

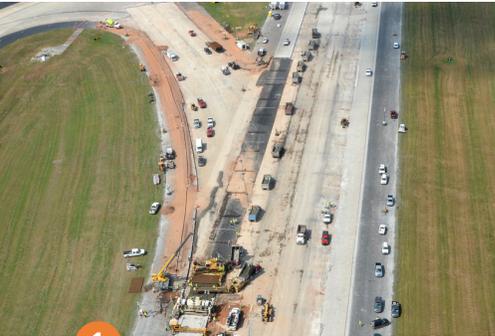


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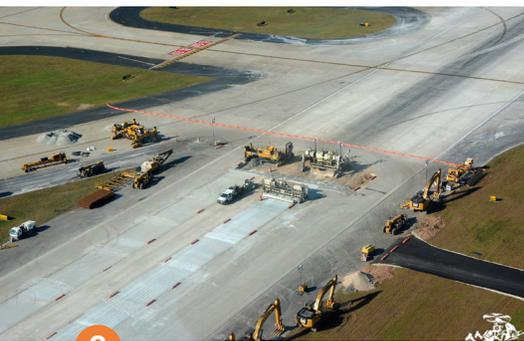


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## Hartsfield-Jackson Atlanta International Airport Runway Replaced with Concrete Pavement in Under a Month



**1** 9,000 foot-long arrival runway



**2** Only 29 days to complete the project



**3** Installation of 45,000 dowels

In construction, a \$500 per minute liquidated damages clause leaves no room for error. ACPA-SE member McCarthy Improvement Company, paired with joint-venture partner C.W. Matthews, approached the Hartsfield- Jackson Atlanta International Airport (HJAIA) Runway 8L-26R Keel Replacement project with extremely detailed preparation.

A 9,000 foot-long Category III arrival runway, 8L-26R handles over 500 domestic, international, and cargo flights to Atlanta every day. Noting an approximate loss of \$1.5 million a day for H-JAIA when a significant runway is closed, the design team, Aviation Infrastructure Solutions Joint Venture, and the client allowed only 29 days for the runway and high-speed taxiway portion of the project to be completed.

These 29 days were used to demolish and replace 99,684 square yards of 20-22 inch thick concrete (roughly 60,000 cubic yards of concrete), place 835,444 SY of welded wire fabric, install approximately 45,000 dowels, and do all of this around 520 newly installed light cans, requiring the reinforced concrete to be placed in two lifts. The team came up with an innovative, two-concrete layer installation paving train. It consisted of a modified Gomaco 2600 placer with vibrators and hydraulic controlled gates that would lift up as they approached a pre-set (pre- installed) light can to allow the paver (the placer) to pass without damaging the cans.

The paving train was followed by a welded wire fabric (WWF) cart that placed the fabric, a hydraulic crane for restocking the WWF, a Guntert S850 paving machine, a Gomaco profilograph machine, and finally, a Gomaco T600Texture/Curing machine. This set-up allowed crews to insert the wire mesh and pre-set the runway and taxiway centerline light cans.

This paving train was operated by two teams working in 13-14 hour overlapping shifts. Concurrently, another concrete team paved four other taxiways. Daily, approximately 300 trailers and dump trucks had to be coordinated, escorted, and kept separated, along with the 400-500 people working on this project.

There were unavoidable delays, including Air Force One landing at the airport on the first day of construction, shutting down the airfield for six hours, but ultimately the project was turned over to the owner ahead of the original schedule.

In an email, Norma Click, the City of Atlanta's project manager, wrote: "I am happy!...It took a tremendous effort and...I appreciate all of the planning you put forth as well as participating in all of the logistics/coordination efforts." The project will serve the Atlanta hub for years to come.

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