

# THE REPORTER

Journal of the Central Indiana Section • IEEE

## Local Educator Earns Prestigious Award

Cumberland Road Elementary School Fourth Grade Teacher Meg Strnat was informed by Vice President of Educational Activities Michael Lightner that, on 29 June 2012, the IEEE Educational Activities Board (EAB) voted to recognize her exceptional achievements in pre-university education activities by awarding her the 2012 IEEE Educational Activities Board Pre-University Educator Award.

This award was established by the IEEE EAB to recognize current pre-university classroom teachers who have inspired an appreciation and understanding of Mathematics, Science and Technology and the Engineering process in students, and who have encouraged students to pursue technical careers.

The 2012 IEEE EAB Award Presentation Ceremony was to have taken place during the November Meeting Series in New Brunswick, but Hurricane Sandy had other plans. Instead, Meg will receive her prestigious award at the February Meeting Series in Austin, TX. Ceremony attendees will include the IEEE President, members of the IEEE Board of Directors, and IEEE Officers.

Mrs. Strnat is a STEM education champion, not only in the classroom, but also throughout the school district and across the state. In the classroom, Mrs. Strnat has presented no fewer than six different TryEngineering lesson plans, including Flashlights and Batteries, Shake It Up with Seismographs, Build Your Own Robotic Arm, Eek a Mouse, Design a Dome, and Design and Build a Better Candy Bag. Mrs. Strnat takes full advantage of the Central Indiana Section's Teacher Grant Program as the only teacher to have utilized the grant in each of the four years it has been offered.

Mrs. Strnat facilitated the first ever Engineering Education Teachers Summer Camp for Hamilton Southeastern School District. This three-day summer workshop featured TryEngineering lessons to teachers in grades one through five. The Summer Camp was supported with a \$500 Grant from IEEE-USA K-12 STEM Literacy Committee.

Mrs. Strnat is an officer of the Indiana Association for the Gifted (<http://www.iag-online.org/>). Her presentations at conferences of Indiana Association for the Gifted and Indiana Student Achievement Institute (<http://www.asainstitute.org/ASAI-About.htm>) promote STEM education and champion the classroom benefits of TryEngineering lessons.

Central Indiana Section could not have a better ambassador. **Congratulations Mrs. Strnat!**

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## New 2012 IEEE Fellows

The IEEE Grade of Fellow is conferred by the IEEE Board of Directors upon a person with an outstanding record of accomplishments in any of the IEEE fields of interest.

Congratulations to our newly elevated IEEE fellows!

**Ahmed Elantably**

**Gerhard Klimeck**

**Peide Ye**

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## **New Senior Members**

The CIS-IEEE has always looked to facilitate members advancing to higher levels of membership.  
Congratulations to our newest senior members!

**Jian-Bo Gao  
Jaehwan Lee**

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## **Central Indiana Section Invited to present at Indiana Association for the Gifted Conference**

On December 10, Brad Snodgrass and Meg Strnat will be presenting a modified "Build a Better Candy Bag" lesson to teachers attending the Indiana Association for the Gifted Conference in Indianapolis. Mrs. Strnat is a Fourth Grade Teacher at Cumberland Road Elementary School

The modified lesson, called "Mission Bag", was originally developed for the Brownsburg Challenger Center and asks participants to design a bag to bring back moon rocks. The bag is built from simple materials, like plastic sheets and masking tape. Participants are asked to design a bag that fits in a small compartment on the space vehicle and will carry the maximum volume of material.

Indiana Association for the Gifted (IAG) is a united body of parents, educators and concerned citizens committed to the advocacy and advancement of educational practices and resources which will meet the unique learning needs of gifted/talented students.

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## **Call for Topics for the 2013 FIRST Essay Contest**

Each January, Central Indiana Section sponsors an essay contest for high school students participating in the FIRST Robotics Competition. This essay challenges students to describe, in engineering terms, a feature of their robot. Past topics include: describing an element of their robot named for its inventor, describing standards and design practices in use, interviewing a practicing engineer, equating a function of their robot to an industrial task, and identifying the simple machines in use.

In this, the eighth year of the contest, the competition is stronger than ever. We need a topic worthy of the competitors. Send your ideas to Brad Snodgrass at [bsnodgrass@ieee.org](mailto:bsnodgrass@ieee.org).

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## **PES-IAS-PELS News for 2013**

The PES-IAS-PELS is planning an ambitious schedule for 2013. As in most years, the meetings will involve a combination of vendor presentations, short courses, interesting "future" topics for power professionals, and site tours. The following meetings are tentatively scheduled:

- January 15<sup>th</sup> - Don Bergert, Advanced Control Systems "SCADA, Distribution Automation"
- February 12<sup>th</sup> - Jeremi.Jermakowicz "Arc Flash Relay Systems"
- March (Short Course) – Batteries

For the remainder of the year, we have contacted a number of distinguished lecturers from the IEEE, who would travel to Indianapolis to present. Topics include dynamic line rating, review of blackouts and more. We also hope to have a talk on Small Modular Nuclear Reactors (based on speaker availability). The autumn short course is tentatively planned to discuss circuit breaker technology. Anyone who can arrange additional speakers is welcome to contact a PES-IAS-PELS officer with suggestions (no purely commercial presentations please).

September is usually the best time for site tours (due to the weather). There are a number of possibilities – wind farms, the new Crane facility, and others. The meetings will be posted to the CIS-IEEE website upon confirmation.

The PES-IAS is pleased to announce the addition of the Power Electronics Society to our group. This society covers some of the more advanced control aspects of electricity, and is a good compliment to the

PES and IAS. We plan to have at least 2 meetings for this society during 2013, and will post them when ready.

