

King Shaka International Airport, La Mercy

The new King Shaka International Airport located at La Mercy, approximately 35 kilometers north of Durban's city centre, is really a national project that is fast becoming a major economic boost for the province of KZN and certainly for the country. It is also 1st Greenfield airport to be built in the past 50 years in South Africa and possibly the only one currently being built in the world.

The new airport is going to replacing the existing Durban International Airport, which will eventually be decommissioned and all aviation related business will be relocated to the King Shaka International Airport which is to open its doors on 1st May 2010 with about 6 weeks before the start of the 2010 FIFA World Cup.

Background

With a project of this stature and expense it had to conduct extensive research and analysis for the relocation of the current airport to the new site. In July 2006 it was finally concluded that the existing airport will be relocated. It was decided that ACSA would develop, manage and own the airport while the Dube TradePort company will develop the cargo facility, trade and agri zone.

Amongst the evaluations that were conducted was, naturally, a full environmental impact study. The assessment revealed a possible threat to the bird population in the vicinity, in particular the 3million barn swallows that migrate every year from Europe to roost in an area close to the airport. Known as the Mount Moreland Lake Victoria Conservancy Reedbed, this site is in the flight path of aircraft that will be using the airport. Concerns raised not only included the possible disturbance of the bird colony on the ground, but also the possible hazard of birds in flight putting aircraft safety at risk. The solution proposed is a special bird detection radar system that can monitor the movements of the birds. The added bonus is that this system will be able to detect the presence of bats at night, as well. This will be the first time in the world that a system of this kind, which will be integrated into the operational procedures of the airport, will be utilised in South Africa.

Whilst the idea of bird strikes is alarming, this is a hazard that is regularly encountered by all airports worldwide. From the intensive research conducted by ACSA and the Mr. Mooreland community, it concluded that the birds and the airport can co-exist. This means that the swallows rarely fly as high as the aircraft and their main activities in the area are 30 minutes before dusk and just before dawn. It has been decided that flight schedulers will take these critical times into account and plan around them, to avoid unnecessary risk to the air carriers.

Other conditions that were issued with the positive record of decision included noise pollution and fuel transportation to the new airport site.

Dube TradePort

The siting of the new airport complements the development of the Dube TradePort, which is situated adjacent to the airport, on 2060 ha of land that is perfectly accessible by the two major ports of Durban and Richards Bay and the rail and road links with

Gauteng. Wholly funded by the Kzn Department of Economic Development, the Dube TradePort is intended to be a world class freight logistics facility that will be geared to attract a wide range of activities that will stimulate economic advancement in the region.

The Dube TradePort platform is split into three sections namely: Trade Zone, Agri Zone and Support Zone (joint venture with ACSA). The Trade Zone, which includes the cargo handling terminal at the airport, will stimulate the import and export of high value goods by air to and from KwaZulu Natal. The Support Zone has been designed to cater to the corporate sector as well as the suppliers of services and tourist accommodation through the provision of offices, buildings, conference and entertainment facilities, while the AgriZone will involve the cultivation of high value farming products for export.

Anyone traveling by road between Johannesburg and Durban will testify to the enormous volume of road freight traffic that uses the route daily. When completed, the Dube TradePort and the King Shaka International Airport will alleviate the pressure on this route by facilitating that the more than 50 000 tons of manufactured goods produced in the region will be air freighted directly from the local airport in the future.

King Shaka International Airport Timelines

6 June 2007	R7.2bn design & construction contract awarded to the Ilembe Consortium
23 August 2007	Positive EIA (environmental impact assessment) record of decision (ROD) issued
30 September 2007	Ground breaking ceremony
31 August 2007	site work commenced
30 September 2008	Control Tower topped out
30 June 2009	Terminal Building topped out
30 October 2009	Runway will be completed
First quarter 2010	Durban International Airport, will be decommissioned. New International Airport will be commissioned
29 April 2010	Contractual completion

Facts and Figures

Earthworks

As at end of August 2009 6.3Mm³ bulk earthworks had been completed site wide (the equivalent of 2500 Olympic swimming pools)

Construction sites

Six construction sites were set up for the earthworks to prepare the runway, taxiways and aircraft parking areas (the size of 100 soccer pitches)

Personnel on site

In Mid-2008, there were 2,100 contractors and subcontractors on site along with 200 earth-moving machines. In October 2009 7,732 people worked on site.

Total building materials used

By August 2009, the total project had used 100 000 m³ of building material.

Concrete

The project has required 100 000 tons of concrete.

Asphalt

At the end of August 137.5K tonnes of asphalt had been placed across the site.

Terminal building

Structural steel

The Terminal Building required 4,900t of structural steel (half of the amount that was used to build the Eiffel tower, in Paris).

Levels

The Terminal Building consists of three levels: Ground Floor (arrivals), First floor (departures) and the Mezzanine level (airline offices) and extensive retail facilities.

Total floor area

The total size of the terminal flooring is 103,000m² (equivalent to 27 soccer pitches).

Courier and parcel facility

An international courier and parcel facility designed to handle 1000 bags/parcels per hour in and out, as well as a local parcel and courier facility designed to handle 400 bags/parcels per hour in and out.

