

IEEE life members newsletter



contents

Walk with Me Through 50 Years	1
2013 IEEE Life Members Tour to Canada	2
Call for Grant Applications	4
Taking Coasters to the "Max"	4
Wanted: Mentors	4
Life Members Connect in the "City of Brotherly Love"	5
Congratulations to the Outstanding Life Members Affinity Groups	6
2012 Honor Roll of Donors	6
Donor Profile: Fiorenza C. Albert-Howard	12
The IRA Charitable Rollover is Back!	12
What Do the New U.S. Tax Laws Mean to You?	12
Enjoying the Leisure Benefits of Membership	13
Tales from the Vault	14–15
Our Mailing List	16
Submitting Articles	16
Stopping IEEE Services	16
IEEE Contact Center	16
LMC Roster	16
Qualifying for LM Status	16
Have Questions...	16



Walk with Me Through 50 Years

Louis A. Luceri, Chair, IEEE Life Members Committee

As many of you already know, the IEEE is celebrating the anniversary of those individuals who have been members of the Institute for 50 years or more. As you look back over those years and reflect on the technological developments that have influenced our lives, and even our profession during that time, one cannot help being shocked and humbled at the same time. Where would we be, for instance, if John Bardeen and Walter Brattain did not develop the first point contact transistor with William Shockley? Their efforts opened the door to an expansion of the field of solid-state electronics and earned them the Nobel Prize in Physics in 1956. The development of the junction transistor meant there was no longer a need to allow for circuitry to "warm up." The result was a radical reduction in the size of electronic devices, and it turned the manufacturing world on its ear.

In preparing this article for the *IEEE Life Members Newsletter*, I was forced to reflect on the many developments that have occurred over the last 50 years and see how my life, and probably yours too, has been changed as a result of engineering technology and the efforts of our peers. The events that affected my life may not be the same as those that influenced yours. So, take a walk with me through some of the discoveries and inventions that have intrigued me or impacted my life.

Les Paul, the guitarist, has always inspired me. I didn't play the guitar, but I was intrigued by the tenacity, innovation, and experimentation to "get the sound"



**IEEE Life Members
Committee Chair
Louis A. Luceri**

that he wanted. Paul was motivated by Bing Crosby to build his own recording studio. Crosby also financially invested in the development of the first commercial reel-to-reel multitrack, sound-on sound audio tape recorder in 1936. Who can forget Paul's recording of "How High the Moon," with Mary Ford?

The "Giant Brain," the Electronic Numerical Integrator and Computer (ENIAC), came on the

scene in 1946–1947. ENIAC contained 17,500 vacuum tubes, 7,200 crystal diodes, 1,500 relays, 70,000 resistors, 10,000 capacitors, and around 5 million hand-soldered joints. It weighed more than 30 t, was roughly 8 ft × 3 ft × 100 ft (in length), took up 1,800 ft², and consumed 150 kW of power. By comparison, in 1995, a very small silicon chip measuring 7.44 mm × 5.29 mm was built with the same functionality as ENIAC. Although this 20-MHz chip was many times faster than ENIAC, it was still many times slower than the modern microprocessors of the late 1990s. (The ENIAC was named an IEEE milestone in 1987.)

Solar cells—think of it, an electrical device that converts the energy of light directly into electricity! Current, voltage, or resistance vary when light is incident upon it, and it can generate and support an electric current without being attached to any external voltage source. How can that be?

In 1949, I took my first airplane ride from New York to Los Angeles, California. We left LaGuardia Airport at 10 a.m. and landed in Los Angeles at 2 a.m. (EST) the following morning. The plane made one stop in Kansas City,

Kansas, for fuel and to drain the waste tanks. In 1958, that era of travel was ushered out with the development of the Boeing 707 jet aircraft, signifying the beginning of the jet age.

In 1964, I was working for the Grumman Aircraft Engineering Corporation, where I was a member of a small engineering team that was responsible for developing an in-house optical tool for calibrating the six stellar tracking systems that would eventually permit the alignment of the Orbiting Astronomical Observatory (the precursor of the Hubble Telescope) in space. The acquisition of specific guide stars by star trackers is an automatic mode involving the recognition of a star by its magnitude and its location in a star field. It also involves discrimination from other stars, though nearby, of similar values. Up until this time, NBS luminance standards were made of special tungsten filament lamps, which had to be limited in use because of the changes of color temperature. In 1960, the development of the tungsten-halogen lamp ramped up the ability to develop a more sophisticated version of such a device and provided stabilization of the color temperature.

In 1969, man walked on the moon! On 20 July, the Apollo 11/Eagle successfully landed on the moon, and Astronauts Armstrong, Aldrin, and Collins made history. I was involved in two aspects of the Lunar Excursion Module (LEM)—one was the development of the feet of the LEM. You must remember that no one had any idea what to expect when the LEM would touch down. Would it sink? Could the surface support the weight? What type design should the “feet” have to sufficiently stabilize the LEM once it touches down? I was part of a research study team to develop a “surface” that would represent the lunar environment that would structurally support the LEM. Taking polarimetric and photometric data at various solar angles from several astronomical observatories (such as Kitts Peak) of the lunar landing site, we developed an electro-optical device that would allow us to simulate the results of the observatories and provide the Lunar team with our best estimate of the make-up of the lunar surface.

