



Airport 2040

GATEWAY TO THE FUTURE

ESSENTIAL MAINTENANCE AND IMPROVEMENTS

Airport2040 represents the largest development at Guernsey Airport in more than 70 years, and will equip the airfield to serve the Island for the next 30 years.

The normal everyday operation of aircraft into and out of the airport inevitably results in considerable wear and tear to the runway and other airfield surfaces. Despite routine maintenance and repair, their condition has deteriorated over time.

The existing runway was last resurfaced in 1974. It would normally be expected to last between 15 and 30 years, so has served the Island well.

Other elements of the existing infrastructure also date back to the 1960s, and any major works trigger requirements to address aspects that no longer comply with modern aviation standards. Chief among these are the safety areas around the runway, its undulating profile, and the alignment of the taxiways.

The runway itself will be maintained at its existing length, but effectively moved to the west to provide a longer safety area at the eastern end.

Construction began in early 2012, and will take around two years to complete. The airport will remain operational, with work on the runway and taxiways taking place at night, and on other elements of the airfield during the day.

The essential maintenance and improvements include:

- Resurfacing the runway and creating a new section to effectively move the existing runway west.
- Extending the airfield west to improve the safety areas at each end.
- Reconstructing as new the entire concrete 'aprons' areas, where aircraft park.
- Replacing the ground lighting, now obsolete, and navigation aids.
- Replacing the entire drainage system.
- Overlaying, levelling and realigning the taxiways between the aprons and runway.

GUERNSEY AIRPORT
OPENED IN 1939, AND
TODAY PROVIDES A VITAL
GATEWAY TO AND FROM
THE ISLAND FOR NEARLY A
MILLION TRAVELLERS
EVERY YEAR. IT SUPPORTS
AROUND 650 DIRECT JOBS
AND PROVIDES AN INCOME
INJECTION OF MORE THAN
£30 MILLION TO THE LOCAL
ECONOMY.

HOWEVER, THE MAIN
ECONOMIC AND SOCIAL
BENEFITS COME FROM THE
LIFELINE CONNECTIONS IT
PROVIDES FOR THE
BAILIWICK - AS A PLACE TO
LIVE, WORK AND VISIT.

York Aviation, 2009

PROJECT ELEMENTS

THE PROJECT IS NOT SIMPLY A RESURFACING OF THE RUNWAY, BUT A PACKAGE OF ELEMENTS, ALL OF WHICH CONTRIBUTE TO THE OVERALL COST AND COMPLEXITY OF THE PROJECT.

THE RUNWAY

Strengthening and levelling

The runway will be overlaid to address the deterioration of the current surface and provide increased strength. It will also be levelled to achieve the required profile along its entire length, with the height increased in some areas, by up to 1.5 metres, and reduced at the western end to remove a noticeable ‘hump’.

Cross-section

The profile across the runway is not symmetrical, which has to be corrected when the new surface is overlaid. Concrete edges installed in the 1970s, which provide no operational benefit, will be removed to reduce the area requiring overlay and the need for additional drainage.

Runway ‘strip’

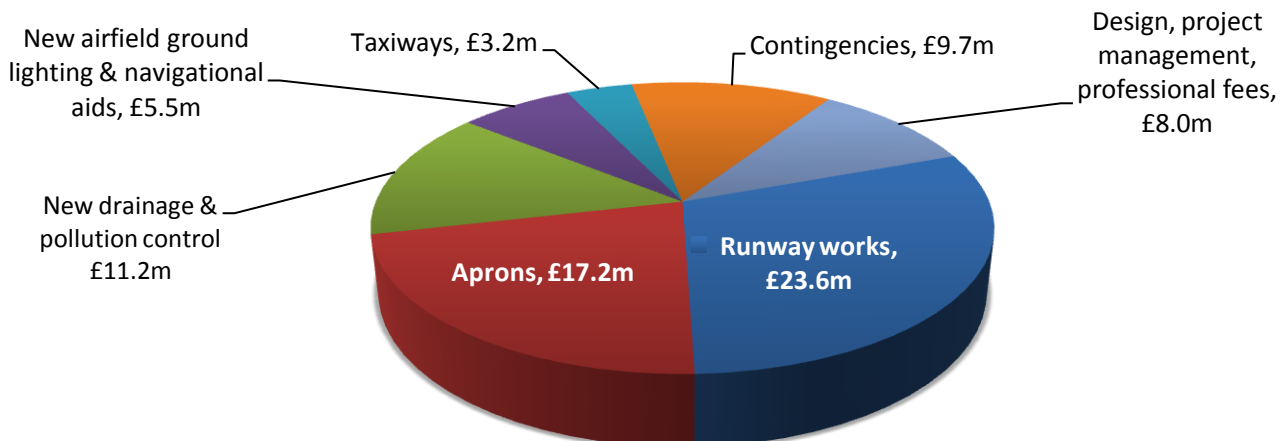
The area either side of the runway has to meet gradient and profile requirements, to protect passengers if an aircraft veers off the runway. The existing ground is too steep in places, and generally too high on one side and too low on the other.

