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JACQUES BLAMONT (1926-2020): A "FOUNDING FATHER" OF THE FRENCH SPACE SECTOR

**Abstract**

Jacques Emile Blamont was born on October 13, 1926 in Paris. Alumnus of the Ecole Normale Supérieure and member of the Kastler-Brossel team, he defends in 1956 a thesis on "The Stark effect of the mercury atom by double optical and magnetic resonance". Researcher at CNRS, he then completes his studies in the United States, where he gets familiar with some of the first projects of space research. Back in France, he proposes to the Comité d'Action Scientifique de la Défense Nationale (National Defense Scientific Action Committee, CASDN) to use the Véronique rocket to generate artificial clouds of sodium, in order to have France participate in the International Geophysical Year. At the end of 1958, he creates within CNRS the Service d'Aéronomie (Aeronomy Division, SA), the first French space laboratory, which he directs from 1961 to 1985. In March 1959, a research campaign in the Sahara Desert highlights the winds of the upper atmosphere and allows for the discovery of the turbopause. Following this success, Jacques Blamont initiates a solid cooperation with the United States, which results in the launch of FR 1 (1965), the first French scientific satellite, and in the emergence of a French space scientific community.

In March 1962, Jacques Blamont becomes the first scientific and technical director of the newly created Centre National d'Etudes Spatiales (National Center for Space Studies, Cnes), as he still manages the SA and teaches at the Faculty of Sciences in Paris. He makes significant contributions towards the creation of the first artificial satellites and helps to develop the first industrial fabric capable of designing space technologies. He also supports the idea that the new generations of launchers (beyond Diamant A) should be placed under the responsibility of Cnes and no longer of the military. Finally, he campaigns for broader cooperation policies, establishing partnerships with the USSR, European states, as well as emerging countries (Argentina, India, Pakistan), to promote their development by sharing French space technology.

Between 1972 and 1982, Jacques Blamont is a senior scientific advisor to Cnes, then advisor to the presidents of Cnes until his death on April 13, 2020. Until the end of the 1990s, he is a driving force in multiple national, American and Soviet scientific programs, sometimes encountering failures (Phobos, Mars Observer), sometimes successes (Pioneer-Venus Multiprobe, Vega 1 and 2, Clementine, Mars Global Surveyor). Member of several academic societies in France, he is made Grand Officer of the Legion of Honor. Abroad, he receives numerous distinctions or prizes, including the (Soviet) Order of Friendship of Peoples, the Distinguished Service Medal from NASA, the Space Science Award from Cospar, the high Indian distinction Padma Shri and the International Astronautical Prize of the French Astronomical Society.