My father introduced me to the world of the camera, back in the 1940s. He had a Carl Zeiss Ikon IKONTA folding camera with a Compur shutter. It had a Jena Tessar

lens 1:4.5, $F = 0.5$ cm. It used size 616 photographic film. (I still have the camera!) Its shutter speed ranged from T (time exposure) to 1/250 s. He presented me with my first film camera back in 1950, and my love for photography took off. In 1975, a gentleman by the name of Steve Sasson, an engineer at Eastman Kodak, invented and built the first digital camera using a charge-coupled device image sensor. (He received the National Medal in Technology and Innovation for this invention in 2009.) In the beginning, there was a great amount of skepticism as to whether the digital camera would successfully compete with a film camera. Over the years, that has proven to be a truism. Unlike film cameras, digital cameras can display images on a screen immediately after being recorded and store and delete images from memory. Many digital cameras can also record moving video with sound. Some digital cameras can crop and stitch pictures and perform other elementary editing. However, there still those serious photographers who use the larger-format film cameras as opposed to the digital. Today, the digital camera has transitioned into more compact versions, and it can be carried in one’s pocket or purse.

Well, as the old song goes: “These are a few of my favorite things.” I hope this bit of my personal nostalgia will prompt you to reflect on some of your most intriguing moments that influenced you and/or changed your life.

A number of you have been asking for information about the Life Members Technology Travel/Tour for 2013. I’m pleased to tell you that a tour of the milestones of the eastern Canadian provinces is being planned for the late summer. Here are some of the details: the tour will begin on 25 August, at the Delta Toronto Airport West, and will end on 3 September in St. John’s Newfoundland. It will travel through Ontario, Quebec, New Brunswick, Nova Scotia, and Newfoundland. Approximately eight IEEE Milestones will be visited. Transportation will be by bus and ferry. In addition to the article below, detailed information has been posted on a special a Web page for the 2013 Canada Tour, and it can be accessed at: http://www.ieee.org/societies_communities/geo_activities/life_members/tech_tour_canada.html. The Web site will be updated as more information becomes available.

2013 IEEE Life Members Tour to Canada

While Canada may be known for its diverse and breathtaking scenery and warm, hospitable people, not many are aware of its major historic pioneering contributions in the technical areas of the two founding parents of IEEE: AIEE and IRE. The IEEE Life Members Committee is planning a ten-day tour for Life Members and their companions that begins with our guests arriving in Toronto, Ontario, on Sunday 25 August and concluding in St. John’s, the capital of Canada’s eastern-most province, Newfoundland and Labrador, on Tuesday 3 September.

Participants will arrive in Toronto and spend the first night at the Delta Toronto Airport West. Following breakfast on Monday morning, 26 August, we will travel to Paris, Ontario, the home of the “First Distant Speech Transmission in Canada, 1876” IEEE Milestone. Following lunch, the next destination is St. Catherine’s, Ontario, to visit the Decew Falls Hydro-Electric Plant IEEE Milestone, view the Tesla monument, and enjoy the sights of the world-famous and spectacular Niagara Falls, with a possible tour of the Rankine Power Plant at the top of the falls.



Niagara Falls.



Heart's Content Cable Station.



Signal Hill, St. John's, Newfoundland.

Members of the tour will then travel back to the hotel in Toronto, arriving in time for a dinner hosted by the IEEE Toronto Section. On the morning of 27 August, the tour travels to the C.H. Best Institute, in Toronto, which is the home of the "First External Cardiac Pacemaker" IEEE Milestone. The group will depart Toronto, en route to Ottawa (Canada's national capital), with a stop in Peterborough for lunch at the Holiday Inn Waterfront sponsored by the IEEE Peterborough Section. In Ottawa, we will be staying at the Delta Ottawa City Centre.



The Nikola Tesla monument at Niagara Falls.

During the morning of 28 August, the tour visits the Nepean Shirelys Bay Research Centre, home to the IEEE Milestone "Alouette-ISIS Satellite Program." On 29 August, we will travel to Montreal and stay at the downtown Delta Centre-Ville hotel. Montreal is the home of Hydro Québec, the "First 735 kV AC Transmission System" IEEE Milestone.

On 30 August, the tour moves to Fredericton, New Brunswick, where we will stay at the Delta Fredericton hotel. The next day, 31 August, the tour commences to Baddeck, Nova Scotia, to visit the Alexander Graham Bell museum before heading to a hotel in Sydney, Nova Scotia, for dinner. On 1 September, the group travels to Sydney Mines to visit the IEEE Milestone "The First Submarine Transatlantic Telephone Cable System (TAT-1)" followed by a trip to the ferry dock in North Sydney for travel to Newfoundland on the NFLD Ferry.

On 2 September, the tour features the IEEE Milestone "Heart's Content Cable Station." We will also travel to Signal Hill in St. John's to view a plaque and participate in sightseeing around the "Landing of the Transatlantic Cable" IEEE Milestone. While in St. John's, the group will stay at the Delta St. John's hotel. On 3 September, the tour concludes and participants travel home from St. John's.

