2017 TAB HALL OF HONOR RECIPIENT NOMINATION FORM



CANDIDATE NAME: Michael K. Masten

BIOGRAPHY: Michael K. Masten is a TI Fellow in Corporate Research and Development at Texas Instruments. During his career at TI, Mike has worked on line-of-sight stabilization, target tracking, inertial navigation, missile autopilot-flight control systems, real-time hardware-in-the-loop test processes, electric motor control, and hard disk drive systems.

He holds five patents, has published over 50 articles, and has taught numerous workshops in stabilization-tracking systems.

Dr. Masten is currently manager of a research program directed to practical implementation of control systems using

state of the art electronics. He was elected Senior Member of Technical Staff on TI's technical ladder in 1980, and promoted to rank of Texas Instruments Fellow in 1989.

Dr Masten received electrical engineering degrees from the University of Texas in Austin, as well as an MBA from the University of Dallas. He served two terms as member of the IEEE Control Systems Society Board of Governors and V.P. Member Activities (1992-1993), V.P. Financial Affairs (1994), and Society President in 1996.

Mike was General Chair for the 1994 IEEE Conference on Decision and Control. He is a member of the Council, as well as Vice Chair of the Technical Board, for the International Federation of Automatic Control; he also serves on the Editorial Board for the IFAC journal, "Control Engineering Practice".

Dr. Masten served as member and delegate of the IEEE Board of Directors for 1997-98 as Director, Division X, and as TAB Treasurer (and therefore a member of IEEE Finance Committee) in 1999-2000. He was elected an IEEE Fellow in 1990 and Distinguished Member of the IEEE Control Systems Society in 1997.

CITATION: For leadereship in restoring TAB to financial health through a new infrastructure cost distribution model.

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

From 1982-1999, the US market (S&P 500) advanced by a factor of 15, a compounded annual growth rate of over 16%. IEEE's 1998 reserves (net assets) exceeded \$100M, largely due to the business models of IEEE Technical Societies, whose annual positive nets in publications, conferences in previous years.

This was the financial state of affairs as the first year of Mike Masten's term as TAB Treasurer began, but he had already started to examine IEEE and TAB Financial Models. He saw the need for the Societies to discover and use best practices in managing their businesses. A special task force on infrastructure distribution was formed within TAB to address these and other issues. Maston's first New Financial Model (NFM - June 1999):

- Terminated all dues allotments
- Required all entities to pay for IEEE services using a "pay-by-the-drink" method.
- Declared cost center expenses ("infrastructure") to be funded annually ("zero-based budget") with remainder of funding covered by cost center income sources.
- Required that IEEE G&A costs be paid first by dues and ancillary income sources, and then and only then by an overhead charge to all entities.
- Required that IEEE cut costs, evaluate infrastructure, outsource when appropriate, and follow good business practices (including balanced budgets).

Mike's insight and vision to see the need for changes to the existing financial model was executed with a personal style of motivating group activity to effect change by discussion and consensus. His process was a case study right out of the *Wisdom of Crowds* - 5 years *before* James Surowiecki's bestseller.

The BoD was slow to adopt TAB's resolutions. In time, however, IEEE FinCom, and the BoD approved much of NFM. Mike's efforts and style in his term as TAB Treasurer transformed volunteers and staff at TAB and BoD levels, and set a lasting vivid example of how one person can affect positive change within our organization.