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PEDRO PAULET: PERUVIAN PIONEER OF THE SPACE AGE

**Abstract**

1969 was the year when man stepped on the Moon. Many space pioneers have contributed to carry out the major endeavour achieved by humankind.

Pedro Paulet (July 2, 1874 in Arequipa, Peru – 1945 in Buenos Aires, Argentina) was a Peruvian scientist who in 1895 conducted experiments on a rocket motor made of vanadium steel that burned a combination of nitrogen peroxide and gasoline. There are indications that actually Paulet had invented the rocket engine in the Sorbonne University, France, where he graduated by the end of 19th Century. Analyzing the direct sources from the late 1920's among others, books and magazines from members of German Society for Space Flights (VfR, German abbreviations of Verein für Raumschiffahrt), it have been found that, at that decisive time in the history of space rocketry, Paulet's studies were an important reference for those German pioneers, specially for scientists and engineers who would construct the V2 missiles and later contribute to put the first men on the Moon. And he also probably influenced on Russian space pioneers. If true, this would credit Pedro Paulet as the designer of the first liquid-fuelled rocket engine.

News of this groundbreaking advance in rocketry did not surface until October 27, 1927, when a letter from Paulet appeared in an issue of the Peruvian newspaper El Comercio in which he claimed legal ownership of his earlier rocket motor design. Recognizing that rocketry was beginning to boom in Europe, Paulet sought witnesses to help verify the work he said he had done years earlier. The letter was circulated across the world by the Russian Alexander Schershevsky in summary form.

Had Paulet's work been authenticated, he would today be considered the undisputed father of liquid propellant rocketry. As it is that title is more commonly attributed to Robert H. Goddard, who in 1926, flew a liquid-fuelled rocket engine in a test vehicle.

Paulet also designed reaction motors in 1895, propulsion systems in 1900 and an airplane using thermolectric batteries and rocket engines in 1902. He alluded to the use of nuclear propelled rockets for flights to the moon.

The rocket Paulet I, a joint venture between the Peruvian Air Force and Peruvian scientific entities, was named in Paulet's honor and was launched on December 27, 2006. It reached an altitude 45 Km. It travelled at five times the speed of sound. This is Peru's first space program. Future plans include putting a satellite into orbit.