Drone Technology Expands Across Sectors Like Filmmaking, Cartography, and Photogrammetry

CVDR
offers drone operation course

NOM 107-SCT3-2019 establishes the requirements to operate an aircraft in Mexican airspace and this training complies with such regulations.

Enrique Soto

The Centro de Vinculación y Desarrollo Regional (CVDR) in Los Mochis is taking to the skies of Sinaloa with its Training Course on the Use and Operation of Remotely Piloted Aircraft Systems (RPAS, also known as drones). This technology has become essential in the agro-industrial sector of the region, significantly reducing time and costs related to crop monitoring, pest detection, and irrigation system supervision for agricultural production.

Jesús Irán Grageda Arellano, Director of CVDR Los Mochis, explained that his team conducted a needs assessment among local production sectors and identified a growing demand for theoretical and practical training in drone technology within the agro-industrial field.

Since 2024, the center has offered this course, and so far, 30 participants have been trained in drone systems. The program consists of 20 hours divided into four modules: theory, regulatory framework, simulation, and field practice.

CVDR Los Mochis is currently the only IPN center offering this course, which is now preparing for its third edition. The training aims to provide participants with the essential knowledge to correctly operate drones, which are classified into three categories: micro RPAS (equal to or less than 2 kg), small RPAS (between 2 and 25 kg), and large RPAS (over 25 kg).

Grageda noted that the course aligns with the Official Mexican Standard NOM 107-SCT3-2019, which outlines the requirements for operating remotely piloted aircraft in Mexican airspace. This alignment ensures that participants receive a foundational knowledge base that prepares them for future certification.

Certification is issued by the Federal Civil Aviation Agency (AFAC), a division of Mexico's Secretariat of Infrastructure, Communications, and Transportation, upon meeting the standard's requirements and passing medical exams and knowledge assessments on topics such as legislation, safety, meteorology, and navigation.

Grageda emphasized that drone technology is being increasingly adopted in diverse sectors, including filmmaking, cartography (for maps and geographic models), and photogrammetry (for obtaining precise measurements from images).

He also emphasized the significance of drones in civil protection, particularly for search and rescue operations, firefighting, and public safety and national security applications

"As a national institution, the IPN responds to the needs of the productive sectors. In Sinaloa, we are offering farmers the tools to better monitor their crops —an activity that supports much of the state's economy," he concluded.