For more information on the 2013 IEEE Life Members Tour to Canada, please visit http://www.ieee.org/societies_communities/geo_activities/life_members/tech_tour_canada.html.

Call for Grant Applications

The IEEE Life Members Committee (LMC) is responsible for the administration of the IEEE Life Members Fund (LMF), in coordination with the IEEE Foundation. The LMF supports the awarding of grants to projects of interest to Life Members (LMs), potential engineers, and engineering students.

Along with the IEEE Foundation, the LMC accepts grant applications for new and innovative projects two times per year. The next grant application deadline is 6 August 2013 at 11:59 pm ET. Grant applicants will be notified of the LMC's decision in December 2013.

To be considered for grant funding by the LMC, a project should have a clearly defined objective and provide support in the following areas of interest:

- young electrical/computer engineers
- potential electrical/computer engineers
- IEEE LMs
- mature IEEE members not yet qualified for LM status
- the history of electrical/computer engineering.

If you feel that your unit (Section or Chapter) has a project that fulfills the criteria identified above, you are welcome to apply for a grant through the IEEE Foundation Web page. Before submitting an application, please review the IEEE Foundation's grant guidelines. All the information you need regarding applying for a grant can be found at www.ieeefoundation.org.

Taking Coasters to the "Max"

Maxwell's Equations, 1861–1870, was dedicated as an IEEE Electrical Engineering Milestone in a ceremony held in Glenlair, Scotland, on 13 August 2009. To celebrate this important milestone, those who donate US\$100+ to the IEEE Foundation Life Members Fund (LMF) by September 2013 will receive this limited edition metal coaster depicting Maxwell and his equations. Maxwell's Equations is the sixth in a series of coasters commemorating various historic IEEE Electrical Engineering Milestones. The first



Maxwell's Equations are celebrated in the newest IEEE commemorative coaster.

five depict Telstar, the Panama Canal, Japan's Bullet Train, the ENIAC computer, and the Atom Smasher. Complete your set of coasters today—available for a US\$100 donation each. Visit ieeefoundation.org/donate to make your gift to the LMF, or contact donate@ieeefoundation.org for more information. Please allow eight weeks for delivery.

Please note: Donors will receive notification of the tax-deductible portion of their contribution that exceeds the value of the articles received, in accordance with the U.S. IRS regulations.

Wanted: Mentors

As IEEE Life Members (LMs), you possess valuable knowledge and experience to share. Why not use this experience to mentor an individual new to the engineering and technology professions? This mentoring partnership provides an opportunity to give back to the profession, as well as to grow your personal network and create a two-way learning opportunity with another professional.

IEEE is in the process of launching a new mentoring service called IEEE MentorCentre. This service is for IEEE members, graduate student level or higher, to serve as mentors and for mentees to find the right professional to help them with a technical or career goal. This service will replace the current IEEE Mentoring Connection. The IEEE MentorCentre is exploring the feasibility of extending this service to IEEE Student Members (undergraduates), depending on the demand from Student Branches and the availability of mentors.

We need you! IEEE would like to provide a special opportunity for IEEE LMs to sign up as mentors before IEEE MentorCentre goes live in late June. In order to

sign up, please e-mail ieeementoring@ieeefoundation.org and specify that you would like to join the new IEEE MentorCentre program as a mentor. We will add you to the first group of mentors to join the new program. When the program launches, you will be asked to complete a profile of your technical interests, background, and experience, so that mentees can find a mentor that best matches their interests. Please indicate if you are available through e-mail/Internet, face-to-face meetings, or both.

- Are you ready to be a mentor?
- Would you listen to your mentee's needs and concerns?
- Would you help your mentee define his or her career, educational, and other professional goals?
- Would you openly share your professional and technical knowledge and skills?
- Would you offer constructive criticism to help your mentee learn and progress?

If so, please sign up today by e-mailing ieeementoring@ieeefoundation.org. Mentors can sign up via e-mail until 25 June 2013.

Life Members Connect in the “City of Brotherly Love”

The IEEE Life Members Committee (LMC) and the IEEE Foundation hosted an IEEE Life Members (LMs) reception in the “City of Brotherly Love” on 12 April at the Sofitel Hotel, Philadelphia, Pennsylvania. Local IEEE LMs from four Sections were invited, and 35 members and their guests attended. The reception provided LMs and the LMC an opportunity to gather in a social setting and exchange ideas about LM activities.

IEEE LMC Chair Lou A. Luceri and Joe V. Lillie, IEEE Foundation director, hosted the luncheon. Luceri shared information about LMC activities and examples of the accomplishments of the IEEE Life Members Fund (LMF) of the IEEE Foundation. The LMF supports activities of interest to IEEE LMs, potential engineers, and engineering students, including student fellowships, preservation of the history of the profession and IEEE, and educational outreach. Lillie encouraged all LMs to support the LMF so that future generations of engineers and the engineering profession can continue to make an impact. He provided examples of how LMs can support the activities that the LMC endorses now, and through legacy gifts. Donor incentives, such as LM pins and IEEE Milestones commemorative coasters, were on display and discussed as well as the recognitions donors receive based on the type and level of their donations.

