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IPN and UNAM successfully launch nanosatellite at Cape Canaveral

- Specialists from both institutions developed the nanosatellite that will be in the polar orbit at 500 kilometers high
- Public Education Minister, Delfina Gomez Alvarez, has recognized the importance of higher education to promote the country's development
- IPN's General Director, Arturo Reyes Sandoval, has pointed out the institution forms new generations of scientists and technologists to contribute to the transformation of the country
- Experts from the Institute of Engineering and University Space Program participated for the National University

Scientists from the National Polytechnic Institute (IPN) and Mexico's National Autonomous University (UNAM), designed and built a three-unit nanosatellite with remote sensing payload called "PAINANI-2", owned by Ministry of National Defense (Sedena), which was launched from the Cape Canaveral base, Florida, United States, aboard a Falcon 9 SpaceX rocket.

Public Education Minister, Delfina Gomez Alvarez, has recognized higher education institutions have managed to link their knowledge and contributions to support the country's development and transformation.

IPN's General Director, Arturo Reyes Sandoval, has pointed out the institution forms new generations of scientists and technologists, who in the future, with their ideas and innovations, will help to transform Mexico and the lives of those who need it most.

The satellite, which will be located in a polar orbit with a height of approximately 500 kilometers, has a payload consisting of a camera that will allow it to capture infrared images that provide accurate temperature measurements.

In this regard, Jorge Gomez Villarreal, Director of the Polytechnic's Aerospace Development Center (CDA), reported that experts from the University Space Program Center (PEU) and UNAM's Institute of Engineering, through Doctors Esau Vicente Vivas (deceased) and Juan Ramon Rodriguez Rodriguez, in coordination with the Mexican Space Agency (AEM) , participated in the design and development of the artifact.

He added that the dimensions of the nanosatellite correspond to a CubeSat, that is, 10x10x30 centimeters, and will have an approximate life time of between 2.5 and three years.

The nanosatellite has subsystems of stability and control that allows to regulate the positioning of the satellite within its orbit; communications to establish links both as Earth-satellite and vice versa; it has a power subsystem that allows to transform solar energy into electric, which was complemented by a group of batteries that will allow its operation in eclipse periods.

On the part of the IPN, the following doctors participated as project managers: Jorge Sosa Pedroza, Director of the National Laboratory of Antennas, Dr. Luis Manuel Rodriguez Mendez and Master Miguel Sanchez Meraz, experts from the Telecommunications Laboratory of the School of Mechanical and Electrical Engineering (ESIME), Zacatenco Unit; Dr. Julio Rolon Garrido, Director of the Digital Technology Development Research Center (Citedi) of Tijuana, Baja California, and Master Hector Diaz Garcia, scientist of the ESIME Ticoman Unit, in collaboration with their work teams.

