**IEEE’s Ethics History Timelines**

(as of September 26, 2016)

**1880-1900**

1884 An International Electrical Exposition was held at the Franklin Institute

1884 Call issued to form the AIEE to host the International Exposition

1884 AIEE’s first annual Conference was held

1884 Norvin Green became AIEE’s first President

1898 The AIEE’s first Standards Work was begun

**1900-1909**

1901 The AIEE’s Membership rules placed “executives and businessmen” in an Associate class, deemed by some as being an “inferior” classification

1902 The AIEE Constitution was adopted

1903 The AIEE adopted a non-discrimination Member policy covering race and gender

1906 Call for a Code of Ethics by Schuyler Wheeler in his Presidential address on “Engineering Honor”

1906 Charles Steinmetz publishes paper on Engineering Honor

**1910-1920**

1910 AIEE had 7,000 Members

1912 Adoption of AIEE’s First Code of Ethics (a Code of Principles it was called)

1912 The IRE is established, focused on Radio Engineering, was International and dealt only with Technical Activities; its membership was younger than that of the AIEE and grew larger

1912 Robert H. Marriot became IRE’s first President

1913 A dispute arose over whether engineer professionals or business executives would control the AIEE

1913 New York Supreme Court rules to allow Executive non-engineer Professionals to serve on AIEE’s Board of Directors

1913-1920 The AIEE underwent a gradual shift from professionalism toward business during which AIEE advocated exempting industry engineers from being licensed Professional Engineers

**1920-1959**

1950 AIEE’s Code of Ethics Revised (but was unknown about when the BART case arose in 1973)

**1960-1979**

1963 The AIEE and IRE are merged forming the IEEE

1963 The IEEE endorsed “Canons of Ethics of Engineers” after AIEE/IRE merger.

1971 Edwin Layton, Jr. published his book “The Revolt of the Engineers”

1971The United States Activities Committee, USAC, was formed under the Regional Activities Board, RAB

1971 The first Professional Activities Committee was formed by RAB

1972 IEEE Constitution Amended to add Professional Activities

1973 IEEE Orlando Section established its own Professional Activities Committee

1973 Stephen Unger wrote about 3 engineers at BART whom had been fired for raising safety issues

1973 Issues of the BART Case motivated Members to seek establishment of an Ethics Committee

1974 USAC was elevated to full Board status, the United States Activities Board, USAB

1974 The IEEE Updates the AIEE Code of Ethics

1997 IEEE Orlando Section holds SOUTHEASTCON ’74 and established the first Professional Activities papers session in IEEE history with 11 papers presented

1974 IEEE’s Spectrum magazine published articles about the BART fired engineers and safety issues

1975 IEEE Files its Amicus Curiae brief in the BART Case of the 3 fired engineers

1977 USAB’s Ethics Task Force developed ethics proposals for disciplining and supporting engineers

1977 IEEE’s Board assigned Jim Fairman to develop ethics discipline procedures

1977 Walter Elden presented USAB’s dual role (member discipline and ethical support) of a Member Conduct Committee and Jim Fairman presented the Board’s view to just discipline, not support, Members in ethical matters

1978 The Member Conduct Committee is established with Jim Fairman its first Chair

1978 The Carl Barus Award is established by the Committee on Social Implications of Technology, CSIT

1978 The 3 BART Engineers receive the Barus Award, Max Blankenzee, Robert Bruder and Holger Hjortsvang

1978 Virginia Edgerton is the first to be supported by the Member Conduct Committee, after the CSIT investigated and published findings supporting her ethical actions; CSIT published findings but the MCC did not

