 25 Subcontractors (Companies)
  - 500 Construction workers (Total of all trades and contractors)
  - 175 Trucks (all trucks- debris removal, asphalt, concrete)
  - 35 Pieces of Concrete Paving Equipment
  - 35 Pieces of Asphalt Paving Equipment
  - 25 Pieces of Grading Equipment
  - 2630 CY of concrete
  - 37,627 Square Yards of Asphalt (17,838Tons of Asphalt)
After 73Hrs-45min Runway 9R-27L was released to DOA at 2:15 am on October 11, 2012

Final Statistics

- Over $2 million in Construction Value Spent ($28,000/hour)
- 2 Separate Construction Projects
- 1 Prime Contractors
- 10 Subcontractors (Companies)
- 300 Construction workers (Total of all trades and contractors)
- 75 Trucks (all trucks- debris removal, asphalt, concrete)
- 25 Pieces of Concrete Paving Equipment
- 25 Pieces of Asphalt Paving Equipment
- 25 Pieces of Grading Equipment
HJAIA Projects in 2013

- Airfield Repairs 2013 – Advertise Nov 2012
- Ramp 5&6 Pavement Replacement – Advertise Dec 2012 or Jan 2013
- Taxiway Pavement Replacement Phase I – Advertise Jan 2013 or Feb 2013
- Runway 8L/26R Pavement Replacement – Advertise Mar 2013
Contract Format Changes

- Exhibit A - General Conditions
- Exhibit B - Special Conditions
- Exhibit C – Quantities, Pricing and Data
- Exhibit D – Insurance and Bonding/Construction Safety and Health Plan
- Exhibit E – Scope of work and Specifications
- Exhibit F – Index of Drawings
- Exhibit G – Airport Security Program
- Exhibit H – Schedule Requirements
- Exhibit I – Quality control Program
- Appendix A – Office of Contract Compliance
Qualification Changes

- Submittal approval required prior to start of work for that Trade.

- Submittal required after Award of the Contract. Bid must include subcontractor who meets qualifications.

- Qualifications based on individuals not companies.
Qualification Changes

- **Striping and Marking Personnel Qualifications:**
  - The striping shall be performed by personnel that have experience performing airfield projects of similar scope and magnitude as what is required in this contract. Refer to Specification P-621 for technical requirements.
  - The Project Manager shall have a minimum of five (5) years’ experience overseeing airfield striping operations.
  - The Superintendent shall have a minimum of three (3) years’ experience overseeing crews performing airfield work.
  - Each operator and/or technician shall have a minimum of one (1) year of experience performing airfield striping.

- **Joint Sealing Personnel Qualifications:**
  - The joint sealing shall be performed by personnel that have experience on airfield projects of similar scope and magnitude as what is required in this contract. Refer to Specification P-605 for technical requirements.
  - The Foreman shall have a minimum 5 years’ experience directing joint sealing operations.
  - The Sawman shall have a minimum 2 years’ experience.
  - Laborers and Joint Strikers shall have a minimum of one year experience running tools pertaining to joint sealing.

- **Electrical Personnel Qualifications:**
  - Electrical work on the airfield shall be performed by personnel that have experience on airfield projects of similar scope and magnitude as what is required in this contract. Refer to Electrical Specifications “L-“ series for technical requirements. All personnel in a field supervisory position and/or crew leader shall have a minimum of 3 years’ experience with the following:
    - Medium Voltage Constant Current Series circuits.
    - Installation of airfield lights (Runway Guard, Taxiway Centerline, Taxiway Edge, Clearance Bar, Runway Centerline, Runway Edge and Touch down Zone) including setting light base cans and proper torqueing of fixtures.
    - Troubleshooting and installation experience with airfield lighting system equipment such as Constant Current Regulators, Airfield Lighting Control and Monitoring System, Land and Hold Short Power and Control Units and Brite Control System.
    - Performing Insulation Grounding Resistance testing.