Fred Stark Pearson (1861 – 1915)
Engineer, Entrepreneur and Envisioner
Genius!

Genius is one per cent inspiration and ninety-nine per cent perspiration

Thomas A. Edison
Currently, the New York Section of IEEE comprises of the following
Active Chapters of the IEEE Societies:

- Computational Intelligence Society
- Computer Society
- Communications Society
- Technology Management Society
- Engineering in Medicine and Biology Society
- Instrumentation and Measurement Society
- Power and Energy Society
- Industrial Applications Society
- Solid State Circuits/Electron Devices Societies
- Systems, Man and Cybernetics Society
- Vehicular Technology Society
- Broadcast Technology Society

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The following Affinity Groups as defined by IEEE

- Consultants’ Network
- Life Members Affinity Group (LMAG)
- Women in Engineering
- Young Professionals

The IEEE rules require that in order to be declared as active each of the Chapters or Affinity Groups must hold at least two presentations per year. Hence, keep your eyes open for any notice and join a presentation or discussion. Only if you help us to keep the Societies active we’ll be able to satisfy your interest.

Energize your Section

Attend and contribute to the IEEE meetings
ELECTION OF SECTION OFFICE BEARERS FOR 2020

The Nominations Committee of the IEEE NY Section, after due deliberations, advised the Section on this year’s nomination slate. David Horn, the present chair of the New York Section has issued the following notification:

This is to notify all IEEE New York Section members that the Annual Election of Executive Committee Officers in the IEEE New York Section will be held on January 15, 2020. The election process will begin promptly at 5:00pm and will be conducted at the offices of Consolidated Edison at 4 Irving Place, NY, NY.

At its December 2019 Executive Committee meeting, the NY Section Executive Committee approved the following slate for the election of officers for calendar year 2020. The candidates are:

- Chair: Robert Pellegrino
- Vice Chair Operations: Chamara Johnson
- Vice Chair Section Activities: Thomas Villani
- Secretary: Cara Levy
- Operations and Procedures: Wilson Milian
- Chapter Organization/Society Liaison: Paul Sartori
- Historian: Amitava Dutta-Roy
- Webmaster: Harold Ruchelman
Due to security precautions, any NY Section member of good standing wishing to participate in the election process needs to contact David Horn, 2019 Chair of the New York Section by 5:00pm on January 14, 2020, so that the member's name can be added to the building access security list. Mr. Horn's contact information is noted below. Active IEEE members attending the election must arrive at the Consolidated Edison building by 4:45pm to ensure that they can be escorted to the room where the election will be held before 5:00pm.

Again, if you wish to participate in this election process, you must be present for the election meeting and you must pre-register for access to the Consolidated Edison building. Please be prepared to provide your IEEE member number to Mr. Horn when contacting him for pre-registration so that your IEEE status can be confirmed.

Mr. Horn's contact information is:

E-mail: david.horn@ieee.org
Tel: 631-560-2309
List of joint presentations organized by PES/IA/LMAG in 2019

The following list was submitted to the Chair of LMAG, Region 1

JOINT PRESENTATIONS OF LMAG, PES AND IAS, IEEE NY SECTION DURING 2019

1. Jan 29: Bioinformatics in Cancer treatment and diagnostics by Prof. G.C. Giakos, Manhattan College, NY
2. Feb 26: Fire-related cables for Emergency Applications, Conforming Cables to Standards by Bradley Rausch, Transit Consultant, ShorElectric, NY
3. Mar 26: Total Building Systems by Maria Marks, Siemens
4. Apr 23: Grounding for Rail Signal Systems by Vijay Lakhchandani, SYSTRA, NY
5. May 21: Astoria Borealis by Dan Taft, Con Edison
8. Aug 22: IoT and Lighting Controls by Cheyo Rogers, Siemens
Note: New York City is no exception as to the scarcity of suitable venues, large and free of charge in large metro areas. So, years ago the PES/IAS chapters in the New York Section of the IEEE made arrangements to hold joint meetings with LMAG. Those days the Section was largely dominated by the PES/IAS and many of them were employed by Con Edison. It was thus easier to get a venue for the meetings. Soon a tradition developed that led to (almost) monthly meetings of PES/IAS/LMAG and the sharing of their respective budgets. PES/IAS chapters were and still are wealthier than LMAG. These days the LMAG has the option of indicating at least two speakers every year. ConEdison still supports our activities.
Fred Stark Pearson

You may wonder why we placed a photo of one Fred Stark Pearson on this month’s cover page. Most of you may not even have heard of him. Pearson was an electrical engineer who, like many adventurous American electrical engineers of that epoch crossed the oceans, Atlantic, South Atlantic and Pacific in ships, was instrumental in the planning and expansion of generation of electricity in many countries. Efforts of these forward-looking engineers led to proliferation of manufacturing of incandescent lamps and appliances – fans, tramways, trolley buses, refrigerators, space heaters and vacuum cleaners, to name a few — that depended on electrical energy for their operations.

