

## A World Cup under control

Daniel Marinho explains how the Brazilian ANSP supported the FIFA World Cup with efficient air traffic operations.

**The World Cup has gone. Thirty-two days of goals, emotions, amazement, expectations, and, above all, intense and harmonious international relationships that only events of this kind can provide.**

In the end, some cheered, some cried. But when it comes to the organisation of the show itself, the event ended up pleasing everyone, generating a feeling of almost unanimous satisfaction.

### Increase in movements

Called by some “the Cup of Cups”, the occasion involved all sectors of transport, infrastructure and tourism in Brazil. In a country of continental dimensions such as Brazil (8.5 million km<sup>2</sup> of territory, 22 million km<sup>2</sup> of airspace under Brazilian control), however, the air transport organisations were the ones especially under the spotlight given the increase in daily domestic flights between the 12 host cities and international flights from all over the world.

According to a Ministry of Tourism report, the World Cup attracted more than 1 million foreign tourists, made up of some 203 different nationalities. This was a higher number than initially estimated. At the same time, according to the report, more than three million Brazilians travelled around the country due to the event, mostly using air transport.

New records for flight movements were set in several host cities. To get an idea of the impact, the three main airports of Rio de Janeiro reported 1,731 air movements during the day after the World Cup Final. This number was 57% up on a regular day and 115% up on the 807 landings and take-offs reported on the day after the final of the 2010 World Cup. The same day, more than 300 business jets were at the Rio de Janeiro Galeão International Airport.

To deal with such a challenge, the Brazilian ANSP (DECEA – Department of Airspace Control) had to anticipate the games, preparing its approach long before the referee’s whistle. The impact on air traffic flow due to the World Cup required strategic planning, training and actions directly aimed at ensuring the safety of airspace during the competition.

A group of DECEA’s professionals had monitored the arrangements and efforts in previous major events ever since Brazil was chosen to host the Cup, benchmarking plans against the actions at the World Cup in South Africa, European Football Championship, the American Super Bowl, and the London Olympics.

### Training to succeed

Since 2012, about 2,600 air traffic controllers underwent a rigorous training programme (PROSIMA - Air Movement Simulation Program) at the Airspace Control Institute, in São José dos Campos, São Paulo. This programme was developed exclusively for the characteristics of the expected traffic at the World Cup.

The enterprise included simulation of civil and military traffic in terminal areas, routes, approaches and control towers as well as scenarios predicting situations of excess demand and contingency or atypical situations of danger in a virtual 3D ambience. Similarly, about 180 professionals from Aeronautical Information Service (AIS) also had training to prepare for the event, such as flight plans in co-ordinated airports.

DECEA could also rely on its own experience, having handled Brazilian ATM during a number of major international events hosted in the country. In 2012, there was the United Nations Conference on Sustainable Development (UNCSD), also known as Rio+20, a week-long meeting with representatives from more than 190 countries, held in Rio de Janeiro. The following year, there was the FIFA Confederations Cup and, also in 2013, the World Youth Day in Rio, that gathered around 600,000 people, who came to Rio to attend a week of Christian congregations and see Pope Francis. These gatherings ended up helping to consolidate actions and strategies for future events, such as the World Cup.

“The success of this event comes as reward for an effort of almost four years of planning,” says the Director General of DECEA, Air Lieutenant Brigadier Rafael Rodrigues Filho. “There were a lot of meetings with government bodies and the commitment of all resulted in what was expected.”

The activation of the “Master Room of Command and Control” – a setting that gathered representatives of ATM, Air Defence, governmental agencies, airport administrators, airlines, and so on, 24 hours a day, at the Centre of Air Traffic Management, an organisation subordinate to DECEA, in Rio de Janeiro – was also vital to integrated operations.

For the 2014 World Cup, the Master Room was activated from 5 June to 20 July. The site used in past events had its facilities renovated and boosted, typified by the incorporation of Integrated Management System Air Movements software, which enabled accurate data and localisation of flights over 22 million km<sup>2</sup>.

Under the constant demand for information and decisions, professionals acted to harmonise air traffic flow and to



Control Tower of the International Airport of Rio de Janeiro in operation at the World Cup. (Photo: Fabio Maciel)

guarantee the safety of operations. The screens surrounding them detailed timings, weather, air defence, airports terminals, runways, and areas of airspace restrictions during the games in the host cities.

“The Brazilian Airspace Control System (SISCEAB) could handle resourcefully the amount of traffic and the atypical demand engendered by the Cup,” says Air Brigadier Gustavo Adolfo Camargo de Oliveira, head of the Sub Department of Operations at DECEA. “We have managed to work with an effective body of human resources, the technical staff of SISCEAB and the government agencies’ employees allocated in the Master Room of Command and Control.”

### Punctuality assured

In the group stage (first phase) of the World Cup, 6.6% of domestic flights departed late, a percentage below the international average and still inside the standard range considered satisfactory (up to 15%). According the Brazilian Civil Aviation Secretariat of the Presidency, the average rate of delays throughout the entire World Cup was 7.46%.

The integrated work between air traffic control, airport administrator, governmental agencies and air defence in the World Cup brought about great success in terms of punctuality, despite the extraordinary amount of people and flights. This success was reported on widely by press and social networks.

As the Scottish reporter Gary Meenaghan, one of hundreds of foreign journalists who travelled throughout Brazil during the World Cup, highlighted on his twitter account, he flew “29 flights in 28 days with no delays at all”.

FIFA President, Joseph Sepp Blatter, emphasised that the Federation granted Brazil 9.25 out of 10 for organising a World Cup that was really special. Jerome Valcke, FIFA General Secretary, described the World Cup in Brazil as “truly unique” and called on the hosts of future tournaments to take inspiration.

The effective absorption of high demands of air traffic flows and the punctuality of flights proved that the high level of planning and strategy adopted by DECEA were absolutely crucial to these accomplishments. And the legacy left by the World Cup in terms of air navigation, regarding new technologies, training and infrastructure will certainly be of huge value both for the present and the years to come.

Another challenge already awaits the Brazilian ANSP. In 2016, the Olympics, the biggest sporting event in the world, will be held in a country in South America for the first time. Centred on Rio, the event will certainly require a different approach. But the expertise acquired in supporting major sporting events ensures DECEA will be ready.

Let the games begin again! ➤