Feedback was requested so that the LMC can continue to shape the scope and success of its efforts. Attendees asked questions about their local LM Affinity Groups. They also discussed the importance of staying active and sharing knowledge and experiences with future engineers, while transitioning into retirement and beyond. We hope our guests made meaningful contacts that will keep them engaged in LM activities.

This is the eighth reception of its kind held specifically for LMs. Another will be held in conjunction with the next LMC meeting—the date and location are to be deter-



Donor incentives, including pins and commemorative coasters, were on full display.

mined. The PowerPoint presentation is available on ieeefoundation.org. Photos from the event are available for review if you “Like” us at [facebook.com/IEEEFoundation](https://www.facebook.com/IEEEFoundation).

For more information about this reception or to make a donation, contact the IEEE Foundation Development Office +1 732 562 5550 or e-mail: donate@ieee.org. To learn more about the IEEE LMF, visit the IEEE LMC at <http://www.ieee.org/lmc>.

#

*Special thanks to those who donate to the IEEE Life Members Fund of the IEEE Foundation. Your donations allow us to host gatherings and support activities of interest to Life Members. Your donation may entitle you to receive a Life Members Pin, Milestone Coaster, or become a member of the **IEEE Heritage Circle** or **IEEE Goldsmith Legacy League**. For more information, visit www.ieeefoundation.org.*



Chair Lou Luceri discusses the activities and accomplishments of the LMC.



The reception allows LMs and LMC members to connect and exchange ideas.

Congratulations to the Outstanding Life Members Affinity Groups

The IEEE Life Members Committee (LMC) is pleased to announce the 2013 Outstanding Life Members (LMs) Affinity Groups. The Outstanding Affinity Groups were identified based on the number of LM events held, the average attendance at those events, and the number of contributors to the IEEE Life Members Fund.

Combined, the groups noted below conducted over 121 events, with more than 1,500 participants, and LMs within their Sections contributed more than US\$27,000.

Section	2012/2013 Chair of LM Group
Boston (R1)**	Lennart Long
New York (R1)***	R. Mazzatto/Amitava Dutta-Roy
Syracuse (R1)	G. Kirkpatrick/Craig Cobb
Northwest Florida (R3)	James Hansen
Southeastern Michigan (R4)	Harpreet Singh
Central Texas-San Antonio (R5)	Thomas O'Brien
Oklahoma City (R5)	W. Watson
Wichita (R5)	George Dean
Buenaventura (R6)***	Jerry Knotts
Kingston (R7)**	Juergen Schwan/M. Rahman
Peterborough (R7)*	James Dymon
Israel (R8)**	Jacob Baal-Schem
Colombia (R9)	Alfonso Perez-Gama
Peru (R9)**	Cesar Chamochumbi
South Australia (R10)	Robert Bogner/Harry Green

***Recognized five years in a row

**Recognized four of the last five years

*Recognized three of the last five years

The IEEE LMC believes that keeping LMs active and engaged is a key component to the success of IEEE in local IEEE activities. This engagement can be conducted through the local Section and/or technical Chapter, but the LMC believes that having a local LM Affinity Group is a more effective method in keeping LMs active.

If your Section doesn't have an LM Affinity Group, you are encouraged to discuss the formation of the LMs Affinity Group with your Section leadership. In 2012, IEEE LM groups conducted over 220 events, which included more than 8,000 participants.

The IEEE LMC would like to congratulate each Outstanding LM Affinity Group for its efforts.

IEEE Life Members Fund 2012 Honor Roll of Donors

The IEEE Life Members Committee (LMC) gratefully recognizes the IEEE Members and other friends who have directed their donation to the IEEE Life Members Fund of the IEEE Foundation. Those names are listed here. A full listing of donors of US\$100 or more to all of the 130+ IEEE Foundation funds appear in the IEEE Foundation's Honor Roll of Donors, which is mailed in July to donors of US\$25 or more. Your support enables the IEEE LMC to support philanthropic activities that encourage students and young electrical engineers to pursue careers in engineering, investigate the history of electrical engineering, and represent the interests of IEEE Life Members (LMs) or similarly mature members. All listings acknowledge gifts of US\$100 or more made during the calendar year 2012 specifically to the IEEE LMs Fund of the IEEE Foundation.

The IEEE Development Office makes every effort to ensure the accuracy of the listing, including proper acknowledgment of gifts and correct spelling. Please notify us of omissions or errors by sending an e-mail to donate@ieee.org or calling +1 732 562 5550.

The IEEE LMC extends a special thank you to those donors who are not included here.