This is how we have come to know about Pearson. His life story is narrated by Gilmore G. Cooke, also an electrical engineer and a Life Senior Member of the IEEE.

Gilmore has been the historian of Region 1 of the IEEE. Last year he was also the chair of the Boston Section. He has contributed articles on the history of electrical engineering in our Power and Energy Magazine. Gilmore is no newcomer to IEEE New York Section. In 2014, at a joint meeting of
LAMG and PACE of our Section and Columbia University, NY to celebrate the granting to the inventor of FM broadcasting technology Major Edwin Armstrong’s first patent for his regenerative circuit, Gilmore gave an interesting presentation.

Gilmore has recently published a book: The Existential Joys of Fred Stark Pearson (1861 – 1915), Engineer, Entrepreneur, Envisioner), 2019, ISBN: 978-1-7332378-0-2. In his book Gilmore writes about Pearson and his travels and work in various parts of this country, and overseas: Spain (Barcelona), Mexico (Pueblo and Mexico City), and Brazil (Rio de Janeiro and São Paulo). It was no easy feat those days to travel so extensively. Fred Pearson and his wife Mabel braved the fears and traveled anyway until on 7 May 1915 the Germans torpedoed the Cunard ship Lusitania in which
they were traveling. The ship sank to the bottom of the ocean floor. For a short historical account of this incident see:


I have known Gilmore for many years because of our mutual interest in the history of electrical engineering and the IEEE. I regard him a friend. Both of us have also some common interests in Brazil. (I lived and taught electronics and communications engineering for many years in Brazil: first at the University of São Paulo and then at the Institute for Space Research there. I was also active in the São Paulo, Section that is now known as South Brazil Section) Section of the IEEE). Gilmore and I often exchanged news, views and stories of my experience in Brazil. (I can read and speak fluently in Portuguese, the language spoken in Brazil; that has been an advantage.) Gilmore has tracked the lives of many American engineers who almost a hundred years ago worked on engineering projects in Latin America. Since our mission at IEEE is to disseminate information on electrical engineering and its practitioners all over the world, I felt kind of dutybound to bring Gilmore’s story on Pearson to you. Though we’ll describe the book’s contents in detail in a future edition of the Monitor we publicized the book even to larger readership.

In October of last year, when I was about to go to Brazil on one of my periodic trips to Brazil. Gilmore asked me to inquire if any entity there was involved with the history of electric power. I am a communications person and I confess that I did not know much of what was really going on in Brazil in the fields of electric power.
My IEEE colleague and dear friend Nelson Segoshi, who for many years represented Region 9, at the PES offered to help me. Nelson told me indeed there was a museum in São Paulo that not only has exhibits and working models on the development of electrical utilities in Brazil but also conducts special visits and programs for school kids in Brazil. Yes, they would welcome a copy of Gilmore’s book and make it available to the interested. Their interest beaconed me as an ideal place to visit.

Gilmore was thrilled with the news and sent me a copy of his 359-page book. It weighs more than a kg. Anyhow, it went into my carry-on bag. Nelson had made arrangement for our visit to the museum in early November 2019. So, Nelson, my wife Maria Cristina Arduino (who is a native of Brazil) and I marched to the museum on the appointed day and were warmly received by a team of young members of the staff. I presented the book on behalf of Gil and the IEEE. Then we visited the museum and its library. They have models and pictures of many interesting sites such as the Billings lake and the generating station and Itaipu hydroelectric project at the border of two countries, Brazil and Paraguay. See the description of the dam in:
https://www.youtube.com/watch?v=Cv-h6LaitAM
and https://www.youtube.com/watch?v=ZmHVAS-KAkw.

A Sao Paulo Street lamp (circa. 1920)  
A Sao Paulo Street lamp (circa. 1920)  
A Brazilian electric lamp stand (ca. 1920)

Some of the artifacts in the energy museum of São Paulo, Brazil
Gilmore is now researching on the stories of other American or Canadian engineers who helped in developing electrical industry in Latin America in early and middle of 1900s. If you know any of such stories please get in touch with Gill at: getcooke@concast.net. In a future edition of the Monitor I’ll tell my story of an American ex-pat engineer who settled in Brazil.