

History Activities Coordinator

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The History Activities Coordinator is assisted by Tony Davies, Past History Activities Coordinator (2013–2020), Antonio Savini, current IEEE History Committee Chair (2022–2023), and Evgen Pichkalyov and Sergei Prokhorov, current IEEE History Committee members (2022–2023).

A. Focal points for 2022

Note: Please refer to the previous report for the highly appreciated actions by the Sections.

- IEEE Milestones, see http://ieeemilestones.ethw.org/IEEE_Milestones_Program
 - The IEEE Milestones program honors significant technical achievements in all areas associated with IEEE. It is a program of the IEEE History Committee, administered through the IEEE History Center. Milestones recognize the technological innovation and excellence for the benefit of humanity found in unique products, services, seminal papers and patents. Milestones are proposed by any IEEE member, and are sponsored by an IEEE Organizational Unit, such as an IEEE Section, Society, Chapter or Student Branch. After recommendation by the IEEE History Committee and approval by the IEEE Board of Directors, a bronze plaque commemorating the achievement is placed at an appropriate site with an accompanying dedication ceremony.
- Documenting the history of Region 8 Sections at the Engineering and Technology History Wiki, see https://ethw.org/
 The Engineering and Technology History Wiki (ETHW) is a wiki-based platform that allows IEEE members and Organizational Units to collaboratively preserve and share their history (including, for instance, the history of individual IEEE Sections). ETHW hosts the Milestones, Oral Histories, and Archives programs, and also allows IEEE members to contribute to Wikipedia-style topic articles or to preserve their own first-hand histories.
- Region 8 history book, available at https://ethw.org/w/images/a/a6/R8_history.pdf
 - The book *A short history of IRE Region 9 / IEEE Region 8* presents a history of IEEE Region 8 spanning its origins from the IRE Region in Europe, through the IRE/AIEE merger forming the IEEE and subsequently to the present day Region 8 consisting of Europe, the Middle East, and Africa. Included are personal reflections of past directors, committee meetings and conferences, student activities, award recipients from Region 8, and Region 8 history papers presented at HISTELCON 2012. A number of archival documents are attached as appendices, including ephemera and minutes from early Region 8 Committee meetings.

The table of contents of the book has been added at the end of this report for easy reference.

- A few minor focal points
 - HISTELCON 2023, Florence, Italy, 7–9 September 2023 (in hybrid form). Contributions from Region 8 are solicited for this Region 8 flagship conference.
 - History of IEEE since 1984 is a wiki webpage that is currently in progress. Contributions from Regions 7–10 are very welcome, otherwise the book may be USA-dominated.

B. Recent Milestone dedications in Region 8

- Leiden, Netherlands, String galvanometer to record a human electrocardiogram, 1901–1905 #222 (55)

 Dedicated 8 April 2022 IEEE Benelux Section
 - On 22 March 1905, the first successful clinical recording of a human electrocardiogram (ECG) took place at this location, which at the time was the Academic Hospital Leiden. Willem Einthoven's pioneering work, from 1901 to 1905, resulted in a string galvanometer specifically designed to measure and record the heart's electrical activity, which made this medical achievement possible. This invention marked the beginning of electrocardiography as a major clinical diagnostic tool.
- Eynsham, England, Active shielding of superconducting magnets for MRI, 1984–1989 #224 (56)
 Dedicated 17 June 2022 IEEE UK and Ireland Section
 - At this site, the first actively shielded superconducting magnets for diagnostic magnetic resonance imaging (MRI) use were conceived, designed, and produced. Active shielding reduced the size, weight, and installed cost of MRI systems, allowing them to be more easily transported and advantageously located, thereby benefiting advanced medical diagnosis worldwide.
- Manchester, England, Manchester University "Baby" computer and its derivatives, 1948–1951 #225 (57)
 Dedicated 21 June 2022 IEEE UK and Ireland Section