All PES-IAS-PELS meetings will be held at the Safety Room at Indianapolis Power & Light unless posted otherwise. All meetings are free (except short courses). We plan to provide food at more meetings in 2013 as well. Hope to see you there!

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## **PES/IAS NEWS**

The PES-IAS conducted its Fall Short Course on Substation Power Transformers in October and November. The sessions were all well attended and informative to both beginning engineers and industry veterans alike. Topics included transformer design and functionality, transformer asset management, transformer electrical testing and maintenance, and finally interpreting analytical test results on transformer insulating fluids.

Information about PES-IAS 2013 activities will be available soon at [www.cis-ieee.org](http://www.cis-ieee.org). Scheduled topics include SCADA links, arc flash hardware protection, a Spring Short Course on Battery Technology, a Fall Short Course on Circuit Breakers, and perhaps a field trip to an Indiana power generating station.

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## **CIS-IEEE CENTENNIAL CELEBARTION GALA A GREAT SUCCESS**

On September 14, 2012, the CIS-IEEE celebrated our centennial – 100 years ago the AIEE was formed and later the IRE was formed, and the two were merged in 1962. Nearly 100 members and companions attended the celebration at the Skyline Club. The program included a review of the history of the section with a photographic presentation taken from over 40 years of THE REPORTER, remarks from the section chairman David Koehler, and other section officers, and presentations by two candidates for President Elect of the IEEE. Award certificates were presented to 15 CIS-IEEE members and officers including 10 past (and present) section chairs.



The Skyline Club and the early arrivals



Past Officers and Spouses: Mr. and Mrs. Bob Graham, Mr. Marvin Needler, Mr. and Mrs. Ken Barr



David Koehler, Section Chair and Region IV Chair with CIS-IEEE Banner

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## CIS Officers Positions are Vacant, Volunteers Needed!

Each year the Central Indiana Section of the IEEE selects officers for the Executive Committee. The officers are responsible for the smooth running of the section and make decisions regarding activities, spending funds, etc. All section members are encouraged to volunteer for the Executive Committee. Following this solicitation, the Elections Committee will prepare a slate of candidates and arrange for competitive elections for the section.

While the Section welcomes volunteers for every officer position (Chair, Vice Chair, Secretary, Treasurer, society chairs, and other CIS positions), this year the Section is particularly interested in volunteers for the Vice Chair and Treasurer positions.

The Section Vice Chair is responsible for running the section (i.e. meetings and other functions) in the Chair's absence, and in assisting the Chair in his/her routine duties. For the CIS-IEEE, we typically plan for the Vice Chair to succeed the Chair at the end of the term, although this is not an absolute requirement.

The Section Treasurer is responsible for managing the Section's finances including paying all bills and collecting funds from the rebate from the National IEEE organization, fund-raisers such as the annual baseball game and other activities. The Treasurer develops and presents the financial statements of the section for submission to the National IEEE organization, and presents a monthly status report to the Executive Committee, of which the Treasurer is a voting member. The Section asks each treasurer to serve for two years, as this position takes longer to learn than the others on the Executive Committee. This is a progressive position, in that the Treasurer is welcome to advance toward higher positions in the Section, up to the Chair, if desired.

Other positions are available include:

- PACE Committee Chair, who arranges and promotes meetings on the "soft" skills side – presentations, personnel development, etc. as opposed to the technical side. This position is generally well funded by Region 4 of the IEEE, so funds are available for activities.
- GOLD Chair – "Graduates of the Last Decade" – coordinator of activities for folks who recently graduated from college. GOLD members receive significant discounts for IEEE. This position also receives funding for activities.
- Women in Engineering Chair - coordinator of activities for women in Engineering. This position also receives funding for activities. The CIS-IEEE has conducted events with the Society of Women Engineers (SWE) and this chair would coordinate future activites as well.
- CIECN Chair – Central Indiana Engineering and Consultants Network. This is an organization of the entrepreneurs, self-employed and others interested in advancing consulting. The group meets regularly through the year.

These are great opportunities to participate more fully in the Section. If you are interested in volunteering for any of these positions, please contact Earl Hill [eshill@loma-consulting.com](mailto:eshill@loma-consulting.com) or Joseph Benek [joseph.benek@wicor.com](mailto:joseph.benek@wicor.com) for more details.

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## A REQUEST FOR YOUR POINT OF VIEW AND HISTORICAL INFORMATION ON THE CIS-IEEE

As mentioned in the last newsletter, we are looking for history of the section. We have many stories in the history documentation written in the 1980s by George Fraser with the assistance of many others, and we are reproducing that history here. However, we are short of interesting and insightful tales of the section events and member and officer activities, especially in more recent years. We are asking all members, officers and especially life members to share their stories for publication in the next issue of the CIS-IEEE Reporter.

In the last issue, example topics were suggested. We need to write the history, both general and anecdotal that surely the future membership will want to know. Please share your experiences with us.

Also, we have a few gaps in our history. We are missing the names of the following persons:

- The chair of the AIEE in 1947-48.
- The chair of the IRE in 1957-58.
- All the officers of the CIS-IEEE in 1968-69.

And we are missing some copies of THE REPORTER in our IEEE archives:

- All copies preceding 1968.
- Many copies in the late 60s and early 70s.
- All 1982, 83, and 84 copies.
- All 1993 and 94 copies.
- A few miscellaneous copies.
- (on the other hand, we have many duplicate copies that need to be discarded, any interest?)

If you have any of the above and are willing to share, please contact Marvin Needler, Historian, ([mnpn@juno.com](mailto:mnpn@juno.com)), 6649 E. 65<sup>th</sup> St, Indianapolis IN 46220

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## CENTRAL INDIANA SECTION of the INSTITUTE OF ELECTRICAL and ELECTRONIC ENGINEERS A HISTORY George R Fraser Volume C\*

### **Part VII**

In July of 1977 the second Microcomputer Show was held by our section at the Holiday Inn East. This again was an outstanding success with attendance near the 1,000 mark. The show was again under the guidance of Harry Bostic and Eileen Takach, both from the Naval Avionics Facility. The show continues to gain in popularity and expand. It is a tremendous effort for a one day event.