2012 Honor Roll of Donors

Sponsor (US\$1,000 to US\$2,499)

Eleanor Baum, LF
GE Foundation, Corporation
Fuyun Ling, Ph.D., LF
Dennis J. Picard, LF
Donald R. Scifres, LF
Donald R. Shepherd, LM
William Tyree, M

Gold Advocate (US\$500 to US\$749)

Dr. and Mrs. Peter Bingham, LSM
K.R. Gleason, LM
Thomas H. Grim, LSM
Robert J. Harrington, LF
John Impagliazzo, Ph.D., LF
Julius R. Inslar, LM
David J. Kellems, LM
Francis W. Keller, LM
Alan Lefkow, LM
Peter E. Perkins, LSM
Paul E. Schmid, LSM
Takashi Sugiyama, LF
Thomas A. Williams, LSM

Silver Advocate (US\$250 to US\$499)

Anonymous (1), LM
Charles L. Barndt, Jr., LM
D.E. Bawden, LM
Drayton D. Boozer, LM
Richard J. Briscoe, LM
Samuel C. Bristow, LSM
David Brooks, LM
Gerald O. Burnham, LSM
Ricardo Cebrecos, PE, LSM
Michael W. Cresswell, Ph.D., LF
Steve O. Dixon, LM
Claude W. Drake, Jr., LM
Charles J. Durkin, Jr., LF
Albert W. Egli, LM
Clinton R. and Mary Turner
Gilliland, LM
Tatsuya Harada, LF
Sue Hart, I
Yeichi Hayashi, LM
Jerald Holt, LM
Marko Jagodic, LM
Frederick C. Keller, LM
Yuri Khersonsky, LSM
Peter A. and Gretchen Lewis, LF
Yuan-Lu Li, LM
#John W. and Lorraine Meredith, LSM
Jon R. Miller, LM
William J. Morrill, LM
David R. Moss, LM
Shoichi Ono, LSM
Yadollah Parvizi, LM
Bart F. Rice, LSM
Neil F. Ruggieri, Ph.D., LM
Kenneth D. Skjervem, LM
Donald Steinbrecher, LM
Debbie Stewart, I
David E. Sundstrom, LSM
Wayne L. Weigle, LM

Bronze Advocate (US\$100 to US\$249)

Anonymous (11), LM
Anonymous (3), LSM
Michael R. Abbett, LM
Masayuki Abe, LF
David W. Abmayr, LM

Marshall Abrams, LSM
M. Fayek Abulela, LSM
John D. Adam, LF
Keith M. Adams, LSM
R. Neil Adams, LM
C.K. Adkar, LM
Michael S. Adler, LF
Lloyd C. Affleck, LM
Forrest J. Agee, LF
J.K. Aggarwal, LF
Alfred V. Aho, LF
Anand A. Ahuja, M
G.J. Aitken, LSM
Seizo Akasaka, LM
Masanori Akazaki, LF
John L. Aker, LM
Ray E. Aker, LSM
Fiorenza C. Albert-Howard, LSM
L.R. Albright, LM
Robert T. Alden, LF
James F. Aldrich, LM
Philip H. Alexander, LM
Basil F. Al-Fakhri, LSM
V.R. Algazi, LSM
Merrill B. Allen, LM
Murray W. Allen, LM
William D. Allen, LM
Charles H. Allison, LM
Karl M. Allison, Jr., LM
John E. Allner, LM
Bipin C. Almaula, LM
Richard P. Almquist, LM
David H. Altizer, LM
Seymour S. Altman, LM
Edward E. Altshuler, LF
Takao Amano, LM
G.B. Amerault, Jr., LM
Marvin K. Amerine, LM
Daniel I. Amey, LF
George M. Ammon, LM
Juan J. Amodei, LM
Ray E. Anderson, LM
Richard J. Anderson, LM
Ross C. Anderson, LSM
Kenneth W. Andresen, LM
Stephen Angyal, LM
E. Aoki, LSM
Teruaki Aoki, LF
#Marc T. Apter, LSM
Oliveros C. Aradanas, M
Mituhiko Araki, LF
Michel P. Armand, LM
Peter S. Armstrong, LM
Fritz Arndt, LF
Dale T. Arnold, LM
Vijay K. Arya, LSM
Thomas E. Ashburn, LM
John R. Asmus, LSM
Antonio D. Asprer, LM
Arthur W. Astrin, LSM
Robert E. Auer, LM
Richard C. Avrit, LM
Antoine H. Ayoub, LM
Jack L. Bacastow, LM
Henry L. Bachman, LF
Ralph H. Baer, LSM
David L. Bailey, LM
Kenneth D. Bailey, PE, LSM
Robert G. Bailey, M
V.R. Baird, LM
John A. Baka, LSM
David S. Baker, LF
Keith W. Baker, LSM
Samuel I. Baker, LM
W.D. Baker, LSM
Frank J. Balash, LM
Thomas R. Balgie, LM

