

Chief Engineer

- CNC programming and job quoting. Manufacture of aerospace components of gas turbine engines and rocket engines, specializing in the EDM process. Invented a process to integrally mfr. blades and disk (BLISK) and CNC constant speed jig grinding.
- **The Cyclone Enterprises Inc** (1980-1985) Designed, engineered manufactured and built a prototype 500 shaft turboprop gas turbine engine model for the GATE industry. 10,000 hrs labor equity. Patented a low emissions LPP combustor design for gas turbine engines.

Pratt and Whitney Aircraft East Hartford, CT / West Palm Beach, Fla. 1972 –1980

Project Engineer

- Engineering design, test engineer and project engineering in the Advanced Turbine Engine Gas Generator (ATEGG) program.
- Test engineer in the large turbo-fan program.
- Worked on the initial design concept for float wall combustor, and low emissions JT8D combustor

T&T Engineering Lebanon, New Jersey 1970 – 1972

- Designed, manufactured, built and tested **J-5-1** turbojet.

Education

B.S. Aeronautical Engineering- St. Louis University

Courses toward an MS is Mechanical Engineering-University of Connecticut

ASME course, Combustor Modifications for Low Emissions

Patents (Issued and or pending)

6,845,621 (RQL,Annular Combustor for use with an Energy System)	6,988,728 (Electrical system for turbine / alternator on common shaft)
6,698,208 (Atomizer for a combustor).	6,989,610 (Electrical system for turbine / alternator on a common shaft)
60/459,861 (Electrical power generating system, Hybrid Microturbine) (2 spool system)	6,911,742 (Method and apparatus for turbine/alternator on common shaft)
6,605,928 (Electrical system for turbine / alternator common shaft)	6,909,194(Method and apparatus for turbine/alternator on a shaft)
common	
6,314,717 (Electrical generating system having annular combustor)	6,891,282 (Method and apparatus for turbine / alternator on a common shaft)
4,429,527 (LPP low emissions combustor for gas turbine engine)	11/393,204 (Rankine – Microturbine for generating electricity) (Patent issue ~ by 9/06)
44,351,342 (Catheter)	60/816,404 (RQL Combustor radially staged)
PCT/US97/22-007 (International patent application, Microturbine)	60/727,518 (Desalination with microturbine)
5,427,144 (Liquid flow valve)	5,295,826 (Dental mirror)
5,694,683 (Hot Form Process titanium GE90 fan blade leading edge)	5,313,934 (Lens, shieth device)

Licenses

FAA Airframe and Powerplant
Single Engine Pilot

Professional Affiliations

ASME