For unknown reasons but probably due to many other clubs and activities following the same procedure, along with the fact that we do have many fine academic persons in our Central Indiana Section, our section has always operated on the academic year basis compared to an annual basis of the calendar year. Each basis has its advantages and disadvantages but only once over the years have I found any evidence of an attempt to change.

September 27, 1977 started the New Year for our section with a meeting at the Indianapolis Motor Speedway. The topic was 'Search for Extraterrestrial Intelligence' by Professor Robert E. Machol of Northwestern University. This very interesting program brought out 42 members with 25 guests for the evening.

Our officers for the year were Chairman, John W. Boyer; Vice Chairman, Gerald D. Waltz; Secretary, Dr. Ben V. Leon and for Treasurer, Ken Barr. Another excellent group of leaders.

One of our basic efforts, as a professional organization, has been to help each other to improve in his profession. To that end result one of the most important appointments any Chairman ever makes is that of Chairman of the Engineering Education Committee. It is the responsibility of that Committee Chairman to assist in the continuing education of our members. Considerable flexibility is normally granted to the committee toward the success of this effort. Cooperation with other activities: academic, military and commercial is most important. Many courses cover new developments or trends, others up-date existing courses or legal codes. The Power Engineering Society courses provide a continuing education in their important field. The PES courses have consistently been outstanding and of benefit to all who spent the time to attend. During the 1970s there were rapid developments in engineering. Microchips and computers became common words and the Central Indiana Section was on top of these developments with good section programs and outstanding courses. Each and every member that participated in the preparation or presentation of a course or in any way assisted in the presentation of a course is to be commended for his effort. Classes grew from a few to many; courses grew in number and importance and from office conference rooms to classrooms, etc. to statewide television coverage. Frank E. Burley, a Past Chairman, corporate researcher and engineer and now a professor has commented on the period as "The Golden Years of the Section."

### **Part VIII**

Continuing education remains an important part of our section's activities and is a necessity for each and every member. Failure to obtain and continue to maintain current technical knowledge leaves an engineer in a position where personal growth is impossible.

One of the most popular courses ever presented by the section was "The Introduction to Microcomputers" presented by Don Weidner of the Naval Avionics Facility to 276 attendees in 1977 over the IHETS TV network. This was followed in 1977-1978 with a Microcomputer Systems and Application course by Don over the same materials. These courses were repeated with reruns, abbreviated for seminars and some topics even sold to other activities.

Many of the courses presented by the section were administered by the IUPUI Division of Continuing Studies with Dr. Marvin Needler as coordinator. Many courses also had cosponsors to further expand the area of coverage for participants.

The September 1977 issue of *The Reporter* was almost entirely limited to various technical course announcements and comments. They were, indeed, 'The Golden Years'.

The Computer Society of our section was organized during the 1976-1977 year under the leadership of Dr. Phillip Swain of Purdue and this year became an active participant in the activities of the section.

Our show experience continued to grow with our participation, with the Electric League of Indiana, in a 2-day

November presentation of EXP0-77, Electric and Electronics Show, in the Indiana Convention Center.

Tours again proved popular events for a section meeting. In October it was the Chevy Truck Plant following dinner at McClarney's. The annual Speedway tour was followed by dinner with race driver Tom Sneva as speaker. In June it was a long but very educational hike with a tour through the Western Electric Plant on Shadeland following dinner in the plant cafeteria. There had been tours of Western Electric before but none as complete as this one. The power plant, explained in detail, was one of the last stops of the tour.

## Part IX

Programs during 1977-1978 included Battery Technology, Computer Comography and the EXP0-77 program with Dr. James Coughlin speaking on Nuclear Power.

The March program was co-sponsored by the Computer Society and had Dr. Ryszard S. Michalski, an Associate Professor from the University of Illinois, as speaker. The evening could have been one of the greatest events ever for a single section meeting as it was held at the Kendall Inn with great fanfare. An early and continued plea for accurate and timely reservations for the promised 'Royal Roast' -- a whole roast pig -- had gone unheeded and with 82 showing up for the meeting the room size proved inadequate and serving of the 'roast' for a very inadequate reservations list became a problem.

The April meeting was at Purdue University and co-sponsored by the Student Branch. Dr. King-Sun Fu was the speaker.

For the third time the annual IEEE Indy Microcomputer Show was held at the Holiday Inn East. This show, held on July 26, 1978, again proved a popular event.

Other events of the year marked a change from a purely local organization to more interest in national events and discussions. Our own PAL Chairman, John McNett, published a long but thoroughly researched comment on, "the Case against Universal Registration." This was followed in *The Reporter* with another article on "The Case for Registration." The subject was widely discussed and the section presented the results of a referendum to our national organization. One of our course topics was selected for use at MIDCON and received good response. Another event of the year was the change in the name of The Naval Avionics Facility, Indianapolis, to The Naval Avionics Center. A tragic home accident saddened the section when long-time loyal member Jim Sugioka was killed only two days after attending the March meeting. Jim was a missionary, a minister, purchasing agent and engineer, as well as a great family man and friend.

The year 1977-78 was a good year with active participation of the members and a lot of events happening. The year had started with \$11,681.99 in the treasury and ended with \$8,217.21.

A meeting to conclude the 1977-78 year and to prepare for the 1978-79 year was held in July with reports that at least five courses were ready for the fall. The Bloomington sub-section reported 109 members with an average attendance at meetings of 20.

