

FAB counter-narcotics mission

On June 6 this year Cessna 182P Skylane, registered PT-IDV, was forced to land in a rural area of Brazil's Mato Grosso do Sul state. The light aircraft had been monitored since it left Bolivia, heading towards Brazilian territory. After its crew refused to respond to questions by Brazilian air traffic control authorities, the Skylane was intercepted and escorted by an element of A-29 Super Tucanos, which ordered it to land.

Once on the ground, the Federal Police of Brazil discovered its cargo of 661lb (300kg) of cocaine base paste. The pilots, including a member of the Bolivian military, attempted to flee but were captured soon after.

The find was among the most recent successes of Operação Ostium (from the Latin for gate), launched by the Força Aérea Brasileira (FAB, Brazilian Air Force) in March last year.

One of the biggest operations in the FAB's history, its objective is to counter illicit flights along the borders with Paraguay and Bolivia that are carrying arms and narcotics to Brazil.



Above: The view from the cockpit of an A-29 during Operação Ostium. Note the two 12.7mm (0.5in) machine guns in the wings, each provided with 250 rounds. **Left:** A fighter pilot, deployed to Cascavel, Paraná state, receives information about his next mission during Operação Ostium. **Below:** It's standard procedure during Operação Ostium for the A-29 to carry a sign indicating the communications frequency to be used by the unidentified aircraft in case of emergency. All photos Johnson Barros/Brazilian Air Force unless stated



Right: A Super Tucano pilot races towards his aircraft to take off during alert duty in Operação Ostium. A-29B serial 5938 is assigned to 1°/3° GAv, Esquadrão 'Escorpião', normally based at Boa Vista.



First steps

Preparations for Ostium began a month earlier when two radars were transported to the cities of Chapecó (Santa Catarina state) and Corumbá (Mato Grosso do Sul). These additional radars improved the probability of detection, since aircraft involved in illicit activities usually fly very low.

Meanwhile two other cities in Mato Grosso (Campo Grande and Dourados) and two in Paraná state (Cascavel and Foz do Iguaçu) received fighters, unmanned aerial vehicles (UAVs), airborne early warning and control (AEW&C) aircraft and helicopters, increasing air patrol coverage of these key areas.

Operação Ostium required considerable infrastructure and personnel support. In Dourados, for example, a contingent of more than 100 FAB personnel was initially supported by almost 7,063 cu ft (200m³) of supplies transported in five trucks and a van.

The materiel included tents, command-and-control centre modules, meeting rooms, dormitories, toilets and even a mobile laundry. The full, deployable unit is known as the Unidade Celular de Intendência (UCI, or Cellular Administrative Unit).

Dourados also received three generators to provide electricity for the camp, including all communications infrastructure, among which was an antenna to transmit images

A simulated counter-narcotics mission as seen from the intercepted aircraft.

gathered by the UAVs, in real time, to the operation's commanders in Brasília.

Plan of action

The operation uses a three-phased approach to tackling illegal flights. First, the landing strips from which they depart must be identified by aerial reconnaissance. Second, aircraft operating without a flight plan have to be detected, intercepted and forced to land – or perhaps even shot down.

The first step is accomplished using three reconnaissance assets: the Learjet R-35AMs of the 1° Esquadrão do 6° Grupo de Aviação (1°/6° GAv, 1st Squadron, 6th Aviation Group) 'Carcará', based at Anápolis, Goiás state; AMX RA-1A/Bs of the 1°/10° GAv 'Poker', based at Santa Maria, Rio Grande do Sul state;

and the Hermes RQ-450 UAVs of the 1°/12° GAv 'Horus', also based at Santa Maria.

The airborne detection phase is the responsibility of two of the six Lockheed Martin TPS-B34 radars currently operated by the FAB in the Amazon basin as well as the Embraer E-99 AEW&C aircraft of the 2°/6° GAv 'Guardião', based at Anápolis.