Capacity

The initial AIRPORT capacity will allow for 7.5 million passengers a year with opportunities for significant expansion, should it be required (figures are projected at 45 million passengers by 2060).

Aircraft stands on the apron

The passenger terminal will initially have 18 Passenger aircraft stands and by 2060, there will be parking space on the apron for 96 aircraft.

Runway and taxiways

The runway is 3.7km x 60 metres wide and will be able to will accommodate the latest New Generation Large Aircraft (NGLA) including the Airbus A380, with the space to expand to 4km.

The runway and 10 taxiways cover 400, 000² and required 230,000t of asphalt (the equivalent of 35km of a four-lane highway).

Cargo building

State-of- the-art 160 000m² cargo facilities. (DIA currently has 39 000m² cargo facilities). Annually, 90, 000 tons of goods from Durban's harbour are trucked to JHB airport for export. Most of this will now remain in Durban and will be flown out directly from the new airport.

Support Zone

This includes platforms for future development of conference, hotel and entertainment facilities which will be a joint venture between ACSA and DTP.

Fuel

The fuel farm is located with four fuel tanks. The fuel will be brought by truck from the refinery located near the existing airport.

Landscaped gardens

Large areas that surround the terminal is being landscaped and designed to enhance the overall aesthetics of the airport.

Parking

Multi-storey parkade caters for 1500 vehicles while there is a total of 6500 vehicle parking pays at the new airport.

Road infrastructure

N2 Interchange.

The traffic, engineering and transport planning aimed to maximize accessibility and flexibility to and around the new airport. The plans also provide sufficient flexibility to ensure that all future (2060) projected transportation modes and requirements have been considered. The proposed N2 interchange which forms part of the development, will be the primary access road to the airport. A link road between the airport and the N2 has been constructed.

Job creation

The airport could create 165000-260000 jobs over the next 20 years.

Capital cost of the project

Although the capital cost of the project was originally estimated at R6,8-billion, a negotiated acceleration programme amounting to R400-million has increased the capital cost to R7,2-billion.

Retail facilities

Kauai King Shaka

NWJ

The Stables Wine Estate

Airport Bookshop Pty Ltd

Link Pharmacy

Cosmic Candy La Mercy (Pty) Ltd

Euro Blitz 45 (Pty) Ltd

Thebe Tourism group Retail

EM Native Collection CC

Tie Stop

Fego Caffè'

Dinaledi Airport Concessions (Pty) Ltd

Duty Free

Rhapsody's

10 Car Rental Companies

Operational Readiness and Transfer Program

The multibillion airport project is almost 90% complete and the ORAT program is well on track with the teams working hard on the program to make it a reality. The daunting but exciting task of relocating the airport “overnight” to the new site is exactly what is being planned. Behind the scenes is a team headed by Bongwiwe Pityi (AGM Airport Operations) for ACSA who has a team of local and international consultants working on the ORAT.

“The plan is that on 30th April the last aircraft will land at DIA and after the passengers have left the airport those aircraft will have to be relocated to the new airport. The equipment and resources will also be relocated for most of that week but certainly overnight of the 30th April. The next day 1ST May 2010, considering it being a Saturday and a relatively quieter from an operational perspective, the new airport will commence operations. This process on the actual relocation will be issued, regularly to the public via the various mediums to show the progress and readiness of the airport and how it will affect and impact on the public”.

With the new airport at La Mercy just 3 months away from opening and the ORAT (Operational Readiness and Airport Transfer) team consisting of about 24 work stream leaders is well on track to have that airport operationally ready for 1st May 2010.

This commenced in November last year when the Familiarization program kicked off which involved taking the current 3400 work force from the current airport and familiarize them with the new airport and the team has already exposed almost 2000 staff to their new home. This has injected positive energy with most staff belonging to various organizations committing and confirming their wish of still serving at new International Airport at La Mercy.

On 14th January 2010 the 1st Basic End User Trial started which involved the participation of key stakeholders such as airlines, ground handlers and ACSA. This program will test the various components of airport operations including flight data, passenger handling, check in and boarding processes, hold baggage screening, etc.

This is another major milestone that the ORAT team can be proud when on 15th December 2009 the South African Civil Aviation Authority successfully conducted calibration tests on the runway lighting and navigational aids. It was an emotive moment to watch test flight flying over the new airport to conduct that test. The collaborative approach of various stakeholders, including the building contractor, Air Traffic Navigation Services, ACSA ORAT Team, The navigation aids installer (SAAB) was a testament to how important it is that important milestones are met in order for the airport to be ready and licensed timeously in order for all aeronautical data to be published on time.

Once the new airport is fully operational by May 2010, the current airport will be decommissioned as an airport and all aviation business will then be relocated and conducted at the new airport. **Which basically means that all scheduled aircraft;**

domestic and international will be operating from the new airport from 1st May 2010.

The current airport once decommissioned as an airport and is being planned to be disposed of which will be decided by a task team that consists of ACSA, Dti, National/Provincial Government and eThekweni Municipality.