Radio Station WIRE featured newly elected Chairman of the Section, Jerry Waltz, as their 'Man of the Day' and gave Jerry, engineering and our section some valuable public relations. Don Huizinga did the good work on this promotion.

Officers for the 1978-1979 year were Gerald D. Waltz, as Chairman; Dr. Ben J. Leon, as Vice-Chairman; Phillips Ballantyne, as Secretary and Robert D. Adams, as Treasurer with Harry D. Bostic as Editor of THE REPORTER. A good hard-working group with lots of excellent experience.

The year's program started off with a tour of the Naval Avionics Center that proved a great success; over 200 were reported to have turned out for this event that followed an excellent dinner in the Center's Cafeteria. Other tours of the year included a tour of RCA Records following dinner at the Marriot Inn and a tour of Delco Electronics at Kokomo following dinner at the Ramada Inn. The tour of the track again proved popular with a near record turnout for dinner at the Motor Speedway Motel.

The October meeting of the section was one of local talent and proved again that within the area we have our own highly qualified and respected community leaders. Mr. Zane G. Todd, Chairman of the Board and President of IPALCO spoke to us on the timely subject of 'Fundamental Economics of Electrical Utilities'. Mr. Todd is a 'Fellow' in our section of IEEE.

In November our meeting was co-sponsored by the Circuits and Systems Society and was a talk by J.R. Stauffer of Bell Labs on "Lightwave Transmission Systems for Telecommunications Application."

In February it was a presentation on 'Orbital Flight' by NASA Astronaut Gerald P.Carr. A futuristic program on Computers and Society by Sperry Univac Scientist Earl Joseph was our March program. In April we traveled to Rose-Hulman for our annual meeting with a student branch. Don Fitzpatrick, Chief Engineer, Allen Bradley, was our speaker. This former professional musician and Purdue Engineering Professor presented an outstanding talk with humor and knowledge that inspired the students and made all present proud of their profession.

During the year Vice-Chairman Dr. Ben J. Leon of our section had been elected IEEE Vice-President for Educational Activities and with his new position the section gained in national prestige while having direct communication on national events.

The Fourth Annual IEEE Indy Microcomputer Show had grown to the extent that more power and more space was required than could be provided by the Holiday Inn East and was moved to the Sheraton East Motor Inn. The show was held on June 28, 1979 and again proved a successful presentation for our section with over 1100 people attending the one day event.

The year ended with 3,730.23 in our Treasury.

The officers nominated and elected for the year 1979-80 were Dr. F.J.

Friedlaender as Chairman; Phillips Ballantyne, as Vice-Chairman; Robert Adams, as Secretary and Dr. M.A. Needler as Treasurer. Mr. Harry D. Bostic continued as Editor of *The Reporter*. The Bloomington sub-section reported Harold Sabbagh as Chairman for the year with Steve Willoughby as Vice-Chairman and Kevin Sosy as Secretary-Treasurer. It was good to see Dr. Sabbagh as Chairman of the subsection as he has been a very active member of our section. Originally from West Lafayette he followed in his father's footsteps in Electrical Engineering and as a Professor. At Rose-Hulman he coordinated the Student Branch and was responsible for some very good programs. He recently had moved to the Bloomington area where his dynamic interest in his profession will continue to benefit his profession and the CIS of IEEE.

Programs for the year included the annual Ladies and Awards Night and the annual meeting at the Speedway. The Ladies and Awards meeting turned out to be slightly different than anticipated. Our program was entitled, "Yes, You Can Hear the Difference" to be presented by HiFi Buys. The meeting was held at The Holiday Inn East. For those arriving on time the streets were clear with the weather threatening. As the meeting continued, there were reports of problems. Yes, we had problems. Our program was not on the calendar of the presenter and it wasn't until the afternoon of the program that a commitment was realized by them; unfortunately the equipment for their presentation was committed until late afternoon. As a result the program became a problem. With rumors of the weather everything was rushed resulting in a very brief awards meeting with a brief program that was interrupted with the public address system of a neighboring room becoming a part of our program. By adjournment those who had arrived on time were surprised to find a four to six inch deposit of snow as they left. Not an unusual occurrence for this time of year but nevertheless a problem for those who had a distance to travel.

The first programs of the year had been on problems of interest in our national organization. In September Bruno O. Weinschel, Vice-President of IEEE for Professional Activities talked on current events involving serious engineering problems of our time. October brought Dr. James Brittain, IEEE History Committee Chairman to talk on Thomas A. Edison.

In November our Chairman arranged for Dr. Andrew H. Bobeck of Bell Labs to talk on "Magnetic Bubbles." In the January issue of *The Reporter* Dr. Friedlaender reports on his visit to Poland as a guest of the Polish Academy of Sciences. A very interesting and educational report by our Chairman on a part of the world but that few of us have had an opportunity to visit.

Our January meeting was presented by Magnavox on the subject of "Magnivision Videoscope System." In February a joint meeting with the Computer Society was held at "The Trails" in West Lafayette with the subject being, "Microcomputer Systems, A Look at the Top of the Line." For those who attended it was a great education; unfortunately many of those presenting their products for display would rather have been elsewhere.

The April meeting was held on May 1 and was a joint meeting with the Chapter on Medicine and Biology. It also was held in West Lafayette. This meeting was a tour of the Purdue University Biomedical Engineering Center. In the May issue of *The Reporter* the Power Engineering Society announced their 1980-81 meetings. The last meeting of the 1979-80 year was held at the Sheraton East and was presented by Electronics Associates of New Jersey. It was a discussion on "The Modern Hybrid Analog-Digital Computer" by Mr. J. Paul Landauer of that corporation.

