

CASE STUDY

CLIENT

Bournemouth Airport is operated by Regional & City Airports (RCA) part of Rigby Group plc. It's located 3.5 NM north-northeast of Bournemouth, in southern England. The site opened as RAF Hurn in 1941 but was transferred to civil control in 1944. For a short period Hurn served as London's international airport, until the opening of facilities at Heathrow.

The Bournemouth Airport Management Team, together with over 120 members of staff, oversee the daily running of the airport. The primary function is the management, delivery, and operation of a range of airport services which enables passengers to move through the airport terminal building onto and from an aircraft in a safe manner with minimal delay and disruption. Bournemouth Airport is also committed to monitoring and improving the overall quality, environmental and health and safety performance in all aspects of service delivery.

CHALLENGE

Lagan Airport Maintenance Limited (LAML) were contracted to undertake Taxiway Refurbishment of Taxiway Romeo and Taxiway Bravo at Bournemouth Airport. Both taxiways were previously used as WWII Runways, and have been used more recently for A340 taxi operations. These primary routes onto the main runway, required refurbishment which included:

- Construction of 2 no. concrete blisters and all associated AGL and drainage
- Construction of 2 no. vehicle bays and associated line marking
- Asphalt patching of the taxiway shoulder at Bravo
- Installation of a duct crossing at Taxiway Romeo
- Asphalt Patching of the taxiway at Romeo
- Overlay of the Taxiway at Romeo

LAML were awarded additional works undertaking patching on the main runway, Taxiway Charlie and the access to the main apron. The works were undertaken in conjunction with Bournemouth Airport during a series of daytime closures of each taxiway, and night-time possessions, requiring each area to be made available for aircraft use by the next shift.

RESULTS



Asphalt Patching

LAML undertook approximately 1700m² of asphalt patching on Bravo Taxiway, primarily undertaken during daytime closures. For the night-time possession works, on Romeo, we undertook 670m² of asphalt patching. On the runway 26 Turning Circle, we undertook 960m² of patching and on Charlie and the Apron Taxiway, 54m².

Scope

To successfully plan the works, LAML undertook a joint inspection with the airport, measuring each patch in turn. The patching scope was to plane out, saw cut, clean, spray with K140, place asphalt to the required depth (80mm HDM Binder, 40mm SMA surface course). We reviewed core data and inspected the surface condition to ascertain if additional depth would be required due to the condition of the pavements that were being treated and allowed an amount for regulating material should this be required. Line markings were reinstated where required in patched locations.

Planning and Logistics

Planning a series of patches in the most efficient way, that were to be undertaken on days and nights, in 5 different areas of the airport, required methodical logistical planning. LAML agreed the dates for work to be undertaken with the airport and reviewed the routes to the works locations to formalise the sequence of the work. LAML had security passed personnel to provide escorts to the asphalt team and brings supply trucks in and out of the airfield, along with a low-loader to safely move equipment between locations and minimise FOD risk. LAML employed a full-time sweeper to ensure cleanliness was maintained within the work areas and the haulage routes. We used towable tower lights which were transported between locations to ensure safe working when on nights. We worked closely with the Client to hand over each area of the airfield before moving on to the next, completing a full FOD check prior to moving from location to location, facilitating a smooth hand back to Operations and ATC each shift.

Quality Assurance

In line with the contractual requirements and our internal quality processes and ISO 9001 standards, LAML completed laying records for the works undertaken to ensure that the patching material met the temperature requirements and to monitor what material batches had been laid in which location for traceability and as built records.