 At this site on 21 June 1948 the "Baby" became the first computer to execute a program stored in addressable read-write
 - At this site on 21 June 1948 the "Baby" became the first computer to execute a program stored in addressable read-write electronic memory. "Baby" validated Williams-Kilburn Tube random-access memories, later widely used, and led to the 1949 Manchester Mark I which pioneered index registers. In February 1951, Ferranti Ltd's commercial derivative became the first electronic computer marketed as a standard product delivered to a customer.
- Manchester, England, The Atlas computer and the invention of virtual memory, 1957–1962 #226 (58)
 Dedicated 21 June 2022 IEEE UK and Ireland Section

The Atlas computer was designed and built in this building by Tom Kilburn and a joint team of the University of Manchester and Ferranti Ltd. The most significant new feature of Atlas was the invention of virtual memory, allowing memories of



different speeds and capacities to act as a single large fast memory separately available to multiple users. Virtual memory became a standard feature of general-purpose computers.

The total number of dedicated **Milestones** in Region 8 is currently 57, with 59 plaques located in 17 Sections: Benelux (4), Croatia (1), Denmark (1), France (4), Germany (6), Israel (2), Italy (9), Norway (1), Poland (2), Russia (Northwest) (2), Serbia and Montenegro (1), South Africa (1), Spain (2), Sweden (1), Switzerland (2), UK and Ireland (19), and Ukraine (1). Note that France and UK and Ireland have one Milestone (#44) in common, with different citations on the plaques, and that one of the Milestones in Poland (#205) has a duplicate plaque in Germany.

In addition to the actual Milestones, there are 2 **Special Citations**: one in Serbia and Montenegro (#1) and one in Germany (#3). Special Citations recognize events or institutions which – although not technical achievements as defined by the Milestone Program – have contributed to the profession. Examples might be: museums or archives with substantial holdings pertaining to the history of electrical engineering and computing, the holding of a seminal conference, or the formation of a technical society.

Note that as a result of the motion that passed in the 9 June 2022 IEEE History Committee meeting, Milestones and Special Citations are now on separate lists, and the numbering of Milestone dedications has been updated; this has affected all Milestones of which the dedication ceremony took place between October 2015 and May 2022.

C. Recently approved Milestones in Region 8 and planned dedication ceremonies

- Budapest, Hungary, Budapest Metroline No. 1, 1896; approved 24–11–2019.
 Dedication ceremony planned for 19 or 20 October 2022.
- Hayes, England, *First computerized tomography (CT) X-ray scanner*, 1971; approved **19–05–2022**. Dedication ceremony planned for **26 October 2022** with the unveiling of the Milestone plaque at Jupiter House, followed by a symposium at the Royal Institution of Britain on 27 October 2022. More information on the IEEE UK and Ireland Section website.

A list of all **IEEE Milestones and Special Citations in Region 8** with links to ETHW and to their locations on Google maps, including the ones that are currently under investigation by the IEEE History Committee, is available here (.xlsx).

D. Events

HISTELCON 2023, Science and Technology or Technology and Science?, will take place in Florence, Italy, 7–9 September 2023.

HISTELCON is a Region 8 flagship conference held every two years on the history of electrical engineering, electronics, computing, their applications, and their impact on humanity's social development. HISTELCON 2023 is already the eighth HISTELCON conference, with predecessors in Paris (2008), Madrid (2010), Pavia (2012), Tel-Aviv (2015), Kobe (2017, together with Region 10), Glasgow (2019), and Moscow (2021).

HISTELCON 2023 will be a hybrid event, held both live and online. The conference official language is English; all presentation will be oral. The conference will be hosted in the magnificent Florence city center on 7–9 September 2023 supported by the IEEE Italy Section.

The conference leading topic is *Science and Technology or Technology and Science?*, however, different topics are welcome, including but not limited to: Technology museums, Computers and microprocessors, Device and system vulnerability, Foundational research and Big Science, Measurement systems and units, Big corporations.

More information will soon be available at https://2023.ieee-histelcon.org/.