It had been another good year with many interesting and educational programs. Over the years presentations of the Engineering Education Committee had involved cooperation with many activities. The intent of our section and the IEEE had been to assist in the education of our members. Working with so many different organizations usually created problems, however. Differences had cropped up and settlement of accounts had often been difficult. Toward the end of 1979-80, agreements had finally been reached and funds due the section had been received. The year had started with a balance of only \$3,730.23. The year ended with a balance of \$20,563.23. The Engineering Education Committee was credited with \$13,210.82 of this as income.

The year 1980-81 started with our first section meeting at the Holiday Inn East with a technical presentation by Dr. George E. Smith, Head of MOS Device Department of Bell Labs, Murray Hill, New Jersey. His talk was entitled, "Integrated Circuits Using One Micro Linewidths. For many it was a talk of the future.

Our officers for the year were Phillips Ballantyne, Chairman; Robert D. Adams, Vice-Chairman; Ken Barr, Secretary and Dr. David A. Landgrebe, Treasurer. John W. Boyer and Gerald D. Waltz served as Directors and the Editor of *The Reporter* was Harry D. Bostic.

The Bloomington sub-section had elected Harold Sabbagh as Chairman, John P. Wentworth as Vice-Chairman and Kevin Sosby as Secretary/Treasurer.

Many courses were announced for the year to provide valuable training and instruction for those looking to their own future. From Purdue Dr. Elliott, writing for Continuing Engineering Education offered IHETS TV courses in Basic Management Skills for Scientists and Engineers, Manufacturing Quality Control and Fundamentals to Engineering Review. The Power Engineering Society offered training in Substation Engineering. The Purdue University School of Engineering and Technology at Indianapolis with co-sponsorship by our section offered a Microcomputer/Microprocessor Workshop course (complete with a microcomputer) and an Introduction to Digital Circuits course with a workshop. There is something to learn in these offerings for any engineer with costs to fit the pocketbook from \$10 to \$450.

Phil Ballantyne in his-from the chairman-urges all to participate in voting for our IEEE officers and in another column comment on the passing of a high school slide rule competition held by the university of Texas (Austin) for 46 years. The world changes! How long has it been since you have seen this status symbol of our profession dangling from a belt or a 4" or 6" tucked away in a pocket? Even with a computer on the desk, your historian will wager that there are still many slide rules on the desk-just in case!

September, among many other events, saw a tour of Public Service Indiana's Marble Hill Nuclear Generating Station.

This tour, sponsored by the Power Engineering Society, was on a Saturday and conditions were strictly under construction but over 180 were there.

Five tours enlightened our members attending section meetings; with joint sponsor, the Power Engineering Society we toured the Detroit Diesel Allison plant; in November it was Laboratory Automation and a tour of Eli Lilly and Co.; in February, with a program for our spouses, we toured RCA following a fine dinner in the plant; in May it was our annual tour of the 500 track and then in June it was a tour of the Westinghouse Electric Large Power Transformer Division in Muncie.

Other programs for the year were on electronic mail by Dr. J.L. Devilbiss with the Computer Society as a co-sponsor; electric vehicles, by Prof. Larry Ogborn of Purdue and one on robots by Tom Foltz, President of Total Systems Incorporated during a meeting co-sponsored by the student section of Rose-Hulman at Rose Hulman.

Interesting comments in *The Reporter* were written about the student branch at Rose-Hulman and the school they attend, the IHETS TV System by Charles S. Elliott, on IUPUI by Ben J. Keller and one entitled, "It's Hard to Keep a Good Man Down" also by Prof. Keller, the 'good man' being Frank Burley, a destined member, active on many committees and former chairman.

The fifth IEEE/Indy Microcomputer show as held on June 30, 1981 with more space, more displays, more technical sessions and more people attending. This again proved that the Central Indiana Section of IEEE is a 'can do' group.

At year's end our treasury indicated a balance of \$20,741.47 thanks to continued success in training courses and a great willingness to work and cooperate by all. The treasurer's report was always on time and in precise order by our treasurer, Dr. David A. Landgrebe. His use of a home computer and printout was a first.

I will have to repeat -- it was another good year.

In July 1981 two of our most experienced members became our Chairman and Vice-Chairman. Each had worked his way to section leadership by willing cooperation with previous officers and faithful attendance at section activities. Bob and Ken had served on, or worked closely with, every committee of the section. Bob had greeted us for many of the meetings for some period of time while serving on the Hospitality committee. Ken had worked hard and mostly by himself in accomplishing the various tasks of keeping *The Reporter* functioning as the important communication link of our section. Our chairman for the year was Robert D. Adams with Ken Barr serving as Vice-Chairman. They were ably assisted by Dr. David A. Landgrebe as Secretary and Greg A. Head as Treasurer. Directors were Gerald D. Waltz and Dr. Marvin A. Needler. Harry Bostic continued as Editor of *The Reporter*.

The month of September indicated considerable planning had been accomplished during the summer holiday. Dr. Elliott of Purdue announced his schedule for the Continuing Engineering Education courses for fall presentation over the IHETS TV network. There were seven courses available, three being popular courses repeated, request and tour new courses. The Power Engineering Society published their annual schedule of events and announced their fall short course on "Electric Cars and Batteries." Other groups were well along with their planning and most had published at least one scheduled event. Kevin Sosbe had been elected Chairman of the Bloomington sub-section and promised an active program there.