Harold Balshem, LM
George W. Baltz, LM
Quirino Balzano, LF
Amiya R. Banerjee, LM
Utpal Banerjee, LF
William J. Bangs, Ph.D., LM
Robert M. Bania, LM
John W. Barber, LM
Christian Barfuss, LM
Eugene S. Barkan, LM
T.N. Barker, LM
William C. Barker, LM
William J. Barksdale, LSM
Glenn A. Barlis, LM
Keith A. Bartels, LM
Robert A. Bartolini, LF
David K. Barton, LF
Michael Bass, LF
Paul E. Bassett, LM
Alan P. Batson, LM
Lowell W. Bauer, LSM
C.R. Baugh, Ph.D., LF
Richard A. Baumgartner, LM
Miguel A. Becerra, LSM
George A. Beck, LM
James A. Becker, LM
Eric S. Beckjord, LSM
Clifford J. Bedore, LM
Nicholas A. Begovich, LF
Jules A. Bellisio, LF
Ken Belteau, LM
Justo Benitez, LSM
John E. Bennett, LSM
Edward R. Bennich, Jr., LM
Marvin D. Benson, LM
Ib Bentzen-Bilkvist, LF
Lawrence Bernstein, LF
E.A. Berry, LM
Gordon Berry, LM
K.W. Betsh, LSM
Arthur J. Beutler, LSM
Frederick G. Beyerlein, LM
Rajaram Bhat, LF
Theodore A. Bickart, LF
Henry Bing, Jr., LM
Donald L. Bitzer, LF
Bruce A. Black, LSM
George F. Bland, LSM
Gustav Blazek, LM
Steven A. Bleier, LM
Daniel Blitz, LM
Nicolaas Bloembergen, LF
W.O. Blumfelder, LM
Daniel A. Blycker, LM
Martin C. Blyseth, LM
Robert B. Bode, LM
James V. Bodycomb, LM
James F. Bohren, LM
Sigmund Borax, LM
John H. Bordelon, LSM
Walter G. Borland, LSM
Mario Borsani, LM
Edward Bosier, LM
Charles W. Bostian, Ph.D., LF
Henry Boulanger, LM
Kenneth E. Bow, LF
John D. Bowen, LM
Gilbert L. Bowman, LM
James C. Brakefield, LSM
Aron Brall, LM
R.P. Brand, LM
Harold D. Branstetter, LM
Gary J. Braswell, LM
John R. Brauer, Ph.D., LF
Peter J. Bravman, LM
J.P. Brazy, LM
Sam J. Breidt, LM

R.C. Brickley, LSM
Frederick Bried, SM
Thomas R. Brinner, LM
John A. Brockwell, LSM
Lewis M. Brodnax, Jr., LM
Adrian P. Brokaw, LF
Carl P. Brooking, LM
Steven W. Brooks, LM
Charles A. Broutman, LM
Charles H. Brown, LSM
Charles V. Brown, LM
Ronald Brown, LM
William D. Brown, LF
Samuel Broydo, LM
Charles G. Bruch, LM
Richard P. Brueggemann, LM
J.H. Bruning, LF
Clarence A. Brunkhorst, LSM
Robert B. Bruns, LM
Barry C. Brusso, LF
Arnold M. Bucksbaum, LSM
Fred K. Buelow, LM
O.R. Buhler, LSM
B.J. Bunin, Ph.D., LM
William P. Burbach, LM
David L. Burgess, LSM
James H. Burghart, LSM
Dennis W. Burr, LSM
John F. Burton, LM
R.J. Bustran, LM
C.M. Butler, LM
John M. Butt, III, LM
Salvatore F. Cagnina, LSM
James T. Cain, LF
Ross Caldecott, LSM
Malcolm D. Calhoun, LSM
David E. Callahan, LM
Clyde R. Camp, LSM
Stephen B. Campana, LM
James C. Campbell, Jr., LSM
Ralph D. Campbell, LSM
Richard H. Campbell, Jr., LM
V.R. Canino, PE, LM
Ben H. Cantrell, LM
Joseph J. Capezza, LM
Edward A. Capouch, LSM
William M. Carey, LM
Richard C. Carle, LM
Aydano B. Carleial, LM
Gordon L. Carpenter, LSM
Otis Carpenter, LM
Ronald J. Carpinella, LSM
Donald G. Carrigan, LM
Edward B. Carrillo, LM
John J. Carroll, LSM
Lee F. Carroll, LSM
David Carter, LM
G. Clifford Carter, LF
Louis J. Carter, Jr., LM
Ronald J. Carter, LM
Robert C. Casey, LSM
Douglas A. Cassell, LM
Robert L. Castleberry, Jr., LM
David H. Castleman, LM
C.R. Castro, LM
Clive E. Catchpole, LM
Robert L. Cattoi, LSM
Stephen T. Cavit, LSM
Tino Celio, LSM
Zoltan J. Cendes, LF
John W. Chadwick, Jr., LF
Stephen M. Chalmers, LSM
Chandu N. Champaneria, LM
P. Chandrasekaran, LSM
Robert E. Chapman, LM
Madabushi V. Chari, LF
Arthur C.M. Chen, LF

