

BIBLIOGRAPHY (Curr.Vitae)

NAME: HENRY E. PAYNE III

POSITION: President, Payne Engineering Company, Inc.

EDUCATION: B.S. Mech. Eng. - Yale University 1957
M.S. Aero-Eng. - Princeton University 1959
Dr. Sc. Elec-Eng.- W.Va. Inst. of Technology 1986 - Hon.

PROFESSIONAL BACKGROUND*:

- 1957 – 1961** Research Associate at Princeton's Forrestal Research Center.
Responsible for basic and applied low-speed aerodynamics including:
- a) design and tests of tilt-wing VTOL transport.
 - b) design and test of airship flying wind-tunnel.
 - c) design of low-speed fans and propellers.
- 1959 – 1966** President/Chief Engineer of Payne Engineering Company.
Responsible for conception and initial production of solid-state power control product line.
- 1966 – Present** President of Payne Engineering Company.
Manufacturer of solid-state motor and power controls, sold through agents and distributors around the world. Typical products are:
- a) Model 11 series solid-state AC and DC contactors and motor starters.
 - b) Model 18 series solid-state AC variable voltage power controls and motor controls.
 - c) Model 47 series temperature controls.
 - d) Model 67 series AC power computer.
 - e) Model 31 series propeller/fan blades.
- 1966 – Present** Tomorrow's World monthly column, describing the impact of aerospace and energy technology on the world around us, published in West Virginia's Charleston Gazette and the State Journal.

*See attached for list of professional publications.

PUBLICATIONS
by: Henry E. Payne III

Propeller Effects on the Stability and Control of VTOL Aircraft.
AERO/SPACE ENGINEERING, March 1960.

A Stability Analysis of Tilt-Wing Aircraft.
PRINCETON AERO REPORT #477 (Analytical) May 1960.
PRINCETON AERO REPORT #478 (Experimental) May 1960.

A Preliminary Evaluation of the Use of an Airship as a Test Vehicle for VTOL/STOL Aircraft Models.
PRINCETON AERO REPORT #520. August 1960.

Drag Investigation of Bodies of Revolution with Shrouds.
(Proprietary for Electric Boat Division of General Dynamics)
PRINCETON AERO REPORT #513. May 1960.

Smoke Flow Visualization of SSN 585 Skipjack.
PRINCETON SUBSONIC LABORATORY REPORT. November 1959.

Application of Small-Scale Propeller Test Data to VTOL/STOL Aircraft Design.
PRINCETON AERO REPORT #503. October 1961.

The Navy's Flying Wind Tunnel.
AERO/SPACE ENGINEERING. March 1961. (Cover story, February).

Study of V/STOL Aerodynamic Test Facilities.
PRINCETON AERO REPORT #545. May 1961.

Flight Comparison Analysis.
PAYNE ENGINEERING REPORT #7, January 1961.
(Proprietary for Curtiss-Wright Propeller Div.)

Helicopter-V/STOL Experimental Test Methods.
IAS Paper #62-15, 30th Annual Meeting of the INSTITUTE of AEROSPACE SCIENCES.
New York City, January 1962.

A Flow Study of the Underwater Turning Maneuver of a Submarine.
PAYNE ENGINEERING REPORT #15, January 1962.
UNDERSEA TECHNOLOGY March/April 1962, Vol. 3, No. 2.

A Feasibility Study of an Airborne Underwater Weapon System.
PAYNE ENGINEERING REPORT #30, February 1963.

Semiconductor Fusing.
PAYNE ENGINEERING REPORT #49, January 1968.

Propeller Design for Duffers Associates ACV (Liebeck Airfoil)
PAYNE ENGINEERING REPORT #31D, November 1970.

Power Optimization Program.
(Field excitation, capacitor switching and demand control)
PAYNE ENGINEERING REPORT #62, December 1974.

Electric Heating of Bridge Decks and Roadways.
PAYNE ENGINEERING REPORT #64, June 1975.

Publications (contd.)

Laminar Flow Rethink - Using Composite Structure.

SOCIETY of AUTOMOTIVE ENGINEERS, SAE #760473, April 1976.

Design & Economical Protection of Thyristor AC Motor Starters from 5 KW to 1000 KW.

POWER CONVERSION INTERNATIONAL, July/August 1980.

Power Integrated Circuits: Know the Limitations.

CONTROL ENGINEERING, July 1986.

Submarine Maneuvering Instability.

SUBMARINE REVIEW, January 1988.

Want to Study About Modern Submarine Design?

SUBMARINE REVIEW, October 1988.

Why Do Our Attack Subs Try to Fly With Only 1/2 Wing? PART I.

SUBMARINE REVIEW, January 1989.

Why Do Our Attack Subs Try to Fly With Only 1/2 Wing? PART II.

SUBMARINE REVIEW, April 1989.

An Airborne Undersea Weapon System.

SUBMARINE REVIEW, October 1989.

Magic Black Boxes:----,

POWER QUALITY Philadelphia Conf.Proceedings, Oct. 1990.

Submarine Maneuver Control.

NAVAL INSTITUTE PROCEEDINGS, July 1992 pp.56-60.

The ALBACORE: Back to the Future,

NAVAL INSTITUTE PROCEEDINGS, April 1993 pp.105-107

The ALBACORE Advantage,

NAVAL INSTITUTE PROCEEDINGS, July 1993 pp.59-62.

Transformer Considerations w/Thyristor Controls.

PAYNE ENGINEERING, AN 11-18, June 1994

Journalist Energy Training Seminar

PAYNE ENGINEERING CO , Scott Depot, WV, June 2004

History of Electricity Seminar

PAYNE ENGINEERING CO , Scott Depot, WV, June 2005

The SILICON Revolution.

CONTROLS and SENSORS Conference, Cleveland, OH, May 1-2, 2007

May 2007