The first program of the year was a tour of the Ransburg Corporation with emphasis on robots. Dinner was in the plant, followed by remarks from Mr. Milo Friesen, President of Cybotech. A good crowd was present and the evening was enjoyed by all. In February, spouses' night, we toured the Indianapolis Center for Advanced Research following a good dinner at the Lascala Restaurant. In April our joint meeting with a student group was at Purdue and following dinner at the Union we toured the "Purdue Computer Aided Design and Graphics Laboratory." Dr. D.C. Anderson, Director of the Laboratory, briefly discussed the laboratory and its function. Mechanical Drawing 101 was certainly a long way off when you saw complicated design changes made with ease by a computer. In May we toured the track with dinner at the Speedway Motel and, as usual, it was a memorable event. The last regular meeting of the section for the year was also a tour with a joint meeting with the Bloomington sub-section. This tour was of the Indiana Bell Electronic Switching Facility in Bloomington. There was no dinner planned for this event.

For two years the section had cooperated with the Electric League of Indiana and their Expo '81 that was presented in the Indianapolis Convention Center. The event scheduled for November was on our schedule as a regular section meeting and many did attend. Unfortunately, the planned dinner had to be cancelled due to a lack of response.

Other section meetings of the year were on "The Interconnect Industry" by Norm Boman of Executone Inc. of Long Island City, New York; "High Quality Cables" by George Rakos of Hendrix Cable, New Hampshire and "Applications of Network Personal Computers in a Real Time Lab Environment," a joint meeting with the Computer Society, with Kenneth A. Sherwin of TRW Ross Gear Division, Lafayette and Asst. Professor J. Michael Jacob, School of Technology, Purdue.

During this year many changes took place in the way we did things and in the outside activities of the section. After many years of presenting an annual Microcomputer Show that had always proven successful, the show had outgrown the usual facilities and recent competition had entered the field. Although the show had made \$2,300 for the section in June of 1981 it was realized that some changes were required. After much discussion and several committee meetings, it was agreed to form a new show. The Central Indiana Section of IEEE joined in an agreement with the National Electronic Distributor Association (NEDA) and the Electronic Representative Association (ERA) to plan for and present INDYCON '82. Each group was to furnish three directors, with one of the IEEE Directors to be the Seminar Director. The first INDYCON was held August 24 and 25, 1982 in the Indianapolis Convention Center was a success.

Changes in the section resulting from Executive Board action were the appointment of Dr. Marvin Needler to replace Dr. Fritz J. Friedlaender as Dr. Friedlaender would be out of the country for most of the year; the fiscal year was changed from an academic to an annual year and a new method of accepting reservations was utilized, to improve communications, with the office of the Electric League doing the coordinating work. Other changes involved training and

educational courses. In January IEEE had taken a bold step ahead of others and presented a short course on "Project Management" with Merrell Buckley. WFYI (Channel 20) had cooperated in providing the downlink with the satellite and feed to IHETS. In attendance at various sites around Indiana were over 180 students and engineers; of these 52 were from Naval Avionics and 54 from the Crane Naval Weapons Center. Nationwide there were 650 to 700 that learned by satellite during this presentation. Our section's presentation of technical courses was fewer with a resulting decrease in revenue. This had been a good year but interest remained strong and attendance at functions had been good.

During the spring and summer of 1982 the Executive committee of the section had been very busy. In May a formal invitation had invited those concerned to attend a reception and informal discussion in the Mayor's Conference Room of the City-County Building, Indianapolis. The outlined purpose was to obtain members' concerns with respect to the present status and direction of the engineering profession and the institute. Present from headquarters of the Institute of Electrical and Electronic Engineers were Eric Herz, General Manager and Executive Director and James Owen, President Elect. This meeting provided interesting discussions and provided valuable information to our national leaders about our city, area and the activity in our profession. In July the Executive committee met at the China Royal for the first of two important meetings for the summer organization and planning sessions. The second meeting of the summer was held at the Convention Center following the first day of the Microprocessor Show being held there.

In August in an announcement from the Governor's office, our Past Chairman, Gerald Waltz, was appointed to the State Board of Registration for Engineers and Land Surveyors. On that Board he joined another long-time member, Herman A. Moench.

Officers for the year were Chairman, Ken Barr; Vice-Chairman, Dr. Marvin A. Needler; Secretary, Melvin T. Forthfer and Treasurer, Ova 'Glen Amburgey. Directors were Phillips Ballantyne and Dr. Fritz J. Friedlaender. Editor of *The Reporter* was Harry D. Bostic with Ronald L. Wolff as Business Manager.

With another fine set of officers the section was off to a good start for the year 1982-1983. The September issue of *The Reporter* always sets the tone for the year and starts the year's activity with numerous announcements. The issue lists the meeting dates for the year and the major activities for the fall. Dr. Charles S. Elliott in his Continuing Engineering Education comments on 'Personal Renewal' and states, "It's never too late to catch up or continue in keeping up to date in your field." A very true statement and we are indeed fortunate to have good activity with good coordinators in this area. Dr. Elliott then announced four new programs, one revised program and three previous successes for the IHETS network plus some on-campus conferences. Power Engineering announced an October course in "Engineering Economics" and also their programs for the year.

On December 7, 1982 the first national presentation of a televised training course was presented. This course was on 'Robotics' and following some early coordination problems the course was presented to an estimated 2,500 attendees nationwide, of these 250 were from Indiana.

Programs for the year 1982-1983 were of the usual high caliber. The program with the greatest number of attendees remained the annual meeting at the track, even though we were not permitted that year to drive personal cars on the track. The total attendance for that meeting was 122. However, if we were only to count members attending the best attended meeting would be the June meeting with Don Baker, Senior Experimental Engineer of Detroit Diesel Allison talking on "Micro Computing." A tour of Waveteck proved interesting to 58 members and guests. Other programs were on computers, static awareness, the video disc, fiber optics and one on "From Garage to Corporation" again proof that new ideas and hard work can still result in success in America and in our own area. Unfortunately, one joint meeting with the Bloomington Sub-Section was cancelled but later rescheduled with success by the sub-section.

