

BIOGRAPHICAL SKETCH

Name: John R. Boyd

Address:



Education: BSC Economics, University of Iowa, 1951
BIE Industrial Engineering, Georgia Tech, 1962

Experience and Contribution:

Officer in the USAF from 8 July 1951 through 31 August 1975. Retired in the grade of Colonel - 1 September 1975. Served in Korea as an F-86 pilot with the 51st Fighter Interceptor Wing 1953-54. Flew 22 combat missions before the war ended. Assigned to Nellis AFB, Nevada from 1954-1960. While there served as a combat crew and fighter weapons instructor in both the F-86 and F-100. As a member of the USAF Fighter Weapons School developed and wrote the maneuver-counter maneuver, tactic-countertactic concept of Fighter Tactics which appeared in the "Aerial Attack Study" - 1960. During this period as Chief, Training Analysis and Development (1957-58) and Chief, Fighter Weapons School Academics (1958-1960) was responsible for and developed many of the training concepts as well as wrote much of the supporting literature such as mission cards, publications, etc. At Eglin AFB, Florida, during 1962-1966 with co-worker Mr. Thomas P. Christie evolved the Energy Maneuverability Theory which is now used by designers and tacticians to develop new airplanes and new fighter tactics.

Also during this period, once again, with Mr. Christie evolved the digital simulation of SA-2 missile. These simulations were used to evolve maneuvers that were subsequently employed to effectively counter the SA-2. During 1966-69 as a member of the Operational Requirements Team in the Deputy for Research and Development (AFRDQRT) at Headquarters USAF, was responsible for and developed the design trade-off concept and methodology for the F-X which resulted in the F-15. During 1970-72 with Mr. Pierre Sprey and Col. E.E. Riccioni evolved the Lightweight Fighter (LWF) Concept and supporting trade-off methodology that resulted in the YF-16 and YF-17. During 1970-1972 also evolved the Maximum Maneuver Concept which was used in the design trade-offs and Source Selection Evaluation of the LWF competition and in Linebacker operations in Vietnam. During 1972-1973 was Vice Commander Task Force Alpha then Base Commander at Nakon Phanom, Thailand. From 1973 until retirement in 1975 was Chief, Development Plans and Analysis (AFRDQL) at Headquarters USAF. In this capacity evolved the ideas and formulated the concept for integrating development planning with force planning.

From 1 September 1975 until the present has investigated the nature of winning and losing. In this context, has surfaced: A rich compendium of ideas and actions that make-up the character of conflict--titled "Patterns of Conflict"; the implicit arrangements that permit effective command and control in complex, fast moving situations--titled "Organic Design for Command and Control"; key strategic ideas for realizing what we aim for--titled "The Strategic Game of ? and ?"; and the ways we evolve mental concepts to comprehend and cope with our environment--titled "Destruction and Creation". Presentations on these topics have been made to numerous interested individuals and groups.

Awards and Recognition

- 1965 AFSC Scientific Achievement Award for developing the Energy Maneuverability Theory
- 1966 USAF Research and Development Award in Aeronautical Engineering for developing the Energy Maneuverability Theory
- 1969 Air Force Association Citation of Honor for pioneering development of air-to-air fighter tactics
- 1970 Arnold Air Society Gen. Hoyt S. Vandenberg Award for major contributions to the development of theory and tactics for air-to-air combat with special emphasis on blending of missile tactics into overall spectrum of air-to-air tactics
- 1975 Dr. Harold Brown Award for the creation of advanced scientific theories of energy maneuverability and for leading others in detailed design trade-offs and fostering the validation of the theories in hardware prototype (LWF)

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