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IACIT presents exclusive systems at Expodefensa

Drone blocker, OTH radar and DME 0200 are the technologies arriving at the Latin American market

With a strong background in development and innovation, IACIT will be at Expodefensa to present its exclusive technologies to the Latin American market. The company will be at the ABIMDE (Brazilian Defense and Security Industries Association) booth during the fair that takes place in Bogota, Colombia, from December 4 to 6. IACIT will showcase drone blockage solutions, its OTH radar and the DME 0200 air navigation system.

Catering to the Brazilian Army's needs, IACIT is the only Brazilian company offering the DRONEBlocker solution, which provides protection against the threat of non-authorized drones. The system was used with great success by the Brazilian Army during the 2016 Olympic Games in Rio and today is present in countries such as Argentina, Panama, Colombia and Peru. The drone blocker also has been utilized by Brazilian companies for ensuring security in large industrial complexes and even for preventing invasion of privacy in private events such as celebrity weddings.

With 100% national technology, DRONEBlocker features sensors for detection, identification and tracking, as well as radars and cameras for detecting and identifying threats. This solution also includes a command, control and intelligence (C2I) system, which enables the centralization of the operation, setting and management of the entire system remotely. When it is activated, DRONEBlocker causes interference in the operation frequency of non-authorized drones, forcing them to land.

The drone blocker system is not the only one developed by IACIT. The company also provides solutions for blocking cell and radio communication. COMBlocker is ideal for creating safety rooms, for example, as it blocks the signal in specific areas without affecting the neighborhood. For that purpose, the system features specific antennas that operate according to a set potency and frequency.

For the protection of convoys and troops, the company offers RCIEDBlocker, used against explosives remotely controlled by electronic devices (RCIED). The IACIT system blocks or jams the communication of systems responsible for setting off explosives such as radios, cell phones and remote controls—even those operated through Bluetooth or wireless networks.

Over the Horizon

IACIT will also present at Expodefensa in Colombia the first OTH (Over the Horizon) radar ever developed in Brazil. Operating in the state of Rio Grande do Sul since the end of 2016, this

exclusive system was developed in collaboration with Israel Aerospace Industries (IAI) and the support of the Brazilian Navy, which gave concession of the Southern coastal area in the country.

The national technology employs the surface wave approach for detecting targets, which makes it a unique and differentiated system. The surface wave concept ensures the traceability of a larger area as sensors perform tracking by following the curve of the Earth, thus being more efficient than conventional radars, whose range is restricted by a direct line of sight. Operating on HF band, the radar can perform monitoring over the horizon for hundreds of miles on the sea. It uses phased-array technology and a specific system for eliminating interference, which provides reliable and persistent cover on an ample sea area all the time, regardless meteorological conditions or the sea state.

DME 0200

In the air navigation segment, IACIT will present DME 0200, another system with an exclusive technology. The company already has three of those in operation in Brazilian airports. DME 0200 is the first to be integrated into the DME/DME navigation system being implemented by the Department of Airspace Control (DECEA), whose goal is to implement Performance-Based Navigation (PBN). The DME/DME navigation uses a triangulation principle to determe the position of an aircraft with an accuracy level that is acceptable for PBN in a terminal maneuvering area (TMA). DME 0200 was developed with state-of-the-art digital technology, being designed and manufactured to provide a compact size and great energy efficiency, with the potential to cater to the national and international markets. Additionally, the system is certified in accordance with the ICAO Annex 10 issued by the Institute of Airspace Control (ICEA), which is associated with DECEA.

IACIT was commissioned by the Brazilian Air Force to install thirty-six DME systems in Brazil in the next three years

About IACIT

Certified by the Brazilian Ministry of Defense as a Strategic Defense Company (EED), IACIT has been working for more than 30 years on defense projects. Its production plant have been in operation for 10 years, offering an assortment of products and services. Currently, IACIT is the only Brazilian company producing air radionavigation aids. It also manufactures meteorological radars, ocean radars, OTH maritime surveillance radars, telemetry and telecommand systems, and equipment and solutions for electronic countermeasures applied to public security and defense. It owns a certified engineering center in the city of São José dos Campos (SP) for developing complex technological solutions for both hardware and software. It has recently launched meteorological software products based on artificial neural networks (RNA) for air traffic management, greatly benefiting aircraft routes and landings