Runway end safety areas (RESAs)

Safety areas are required at each end of the airfield, to protect passengers and aircraft in the event of a plane overshooting on landing or take-off. The existing provisions only meet the minimum requirement, and Guernsey Airport is expected to make improvements as part of any major works.

Extending the airfield east to provide a longer RESA at that end would require the adjacent valley to be infilled and roads rerouted. That would involve extensive engineering, at considerable cost and significant disruption.

The airport boundary is therefore being extended 240 metres to the west. This will enable longer RESAs at both ends by effectively moving the runway further west. A new section will replace around 120 metres at the eastern end, which will form part of the new safety area.



APRONS

The airfield aprons are where aircraft park, and mostly date back to the 1960s. They will be reconstructed from new, in phases so that adequate aircraft parking is maintained. The old concrete will be crushed and used elsewhere in the project.

DRAINAGE

The current drainage, installed in the 1960s, is in poor condition and beyond repair. The new system will incorporate facilities for storing and treating run-off water from the airfield, and containing and disposing of spillages. This will improve the current arrangements and provide better water capture.

TAXIWAYS

The 'roadways' that link the runway to the aprons and hangars also have to meet certain requirements, including strength and distance from the runway.

The most significant change will be 'Delta' taxiway, linking to the western end of the runway. This will be realigned to join up with the new section. Other taxiways will be resurfaced and realigned.

OTHER SYSTEMS

The airfield ground lighting is obsolete, and the existing navigational aids are being replaced, and relocated to the new runway 'configuration'. Both are specialist operations

TRAFFIC AND TRANSPORT

Around 350,000 tonnes of material are required for the work on the runway and aprons. Most of this has been imported via Longue Hougue, and is stockpiled there before being transported to the airport.

All vehicles on the mass haul route conform to local speed, size and load restrictions, and are fitted with a real time tracking system. They leave Longue Hougue fully loaded and travel south to the Halfway before turning right and heading inland to Vale Church. They then follow the coastal route to L'Eree, and turn inland again for the final leg.

Once unloaded, they continue on the anti-clockwise route through St Martin's to return to Longue Hougue, via Val des Terres.

Vehicle movements are restricted to avoid school drop-off and pick-up times.

The number of deliveries per day will vary considerably, but during the peak 12 months the daily average will be around 60. By comparison, there are normally more than 200 HGV movements daily along the Cobo coast road. The project will represent an increase of around 25% along this section of the route.

Plant and materials arriving via St Peter Port Harbour, in oversized vehicles, will be delivered to the airport under escort.

WORKS COMPOUNDS

Compounds have been set up for storing materials and equipment, preparing asphalt and concrete, and staff accommodation. Management of these sites will be key to minimising the impacts on neighbours, and various measures are in place to reduce any disturbance due to light, noise, and dust, and from the night-time work on the runway.

In the main, only the south compound, opposite the airport entrance, is in operation at night.

NO FURTHER CLOSURES

The project is designed such that the airport remains operational, with work on the runway and other key systems carried out at night. Four short closures were required during 2012 for elements that could not be completed during a normal night-time period. However no further closures are required.

OFFSETTING IMPACTS

GUERNSEY AIRPORT IS WORKING WITH ECOLOGISTS TO REDUCE THE IMPACTS OF THE ESSENTIAL MAINTENANCE AND IMPROVEMENTS.

A rare wetland habitat at the L'Eree headland Ramsar site has already been successfully restored, to compensate for the loss of a similar area close to the airport.

Environment Guernsey has also identified other projects that could also offset environmental losses. They include the restoration of derelict vinery sites; creation of hedgerows along the northern perimeter of the airport; and tree and shrubbery planting schemes on other States-owned properties.

FREQUENTLY ASKED QUESTIONS

Why is this work essential?

Aircraft cause considerable wear and tear to the runway and other surfaces. Despite routine maintenance, the condition has inevitably deteriorated, to the point that one airline is unable to use its new jet without significant operating restrictions. Work is therefore required to rehabilitate and improve these surfaces.

How much will the work cost?

The budget is £80 million, of which the main construction contract is £55 million. The remainder comprises contingencies, professional fees, and pollution control measures.

Does that include extending the runway?

No. Extending the current 1463 metre runway to 1700 metres would cost around £25 million extra. However the current works would enable an extension in the future if required.

Why more expensive than elsewhere?

Airfield construction projects vary, so it is not always possible to make a direct comparison. In many cases, a simple overlay of the runway is all that is required. The work required here is far more extensive, wide-ranging and complex, and a like for like comparison with recent UK projects has shown that the cost is on a par, if not better.

Why do we need longer RESAs?

The current RESAs are at or near the minimum requirement of 90m. Until 2001 this was sufficient for international regulations, but for improved safety the recommended minimum is now 240m.

Why comply with standards from elsewhere?

Guernsey Airport is audited and licensed against international standards. Their safety requirements are, with few exceptions, non-negotiable.

There is also a principle where, in the interests of safety, Guernsey Airport should comply with current standards, so far as reasonably practical.

The underlying philosophy of the project has been to deliver an airport fit for purpose at the most economic price.



Guernsey Airport

A DIVISION OF THE PUBLIC SERVICES DEPARTMENT