**Bronze Advocate
(US\$100 to US\$249) cont.**

Chi-Hau Chen, Ph.D., LF
Mark T. Chen, LSM
Tu Chen, LF
Wee-Ling Chern, LM
Charles V. Childers, LM
Lendyl J. Chisholm, LM
Wiley H. Christal, LM
Arunsi U. Chuku, LM
San C. Chung, LM
Allen B. Church, LSM
Alan G. Chynoweth, LF
Gregory Mark Cinque, LM
Terry C. Cisco, LSM
Robin J. Clabburn, LM
Lawrence G. Clemens, LM
Ken Clement, LM
Brian J. Clifton, LSM
Richard N. Close, LSM
Richard T. Close, LM
Joseph Co, LM
Arthur Cohen, LM
Jules Cohen, PE, LF
Nathaniel Cohen, LSM
Sanford Cohen, LM
Roy A. Colclaser, LSM
David L. Collins, LSM
J.H. Collins, LF
David J. Comer, LF
John R. Commons, LM
Peter L. Congdon, LM
Thomas E. Connor, Jr., LSM
Peter C. Coogan, LM
Doyle Cook, LM
Larry W. Cook, LM
R.F. Cook, LSM
K.F. Cooper, LSM
Robert E. Cooper, Jr., LSM
Jerome I. Cooperman, LM
William T. Corbin, LSM
Frederick C. Corey, LM
Michael J. Corinthios, LF
Henry A. Corriher, Jr., LM
Albert E. Cosand, LM
Edward R. Cote, LM
Leonard W. Cotten, LSM
Charles B. Cotton, LSM
Milton E. Cox, LM
Edwin P. Crabbe, Jr., LM
James W. Craft, LM
Edwin L. Craig, LM
Herb Craig, LSM
Robert B. Craven, LSM
George W. Crawford, LM
John A. Cribbs, LM
Hollen E. Crim, LM
Charles W. Criss, LM
Kenneth H. Crompton, LM
Bobbie Cronquist, LM
Thomas H. Crystal, LSM
Ronald Cubalchini, LSM
Ronald G. Cude, LM
J.W. Culpepper, LM
Mehmet Cultu, LSM
Samuel M. Cummins, LSM
Robert A. Curtis, Ph.D., LM
John R. Dahl, LM
E.B. Daigle, LM
Wayne Dalton, LM
Michael E. Daniels, LM
Magnus Danielsen, LM
Sunil R. Das, LF
David L. Davenport, LM
Jack Davey, LSM
David H. Davies, LSM
Charles F. Davis, Jr., LSM
William M. Davis, LM
#Robert J. Dawson, LSM
Thomas Frederick Dawson, LM
Kenton S. Day, LSM
Donald R. De Zutter, LM

J. Del Canto, LM
Richard A. DePietro, LM
John M. Derrick, Jr., LM
Donald P. Desfosse, LM
Herman Deutsch, LM
Thomas M. Devanney, LM
Jean A. Develet, Jr., LM
Russell G. Dewitt, LF
Bliss L. Diamond, LM
Robert T. Dicke, LM
Donald L. Dietmeyer, Ph.D., LF
Robin A. Dillard, LM
Thomas J. Dixon, LM
Joseph B. Dobsa, LM
Thomas R. Dobyns, LM
Steven R. Doctor, Ph.D., LSM
Dominion Foundation, F
Robert J. Dompe, LM
John E. Don Carlos, LM
Francis J. Donahoe, LSM
Noel E. Donlin, LM
Philip Doolittle, LSM
Stanley Doran, LM
Carserlo Doyle, LSM
Octavian Dragos, LM
Richard L. Drane, LM
N.V. Dravid, LSM
R.A. Drerup, Jr., LSM
Timothy J. Driscoll, LM
Paul R. Drouilhet, Jr., LF
Carl H. Dubac, LM
Carroll G. Dudley, LM
Joseph A. Dudrick, LSM
Raymond D. Dunlop, LM
John J. Dunse, LM
Joseph A. Durusau, LM
Terrence E. Dwan, LM
Roger Dworak, LM
John G. Dyke, LSM
James R. Dyne, LM
Chester A. Dyrud, LM
Antony C. Eaton, LM
Joerg Eberspaecher, LSM
Hiroshi Echigo, LM
W.F. Ecton, LM
Daniel E. Eesley, LM
Leonard Ehrman, LF
Donald L. Eichenberger, LM
Charles W. Eichhorn, LSM
Stan H. Eisenmesser, LM
Stewart M. Elder, LM
A.E. Ellis, Jr., LM
Linda R. Emery, LM
Warren M. Emlen, LSM
Lawrence D. Emmons, LM
B. Eng, Jr., LM
A.M. Engebretson, LSM
Ronald E. Enstrom, LSM
T.M. Eppinger, LM
John A. Epps, LSM
C. James Erickson, LF
Peter D. Esser, LM
George A. Etzweiler, LSM
Roderick J. Evenson, LM
William C. Everett, LM
Thomas E. Everhart, LF
Donald N. Ewart, LF
Eugene J. Fagan, LF
J.E. Fagan, LM
R.T. Fagg, Jr., LM
Wallace O. Faison, PE, LM
James R. Fancher, LSM
Robert M. Fano, Ph.D., LF
Nick A. Farinacci, LM
Albert B. Faris, LM
Ghaffar Farman-Farmaian, LM
Daniel E. Farmer, LSM
C.W. Farrow, LM
William E. Feero, LF
Jacob Feinstein, LSM
Joseph Feinstein, LF
Lyle D. Feisel, LF

