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CANDIDATE NAME: H. TROY NAGLE

BIOGRAPHY: Dr. Nagle is Distinguished Professor of Electrical and Computer Engineering at NCSU, and Professor of Biomedical Engineering at UNC & NCSU. He was the Founding Chair of the UNC-NCSU Joint Department of Biomedical Engineering. Dr. Nagle is widely published in data acquisition and signal processing, co-edited a handbook on machine olfaction, and is coauthor of textbooks in digital logic design and digital control systems. In recent years, he has focused his research on machine olfaction and experimented with its use in food processing, environmental monitoring, and medical diagnostics. Dr. Nagle received the BSEE and MSEE degrees from the University of Alabama, the

PhD degree (Electrical Engineering) from Auburn University, and the MD degree from the University of Miami School of Medicine. He is a life fellow of IEEE, a past TAB Chair (1989-90) and a past IEEE President (1994).

CITATION: For leadership in reforming TAB governance which included giving Society Presidents the same TAB voting rights as Division Directors.

DESCRIPTION OF ACCOMPLISHMENT(S) RELATIVE TO THE CREATION, DEVELOPMENT, OR ADVANCEMENT OF THE TECHNICAL OBJECTIVES OF THE IEEE:

DATE(S) OF ACCOMPLISHMENT(S):

1) Enhancing Technical Society influence in TAB (1984-1990):

When Troy became a member of TAB in 1984, he was concerned that the most important actions of TAB (regarding financial approvals) were decided in whole by a vote of the Division Directors in a body known as the TAB OpCom. Many of the decisions recommended by the Society Presidents (made in a separate President's Forum) were over-ruled by the TAB OpCom. Since Technical Societies are the "engine" of the IEEE, this mode of operation was deemed unacceptable by a majority of the Society Presidents. During his tenure as TAB Chair in 1989-1990, Troy and the sitting Division Directors empowered a significant change in TAB procedures that gave Society Presidents the same voting rights as Division Directors. This raised the influence of Society Presidents one level in the IEEE hierarchy.

- 2) Funding the inaugural IEEE electronic publications database (1988):
 In the mid-1980s, TAB staff controlled a "secret" reserve of funds from the Book
 Broker program. Troy led an initiative by TAB members to make this public and to
 fund TAB initiatives. The first project funded was the creation of an electronic
 database of journal publications. For this reason, early versions of IEEE Xplore
 were limited to papers published after 1987.
- 3) Establishing a home in TAB for neural networks (1987-1992): In 1987, the San Diego Section conducted a very successful First IEEE Conference on Neural Networks with no financial co-sponsorship by TAB. The TAB Chair asked Troy to form a committee to investigate the event. Some of the organizers served as tutorial presenters and paid themselves tens of thousands of dollars. Troy helped organize second and follow-on conferences, and the startup of the IEEE Neural Networks Council. This effort generated a new TAB entity that has been very successful.

RELEVANT IEEE ACTIVITIES:

President, IEEE Sensors Council, 2014-2015.

Member, IEEE Technical Activities Board, 2014-2015, 1987-1992, 1984-1985.

Member, IEEE Neural Networks Council Administrative Committee, 1990-1992.

Vice President for Technical Activities, IEEE, 1989-1990.

Member, IEEE Neural Networks Committee, 1987f1989; Chair, 1988.

Division VIII Director (Computer Society), 1987-1988.

Member, IEEE Technical Activities Board Meetings Committee, 1984-1985.

President, IEEE Industrial Electronics Society, 1884-1985.

Member, IEEE Student Activities Committee, 1984-1985.