In *The Reporter* Chairman Ken Barr honored our members of 'Fellow Grade' by listing the 18 members that were currently in that category. He also used the listing to remind all members that to become a 'Fellow' one must first be a Senior Member.

In another issue of *The Reporter* Ova (Glen) Amburgey, while writing in 'from the Treasurer' concludes with: "Dealing with the 27 members of the Executive Committee for the last six months has taught me one other thing: not one of them have the time to spend on this committee. However, they are here. So the next time someone asks you to help out or run for office, what's going to be your excuse?"

It has been another good year.

Our officers for the year 1983-84 were Chairman, Dr. Marvin A. Needler; Vice Chairman, Dr. David A. Landgrebe; Secretary, Ova "Glen" Amburgey and Treasurer, Charles Mason. Directors for the year were Robert D. Adams and Phillips Ballantyne. Harry D. Bostic was Editor of *The Reporter* with Ronald L. Wolff as Business Manager.

The year started as usual in September but with a more than busy September schedule for many of our members as the Joint Power Generation Conference was held in Indianapolis at the Hyatt-Regency Hotel. Approximately 1,000 attendees participated in 55 technical sessions and three tours.

The September meeting was a joint meeting of the section with the Power Engineering Society and was a tour of the Indianapolis Air Traffic Control Center. This ever popular tour drew 453 to see the wonders of computers, scopes and communications required to make flying safer.

September announcements included tentative schedules for the year's programs, Dr. Elliott for Continuing Engineering Education announcing five courses for the IHETS network and the Power Engineering Society announcing their fall course on "Distribution Fault Current Protection. The IHETS is now showing courses in 25 industries and at six campus sites. There are over 400 videotape courses available in 18 disciplines from 24 AMCEE member universities.

The Power Engineering Society had been nominated with eight others for the outstanding chapter award of their society. Unfortunately, though they were close they were not the winner. All the work was not for naught though as many had worked long and hard to make the chapter a better chapter, involved in more activities. The working together will long remain with them in making a good chapter an even better chapter. Each member deserves the congratulations of our

section for the near perfect effort.

INDYCON '83 had earned for our section \$2,207.77 and in October was already preparing for INDYCON '84. Income for the event had been \$75,697 and Expenses \$62,450. Half of the balance is reserved as an operation fund for the next year and the remaining half is divided between the three sponsors IEEE, NEDA and ERA.

In October the Treasurer's report to the section indicated a net balance \$19,644.28.

The October meeting of the section was held at the Ransburg Corp. and following dinner a tour was enjoyed by the 623 present. The feature of the tour was the use of advanced technology in industrial robots.

The last of the fall meetings was held at MacPherson's with member Dr. Leslie A Geddes making a presentation on "Exercise Responsive Pacemaking." Many from local hospitals were present.

In December Secretary Glen Amburgey resigned to accept employment in Ohio. He was succeeded by Chris Jamison.

January 1984 marked the start of the "IEEE Centennial Year" resulting in some special events for our section. The first meeting of the year was held at the Naval Avionics Center. Several past chairmen and members have been employed at NAC and if no one else showed up for a meeting this group alone could make a good section meeting. The NAC cafeteria prepared the dinner at a modest cost. Capt. W.R. Abel, Commanding Officer, was present and welcomed us to the facility and as a centennial event he briefly reviewed the history of NAC for us. The following tour to the Digital Avionics Systems Laboratory was most interesting and educational for over 110 ladies and gentlemen present for the tour.

In February for our Honors and Awards evening, celebrated with the ladies, we were fortunate to have Dr. Leslie A. Geddes as our speaker talking on "Electricity in Medicine 1745-1983" Our Chairman Dr. Marvin Needler reported the evening exceptionally well in his "From the Chairman" comments in the April issue of *The Reporter*.

"Our February 16 meeting was a special occasion not only because it was our Annual Awards program but also because it was the Centennial Awards program. In celebration Medals awarded to individuals for service to the Institute. Our section was granted eight of these awards. Based on the nomination from section members, our Awards Committee elected the following: Robert Adams, Roy Kenneth Barr, Harry D. Bostic, Robert K. Brown, George R. Fraser, John E. Harder, Clare D. McGillem and Marvin A. Needler. These awards were presented at the February meeting."

The J. Fred Peoples award was presented to Robert Adams for his work in virtually all the offices of the section and for his leadership in INDYCON, the full spectrum electronic exhibition and conference which developed from the IEEE/Indy Microcomputer Show."

"A special misfortune occurs to those that lead the Awards Committee, namely, no matter how deserving they may be they are not recognized for their service. Indeed deserving was the case this year. For this reason, Mr. Gerald Waltz and Mr. Fritz Friedlaender, the Awards Committee Co-Chairmen, were presented with certificates for service to the section, as previous chairmen of the section, for other extensive services, and for the awards committee responsibility. Thanks for a job well done, Jerry and Fritz."

"The balance of the section meeting included a brief centennial history composed by George Fraser and the main presentation by Leslie Geddes on electricity and medicine. All this along with a very nice meal and an enjoyable evening and a successful meeting."

The March meeting was a joint meeting with the Bloomington sub-section and the April meeting was with the IUPUI Student chapter and both meetings were on computers.

In May we were back at 'The Track' with a very interesting program on "Miles and Milliseconds, Timing and Scoring" with Joe A. Clouter from the Speedway staff and Art Graham of USAC.

The June meeting was very well attended for an out of Indianapolis meeting. It was a tour at the Delco Electronics Plant of Kokomo.

All in all it had been a good year.

A July 10, 1984 meeting at the China Royal Restaurant had assisted in the yearly changeover. Our Chairman had been re-elected and most committees were organized and ready to work. The treasurer's report indicated the net amount available to the section is \$17,963.40.