Finally, interceptions are carried out by A-29 Super Tucanos of the three squadrons of the 3° Grupo de Aviação – 1° Esquadrão 'Escorpião', based at Boa Vista, Roraima state; 2° Esquadrão 'Grifo' at Porto Velho, Rondônia state; and 3° Esquadrão 'Flecha' at Campo Grande, Mato Grosso state – as well as H-60L Black Hawks of the 5°/8° GAv 'Pantera', based at Santa Maria and the Mi-35M *Hinds* (AH-2 Sabres) of the 2°/8° GAv 'Poti', based at Porto Velho. ▣

Operação stium

Sérgio Santana describes the most recent operation organised by the Brazilian Air Force – Operação Ostium – intended to thwart drug running along the country's borders.





An element of Mi-35Ms (AH-2 Sabres in the Brazilian Air Force designation system) awaits the next mission during Operação Ostium. These 'Hinds' are operated by 2^o/8^o GAv 'Poti', based at Porto Velho.

Logistical and operational support is provided by Cessna C-98 Caravan and C-105 Amazonas (C295) transport aircraft. If required, personnel recovery missions are the responsibility of the search and rescue version of the Amazonas – the SC-105 of the 2^o/10^o GAv 'Pelicano', based at Campo Grande.

Alert duty

The FAB operates a 24-hour air defence alert service throughout the year to respond to any unknown air traffic movements and maintain the sovereignty of Brazilian airspace.

This process is started by air defence controllers – responsible for guiding the pilot(s) towards the suspect – who have all had highly specialised training within the air defence network, which includes radar sites strategically located throughout the national territory to detect unidentified air traffic.

When the siren sounds, the air defence pilot rushes to their ready and armed aircraft and takes off. Once in flight, they receive details of the mission. An interception sortie may be carried out by F-5EM fighters, A-29s or even

Mi-35Ms – depending on the type and location of the suspect. Alternatively, detection can be carried out by an E-99, which will then vector interceptors towards the aircraft.

During a mission of this kind on April 25 this year, an E-99 directed three A-29s towards an unidentified aircraft flying without a flight plan. It was shot down into a lake in Mato Grosso state, carrying 1,102lb (500kg) of cocaine base paste.

At the airfield, alert duty is conducted by a team consisting of a pilot, aircraft technician, armament technician and his/her auxiliary. They are on constant standby to respond if air defence radars identify unknown or illicit air traffic.

Pilots follow the guidelines of the Centro Integrado de Defesa Aérea e Controle de Tráfego Aéreo (CINDACTA, Integrated Centre for Air Defence and Air Traffic Control) to which they are subordinated. The specific protocol for identification and interception is outlined in the Medidas de Policiamento do Espaço Aéreo (MPEA, Air Policing Measures).

Under Brazilian law, an air defence pilot must follow a sequence of procedures

during an interception, as dictated by the behaviour of the pilot at the controls of the unidentified aircraft.

The entire process is overseen by the Satélite Geoestacionário de Defesa e Comunicações Estratégicas 1 (SGDC-1, Geostationary Defence and Strategic Communications Satellite), which officially became operational on July 5 last year.

Interception procedure

The FAB interceptor will initially take off to carry out verification measures (distance recognition, follow-up and interrogation). If an aircraft is verified as suspicious, or in contravention of airspace rules, intervention measures must be applied. For example, the interceptor pilot might request a route modification and mandatory landing.

If its pilot ignores this second order, the next course of action is a 'persuasion measure' – firing a warning shot. If they still insist on continuing their flight, the aircraft is considered hostile and the FAB interceptor will be cleared to engage in order to force a landing – when so-called detention measures will be applied, with the ultimate aim of arresting the suspect crew.

To execute detention measures, the hostile aircraft must be flying over a non-densely populated area. In addition, express permission of the FAB commander is required, and all communications and images need to be recorded. If the hostile aircraft's pilot chooses to land, they will quickly be surrounded by FAB infantry or federal police agents and handed over to the authorities.

According to official sources, Operação Ostium had dealt with 88 incidents by the end of the mission's first year. The initiative has been judged a success and is not currently scheduled to end. **AFM**



Above: The E-99 AEW&C aircraft is a vital part of the operation. This example wears the insignia of 2^o/6^o GAv 'Guardião'. The Anápolis-based unit flies five such aircraft. André Feitosa and Johnson Barros/Brazilian Air Force

Below: Soldiers of the Brazilian Air Force infantry take position in front of H-60L Black Hawk serial 8909 during training for Operação Ostium.