- The **proceedings of HISTELCON 1 through 7**, available in IEEE Xplore, are now freely accessible for everyone without any payment:
 - 1) Paris, France, 11–12 September 2008
 - 2) Madrid, Spain, 3-5 November 2010
 - 3) Pavia, Italy, 5–7 September 2012
 - 4) Tel Aviv, Israel, 16–21 August 2015, held jointly with the 42nd annual meeting of ICOHTEC, the International Committee for the History of Technology: History of High-Technologies and Their Socio-Cultural Contexts
 - 5) Kobe, Japan, 7-8 August 2017, together with IEEE Region 10
 - 6) Glasgow, United Kingdom, 18-19 September 2019
 - 7) Moscow, Russia, 10–12 November 2021

E. Activities of the History Activities Coordinator

- Updated the **History Activities** webpage and the **History** webpage on the Region 8 website.
- Updated the **Region 8 history book** (.pdf).
- Added the Membership statistics at year end (.xlsx); see also Section 2.6 in the Region 8 history book.
- Added the **Geographic Unit statistics at year end** (.xlsx); see also Section 2.5 in the Region 8 history book with several additional remarks.



The 119th IEEE Region 8 Committee Meeting

- Updated the **list of Sections and Subsections in Region 8** (.xlsx); see also Section 2.4 in the Region 8 history book.
- Updated the **list of Region 8 Committee meetings** (.xlsx); see also Chapter 5 in the Region 8 history book.
- Updated the **list of Region 8 Conferences** (.xlsx); see also Chapter 6 in the Region 8 history book.
- Updated the list of Region 8 Student Paper Contest finals (.xlsx); see also Section 7.5 in the Region 8 history book.
- Updated the **list of awards presented to members who reside in Region 8** (.xlsx); see also Chapter 8 in the Region 8 history book.
- Updated the **list of IEEE Milestones in Region 8** (.xlsx); see also Section 9.2. in the Region 8 history book.
- Updated the list of IEEE Directors residing in Region 8 (.xlsx).
- Updated the **list of Oral Histories related to Region 8** (.xlsx) with links to ETHW.
- 01/03-04-2022: Attended the April meeting of the IEEE Region 8 Committee in Warsaw, Poland.
- 08-04-2022: Represented Region 8 at the Milestone dedication ceremony in Leiden, Netherlands.
- 19-04-2022: Attended the April teleconference of the Region 8 Member Activities team.
- 17-05-2022: Attended the May teleconference of the Region 8 Member Activities team.
- 19-05-2022: Attended the teleconference of the Milestones Subcommittee of the IEEE History Committee.
- 09-06-2022: Attended the June teleconference of the IEEE History Committee as a Past Committee member and as the Region 8 liaison.
- 14-06-2022: Attended the June teleconference of the Region 8 Member Activities team.
- 20/21-06-2022: Represented Region 8 at the Milestones dedication ceremony in Manchester, England.
- 12-07-2022: Attended the July teleconference of the Region 8 Member Activities team.
- 09-08-2022: Attended the August teleconference of the IEEE History Committee as a Past Committee member and as the Region 8 liaison.
- 15-08-2022: Submitted the History Activities Operations Manual to Region 8 OpCom.
- 16-08-2022: Attended the August teleconference of the Region 8 Member Activities team.
- 10/11-09-2022: Attended the Region 8 Strategy Retreat in Geneva, Switzerland.

F. Interesting weblinks

- A short history of IRE Region 9 / IEEE Region 8 https://ethw.org/w/images/a/a6/R8_history.pdf (.pdf)
- Engineering and Technology History Wiki https://ethw.org/
- List of IEEE Milestones https://ethw.org/Milestones:List_of_IEEE_Milestones
- List of achievements suitable for Milestones https://ieeemilestones.org/List_of_Achievements_Suitable_for_Milestones
- List of all Oral Histories https://ethw.org/Oral-History:List_of_all_Oral_Histories
- List of First Hand Histories https://ethw.org/First-Hand:List_of_First_Hand_Histories
- More links can be found on the IEEE Region 8 History Activities and History webpages.



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