Officers for the year were Chairman, Dr. Marvin Needler; Vice Chairman, Chris Jamison; Secretary, Charles Mason and Treasurer, Max Willis. Directors were Robert D. Adams and Ken Barr. The staff of *The Reporter* was Nancy W. Molzan, Editor and Ronald L. Wolff as Business Manager.

The September 1984 issue of *The Reporter* was the first of a new and different publication. Costs and lead time have always been problems with our section publication. The purpose of the new *REPORTER* is to reduce cost and make each issue more timely. A new Editor also reported for duty to succeed long-time Editor Harry Bostic. She is Nancy Molzan, a former teacher but now a recent EE and member of IEEE. In this issue the P.E.S. announced their fall course as one on "Transformer Design and Application" with five sessions of two hours each. Dr. Elliott for Continuing Engineering Education reviewed the offerings available on the IHETS network. IEEE announced an offering of a course on the "INTEL Sixteen-Bit Microprocessor Chips-Architecture and Application" to be taught by Mr. Rick Schue. The section meeting for the month will be a tour, jointly sponsored by the Power Engineering Society and the section, of Plant 20, Delco Remy Division of General Motors at Anderson.

October marks the culmination of the centennial year celebration with the finish of the first and start of the second century of the electrical engineering profession. The event to mark this change goes back to where it all started -- the Franklin Institute -- with a satellite program "The Second Century Begins." The Central Indiana Section participated in this celebration with a dinner at Indiana University-Purdue University, Indianapolis Student Union. It was an early Thanksgiving menu that made for a good dinner for those attending. Early attendees had been able to see the slide presentation of the "History of Electrical Engineering."

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This newly updated curriculum was developed by Donald L. Sweeney and his associates. It includes how an electronic circuit becomes a radio transmitter, how the physics of even the simplest devices such as capacitors, inductors and shielding can help or hinder compliance and how to control the design to minimize emissions. Students will be lead step-by-step through sample calculations, be introduced to take-home proprietary software and be led through trouble shooting a product that does not meet the requirements. Additionally, attendees will be offered an exclusive, hands-on personal consultation with the instructor or a member of his technical staff to apply what has been learned to their specific product, possibly saving tens or hundreds of thousands of dollars in reduced testing, reduced time to market and reduced final product cost.

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## ANNOUNCEMENT

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*D.L.S. Electronic Systems, Inc. announces*

### **New Wireless Power Charging Compliance Program including Qi Certification through the Wireless Power Consortium.**

As one of only two North American labs participating in the Qi Compliance program, D.L.S. Electronic Systems, Inc. in Wheeling, IL is offering Qi pre-compliance and formal certification as of December 15, 2012. This includes:

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- Product Safety testing and certification for North America and Europe.

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The recent introduction to the market of “inductive” wireless chargers and wireless power pads has created some misunderstanding and misapplication of EMC and Product Safety regulations.

How these regulations apply to these devices depends on how the devices operate at various frequencies and whether or not there is any wireless communication present. Careful attention must be taken to ensure that the correct regulations are applied and tested to, and the correct procedures for regulatory compliance have been followed.

Each different device's application, use, and operation must be reviewed before the proper regulations can be determined and applied. Many of these devices will require that the full administrative and technical requirements of the North American standards and European Union Directives be applied, while others may require minor compliance consideration.

More information: [www.dlsemc.com/Qi](http://www.dlsemc.com/Qi) 847-537-6400

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### 2012 Meeting Calendar

Date	Host	Subject	Location
Saturday, Dec 15, 9:00 am	CIS	Executive Committee Meeting Annual Planning Meeting	ET103, IUPUI Internet/Phone Bridge
... Check the <a href="#">Section web page</a> for details and current information.			

### ADVERTISER EVENT

April 23-25, 2013	DLS <a href="http://www.dlsemc.com/1001">www.dlsemc.com/1001</a>	EMC by Your Design Seminar	Hilton Hotel, Northbrook, IL
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## How Do You Communicate??

Want to know what is happening in Central Indiana Section? Don't know where to look? Already inundated with E-Notices? Need to ask a question? Want to find an expert? Got a meeting idea?

Here are some of many communication channels available in Central Indiana Section



®

Find the Central Indiana Engineering Consultants' Network and the Central Indiana Section Communications Society, as well as several other IEEE related organizations on LinkedIn.



Student Branch members are encouraged to join "CIS-IEEE Student Branches" group on Facebook. Several opportunities for students and student branches have been posted there. The Facebook group also provides an opportunity for CIS student members to interact or to make contact with student members outside of Central Indiana. There is no substitute for a good network, but be aware that some hiring managers are also checking these sites.

Communications Society members can find "COMSOC – Central Indiana Section" on Facebook.

### CIS Home Pages

Start with the main site. ([www.cis-ieee.org](http://www.cis-ieee.org)) Check out the calendar of events, or link to the many IEEE groups in Central Indiana Section, including all of the Student Branches.

Not getting E-Notices? E-Notices are not only a resource for keeping in touch with the activities throughout CIS, but you will also receive information on topics of interest throughout IEEE

### E-Notices

Login to myIEEE from the IEEE Home Page ([www.ieee.org](http://www.ieee.org)) and sign-up! with the main site. ([www.cis-ieee.org](http://www.cis-ieee.org)) Check out the calendar of events,

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#### Editorial Policies

Each issue of The Reporter typically references three months - the month in which it is published and the following two months. The Reporter is typically published in March, June, September, and December.

Material to be included should be submitted mid-month prior to the month it is to be published. For example, material intended for the September issue should be submitted to the Editor by August 15. The Editor will send a reminder to all IEEE Central Indiana Section entities by the 15th of the month to submit their updates.

Copy should be submitted electronically. Photographs are desirable. Advertisements are welcome. Contact the editor for layout sizes and rates.