1979 Virginia Edgerton receives the Barus Award

**1980-1989**

1980 Divided Loyalties: Whistle-Blowing at BART (Paperback), Purdue University Press

1983 Stephen Unger writes his “IEEE Guidelines for Engineers Dissenting on Ethical Grounds”

1984 IEEE had over 260,000 Members

1986 Edwin Layton, Jr. revised his book “The Revolt of the Engineers”

1987 IEEE revised its Code of Ethics

**1990-1999**

1990 IEEE revised its Code of Ethics

1992 The ACM adopts a Code of Professional Conduct and Ethics

1994-1999 IEEE Society and Technology Magazine published 19 ethics papers\*

1995 IEEE establishes an Ethics Committee

1995 IEEE’s Code of Ethics becomes required to be supported to renew Membership

1996 IEEE establishes and activates its Ethics HOT Line

1996 IEEE’s Ethics Committee begins publishing ethics articles in the INSTITUTE

1996 The INSTITUTE published 6 ethics papers

1996 IEEE’s Walter Elden coined and defined the phase “Ethical Harassment”, leading to its adoption by authors

1997 IEEE’s Computer Society and the ACM jointly adopt a Software Code of Ethics

1997 IEEE’s first WEB pages for its Ethics and Member Conduct Committees were established

1997 Salvador Castro asked the MCC, via the HOT Line, for ethical support in an infant respiratory defect issue

1997 The INSTITUTE published 5 ethics papers

1998 The Institute published the first article about the operations of the Member Conduct Committee, written by Walter Elden

1998 The MCC recommended support of Salvador Castro and the Board approved it for when matter went to court

1998 Former IEEE Ethics HOT line operators, established an independent HOT line under the outside Online Ethics Center

1998 Past IEEE President and MCC Chair Matha Sloan proposed an Ethics Resolution Service, a proposal was drafted but was never presented to the Board for consideration

1998 The view that IEEE should not get involved in engineer employee-employer conflicts is expressed in a MCC meeting by Past IEEE President and MCC Member Wally Read

1997-98 All Ethical Advice, HOT Line, INSTITUTE articles, Legal Support Fund and Support activities are terminated: pro-ethical support members of the MCC and EC are removed

1998 The INSTITUTE published 7 ethics papers

1999 The INSTITUTE published 4 ethics papers

**2000-2009**

2000-2009 IEEE Society and Technology Magazine published 39 ethics papers\*

2000 The INSTITUTE published 3 ethics papers

2001 The INSTITUTE published 4 ethics papers, and then their publishing was stopped

2001 The Member Conduct and Ethics Committees are combined forming the Ethics and Member Conduct Committee, or EMCC

2001 The EMCC begins informally restricting offering ethics advice and ethical support to Members

2001 Salvador Castro presented a Barus Award for protecting infants from defective respiratory devices

2005 The IEEE Board of Directors formally approves restricting the EMCC from offering ethics advice and ethical support to Members adding a clause in the EMCC Operations Manual

2006 IEEE revised its Code of Ethics

2007 IEEE Executive Committee terminates the membership of a Member for misrepresentations and false statements on the application for membership

**2010-2016 (To The Present, September 15, 2016)**

2010-2016 IEEE Society and Technology Magazine published 15 ethics papers\*

2013 IEEE revises its Code of Ethics

2015 It is revealed that VW included an emission defect switch in millions of its cars, bypassing Regulatory Emission Testing producing a Corporate ethics scandal, several resignations followed

2015 IEEE’s dual ethics restrictions on the EMCC are challenged in a Position Statement

2016 The IEEE Ethics History Repository, IEHR, is established beginning in 1884

2016 The IEEE SSIT under TAB, established 2 initiatives under TechEthics dealing with autonomous devices/artificial intelligence; 1.TA Ethics, Society & Technology (EST) Program and 2. SA Industry Connections (IC) group

2016 IEEE’s The Institute print edition published Walter Elden’s Letter to the Editor, titled “Restore IEEE’s Ability to Provide Ethics Advice and Ethical Support”, September 2016, p.15

NOTES:

* References provided from IEEE T&S Magazine were identified as "ethics" papers by searching the database "headline and abstract" search only. In fact, there would be quite a few more papers that were about "ethics" without explicitly identifying the term in the heading or abstract.