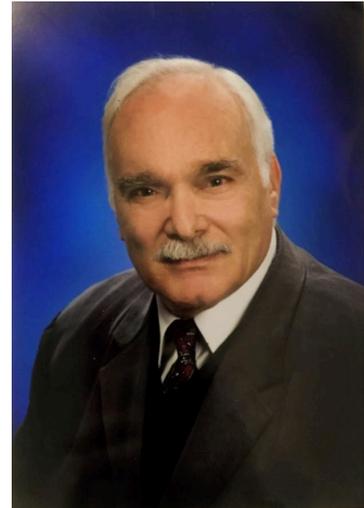


John L. Boccio, March 24, 1937 – June 2, 2024

It is with great sadness to announce the passing of our father, John L. Boccio, Ph.D.

John L. Boccio of Stony Brook, NY passed away Sunday June 2, 2024, at St. Catherine's of Sienna hospital in Smithtown.

John's career was sparked by his interest in the space program starting in the 1950's. John attended Polytechnic Institute of Brooklyn (commonly referred to as Brooklyn Poly) for his Bachelor of Aeronautical Engineering in 1958, a Master of Science in Applied Mechanics (1960) and his Doctor of Philosophy in Astronautics in 1970. John demonstrated a natural gift for applied mathematics and used that ability to fuel his studies, research and engineering projects throughout his career. Like many of his generation, John contributed to theoretical and analytical research that was critical to our national interests.



For the first 20 years John's career track was Aerospace Engineering focusing on testing / analysis of high-speed combustion systems and re-entry phenomenon. During his time at Brooklyn Poly as a research assistant his responsibilities extended to analytical investigation of high-speed flow over blunt and slender aerodynamic configurations, Mach 10 hypersonic wake experimental research, and later as a Research Fellow John participated in analytical/experimental research to investigate the effects of high enthalpy flows on various aerodynamic configurations.

In 1962 John joined the Republic Aviation Division of Fairchild Industries in Farmingdale, NY (1962 – 1968) and participated in the development of the Re-entry Simulation Laboratory. While there, he was instrumental in the design, development, and operation of the 16 inch HOTSHOT tunnel (capacitive discharge blow down wind tunnel) and LONGSHOT (hypersonic free-piston cycle tunnel), facilities used to study hypervelocity flows and re-entry phenom. Using these facilities, John studied hypersonic flow effects on high lift-to-drag Bodies and inlet designs for SCRAM jet powered hypersonic cruise vehicles.

In 1968 John joined General Applied Research Labs (GASL) in Westbury and continued his analytical studies of hypersonic turbulent boundary layer, including studies of post boundary layer transition wakes. In addition, John performed studies of combustion related to turbulent mixing associated with rocket exhaust and developed models of

aerothermochemical flow processes. This model resulted in accurate predictions of optical signatures for exhaust emanating from low altitude rockets.

With the downturn of aerospace on Long Island in the in the late seventy's, John brought his considerable skills to Brookhaven National Lab (BNL) in 1977. His first assignment was as a member of the High Temperature Gas Cooled Reactor Safety Division and studied the containment vessel response to core depressurization associated with the unique features of graphite moderated, helium cooled thermal reactors. While at BNL he worked on a number of nuclear reactor safety studies and research to improve understanding of reactors under hypothetical accident conditions, and risk assessments. Specifically, studies on containment vessel safety under adverse conditions, risk assessment methodologies for fire and seismic events, and detonation phenomena prototypical of nuclear power plants during severe accident conditions. John also had BNL leadership roles as Energy, Environment, National Security Directorate- Manager of the Office of Research Operations and Deputy Division Head for Safety and Risk Evaluation Division and Engineering Technology Division



Because of his expertise, he was selected as consultant on several consequential working groups for the Department of Energy (DOE) including Spent Nuclear Working Group, Plutonium Disposition Working Group, and Highly Enriched Uranium working group.

One of John's proudest achievements allowed him to bring his aerospace and nuclear safety experience together while consulting to the Interagency Nuclear Safety review panel for the CASSINI Space Mission to Saturn and the Mars PATHFINER mission

John L. Boccio retired from Brookhaven National Laboratory in January of 2006.

His accomplishments are many. He was a brilliant, wonderful man who asked for no recognitions, but deserves them.

Of all his career accomplishments, John was most proud of his family whom he loved dearly. He set in motion all that his daughters and granddaughters have done, made possible by his genius, sacrifice and love.

John leaves behind daughters Angela -Instructional Support Specialist Stony Brook Health Sciences Center(Setauket NY), and Laura - Retired High School Science teacher(Lowville, NY). Also feeling his loss are his three granddaughters of whom he was most proud: Katelyn Virga who was inspired by her grandfather to pursue an aerospace engineering degree and is now a Sustainability Manager at Boeing, Seattle, Washington; Alex (Virga) Carpenter - Peer Physics Science Teacher, Seattle, Washington; and Catherine Smith, DO -Resident in Internal Medicine at Albany Medical Center.