Captain Robert C. Truax (USN)
Inducted 2003

Captain Robert C. Truax (USN) built his first rocket as a teenager in Alameda, California, after reading in Popular Mechanics about Robert Goddard's work. While at the United States Naval Academy in 1936, he began experimenting with liquid-fueled rocket engines and developed several small experimental models that burned a combination of compressed air and gasoline. In 1938, he showed one of the thrust chambers he had built and tested to members of the British Interplanetary Society. Although the American Rocket Society published his technical reports, they went largely unnoticed.

During the early 1940s, Captain Truax set up the Bureau of Aeronautics' Project TED 3401 and initiated a program to develop a jet-assisted takeoff (JATO) for the PBY-2 Catalina. He and Dr. Robert Goddard, who was under contract with BuAer, worked side by side for approximately a year on different JATO designs. Confronted with the requirement for a unit that either could be restarted or idled, Captain Truax's work on controls and propellant feed systems led to a design that employed the path-breaking, hypergolic combination of red fuming nitric acid and aniline. During the late 1940s, he organized the US Naval Missile Test Center's propulsion laboratory at Point Mugu, California, and headed rocket development within BuAer. He also conceived and organized the US Naval Rocket Test Center at Lake Denmark, New Jersey. By 1955, however, his proposal for a submarine-launched ballistic missile had failed to win Navy approval. Consequently, when Assistant Secretary of the Air Force Trevor Gardner offered him a position in the Air Force's newly established Western Development Division (WDD), he accepted. Not long thereafter, the navy reversed itself and initiated the Polaris submarine-launched ballistic missile program.

Meanwhile, promising WDD Commander Brigadier General Bernard Schriever that he would not be a Navy "spy" in the midst of Air Force personnel, Captain Truax headed the Thor intermediate-range ballistic missile (IRBM) development program. He was instrumental in selecting the vehicle configuration and writing the original request for proposal (RFP), which led to Douglas Aircraft Corporation receiving the Thor production contract. A longtime member of the American Rocket Society (serving as its president in 1957) and a staunch advocate of space exploration, Capt. Truax volunteered to manage the Air Force's satellite program and oversee its transfer from Wright Field to the West Coast. He led efforts to formulate a development plan and obtain expanded funding for the WS-117L satellite program. When Colonel "Fritz" Oder arrived at WDD to assume command of the program, Captain Truax continued to oversee engineering activities until reassigned in May 1958 as project officer for the Advanced Reconnaissance System in the newly formed Advanced Research Projects Agency (ARPA).

After retiring from active duty in June 1959, Captain Truax headed Aerojet General Corporation's Advanced Developments Division in Sacramento, California. He formed Truax Engineering, Inc., in 1966 and participated in several important space and missile-related efforts during the late 1960s: a recoverable launch vehicle study, sponsored by the American Institute of Aeronautics and Astronautics (1966); the STRAT-X study of future ballistic missile problems, sponsored by the Institute for Defense Analysis (1966-1967); and troubleshooter for TRW Corporation on the Minuteman ICBM program (1967-1968). An ardent proponent of low-cost access to space since the 1950s, Captain Truax designed a series of amphibious launchers from Sea Dragon in the 1960s to Excalibur and SEALAR (Sea Launched Rocket) in the 1990s.