

Biography of Paulo Pellanda

Colonel Military Engineer of the Brazilian Army reserve and Career Professor of the Federal Higher Magisterium. Electrical Engineer from the Federal Technological University of Paraná, Military Engineer and Master in Electrical Engineering from the Military Institute of Engineering (IME), Master in Military Sciences and specialist in Politics, Strategy and Senior Military Administration from the Army Command and General Staff School and Doctor in Automatic Control from the Institut Supérieur de l'Aéronautique et de l'Espace, with the Best Thesis Award in France by the Centre National de la Recherche Scientifique. He has more than 35 years of experience in the areas of engineering education, electrical engineering projects, research and construction management and teaching.

As a professor and researcher at IME since 1992, he is currently the Pro-Rector of Graduate Studies and Coordinator of the Graduate Course at the Lato Sensu Specialization Level in Protection of Electrical Systems carried out in cooperation with the National Electric System Operator – ONS, he was Head of the Department of Electrical Engineering and of the Research Group on Missiles and Rockets of the Department of Science and Technology of the Army. He coordinated the creation and implementation of the Graduate Program in Defense Engineering at the Master's and Doctoral levels, having been its first coordinator after the beginning of its operation. He has filed 2 patent applications and supervised the theses of 12 doctoral students and 45 master's dissertations, having published more than 170 scientific articles in national and international scientific journals and conferences, in addition to 5 book chapters. He participated, in several Brazilian and foreign universities, in more than 170 examining boards for doctoral theses and master's dissertations. He coordinated several research and development projects of interest to the Army, involving missile technologies, cybersecurity, control of electrical systems and alternative energy sources, funded by FINEP, CNPq, FAPERJ, Petrobras, Itaipu Binacional and the Brazilian Army. Participated in evaluations of strategic projects for the development of sensors and systems linked to the Brazilian Space Program. He is a reviewer for the main international scientific journals in the area of Control Systems and an ad hoc consultant for CNPq, CAPES, FINEP and the Brazilian Space Agency, having participated in the evaluation of dozens of research projects.

As Responsible for Planning and Programming of the Directorate of Military Works and Deputy Director of Army Works, he coordinated the activities of strategic planning, budgeting, financial programming, projects, controls and statistics related to contracts of architectural and civil engineering works for the construction and maintenance of facilities in areas under the jurisdiction of the Army spread throughout the Brazilian territory, involving the management of the life cycle of more than 80 thousand improvements in 1.8 thousand properties of the Union. Collaborated, at the senior management level, for the development and consolidation, by the Board itself, of an Information and Communication Technology system for the management of the life cycle of the entire built environment of

the Brazilian Army, based on collaborative and integrative technologies – BIM (Building Information Modeling), ILM (Infrastructure Life-Cycle Management), CVE (Collaborative Virtual Environments), Data Visualization,

Spatial Mapping, Cloud, etc. – which provided a high degree of transparency to the processes and high interoperability of technical and administrative data. He was Chief and Authorizing Officer of Expenses of the Regional Commission of Works of the 2nd Military Region, in São Paulo, when he managed the application of large resources, carrying out the technical, financial and contractual management of renovation and construction and engineering services in areas under the jurisdiction of the Army in the State of São Paulo, including the planning of implementation works, adequacy, expansion and revitalization of the runway system of the São Paulo International Airport, Guarulhos. He worked in the area of electrical installation works in the states of PR, SC, RJ, AM, AC and RR. In the Amazon Region, he also participated in feasibility studies for the implementation of alternative sources of energy and renewable energy – solar photovoltaic and hydroelectric – in isolated locations in the Amazon, to serve military bases and indigenous communities, when he participated in the design and construction of five small hydroelectric plants on the Amazon borders.

He was president-elect of the Brazilian Society of Inertial Engineering. He was also elected Ad Vitam member and president of the Brazilian Academy of Military Engineering. He is a full member of the National Academy of Engineering, a member of the Institute of Electrical and Electronics Engineers and the Brazilian Society of Automatics and a founding member of the Brazilian Society of Inertial Engineering. He has received 16 military and civilian awards and decorations for contributions in the field of Engineering and Science and Technology.