Eldon D. Feist, LSM
Vernold K. Feiste, LM
James H. Feit, LM
Adolph Fejfar, LM
Robert D. Fennell, LM
George Fergades, LSM
Keith M. Ferguson, LM
Patrick E. Ferguson, LM
Paul M. Ferguson, LSM
Frank E. Ferrante, LSM
Alfred J. Ferrari, LM
Omar E. Ferrer, LM
Miles Ferris, LM
Eugene P. Finger, LSM
Joseph S. Finston, LM
William L. Firestone, Ph.D., LF
Jack D. Fisher, LM
Jerry W. Fitzsimmons, LM
Robert H. Flake, LM
Philip J. Fleming, LM
Philip H. Fleschler, LM
Irving L. Fletcher, LM
Martin E. Fletcher, LM
Robert S. Flumach, LM
Richard P. Fogarty, LSM
James A. Fogle, LM
Robert F. Forlaw, LM
Richard B. Fosmer, LM
Robert R. Fossum, LSM
J.D. Fox, LSM
Judson C. French, LF
Robert Frias, LM
R. James Fritsch, LSM
Charles H. Fritz, LM
Toshitaka Fujisaki, LM
Yasuhiro Fujita, M
Hideo Fujiwara, LF
Robert C. Furst, LM
Gordon H. Gaertner, LSM
Stanley Gaglione, LM
Vernon M. Gale, LM
Louis M. Galie, LM
Louis F. Gallo, LM
Homer C. Galloway, LM
Paul M. Gammell, LSM
Luis Gandia, LSM
Thomas V. Garceau, LSM
W.B. Garrison, LM
Thomas F. Garrity, LF
David C. Gasda, LM
Emilio C. Gatti, LF
Dennis J. Gaushell, LSM
Ralph S. Gens, LF
William P. Gibbons, LM
Donald P. Giegler, LSM
P. Roger Gillette, LSM
Burhl Gilpin, LM
Ramsis S. Girgis, LF
Concetto R. Giuliano, LF
Leo M. Glahn, LM
Benjamin Glatt, LM
Richard E. Godfrey, LM
P.H. Goertzen, LM
Robert C. Goessman, LM
August Golden, LM
David S. Goldman, LSM
Jack Golin, LM
Ralph J. Goltz, LM
Alfonso L. Gomez, LM
Mario J. Gonzalez, Jr., LF
D.J. Gooding, LM
Kenneth R. Goodwin, Jr., LSM
George E. Gorker, LM
C. Gorner, LM
Terence J. Gosciniak, LM
Brian E.B. Gott, LF
John K. Gotwals, LM
L.E. Gough, LSM
Richard J. Gowen, LF
Werner Graf, LM
John J. Grainger, LF
S.G. Granler, LSM

Thomas Gray, LSM
Gary D. Gray, LM
Jay W. Grear, Jr., LM
Geoffrey D. Green, LM
Vincent J. Green, Jr., LM
D.L. Greenberg, LM
William S. Greer, LSM
William L. Gregory, LM
Randall V. Gressang, LSM
Walter W. Griffin, LSM
Leonard L. Grigsby, LF
Larry B. Grim, LM
Carl E. Grindle, LSM
Davis Marshall Gritton, LM
Lawrence R. Groehl, M
Roger Grubic, LSM
Stanislaw Grzybowski, Ph.D., LF
Jacques G. Guimond, LM
Richard A. Gumpert, LM
David Gundry, LM
Richard U. Guth, LM
Graeme B. Gwilliam, LSM
Harold Haake, LSM
Roderic H. Haake, LM
Harold H. Haas, LM
H.K. Haase, LM
Rolland R. Hackbart, LM
Jerrier A. Haddad, LF
Gerald E. Hager, LM
James J. Hagner, LSM
Jay B. Haines, LM
James J. Halbach, LM
Fred M. Half, LM
Harold R. Hall, LM
Terry H. Hamada, LM
Amin M. Hanafy, LSM
Charles L. Hand, LM
David G. Hanna, LM
A.J. Hansen, LM
H.A. Hanson, LM
Shya Hao, LM
Russell C. Harbaugh, Jr., LM
Harold E. Harden, LM
P.A. Hardin, LM
George G. Harman, Jr., LF
Thomas L. Harman, LM
Charlie I. Harper, LM
Robert Harper, LM
Robert V. Harper, LM
Dean E. Harriman, Jr., LSM
Ernest R. Harris, LSM
James E. Harris, LM
James S. Harris, Jr., LF
R.H. Harris, LF
Roy E. Hart, LSM
James R. Harvey, LSM
Ryusuke Hasegawa, LF
Masao Hashiguchi, LM
Tsutomu Hashimoto, LF
Asif M. Hassan, LSM
Edwin B. Hassler, Jr., LM
Mack A. Hataway, LM
Arne Hatlestad, LM
Hugh G. Hauck, LM
George R. Haus, LM
Syuiti Hayasi, LSM
Richard A. Hays, LM
Richard L. Healer, LM
G. Erich Heberlein, LF
Herbert Hecht, LSM
Richard J. Hedger, LM
Paul A. Heermans, LM
John W. Hefler, LM
Walter E. Heinlein, LSM
John W. Held, LM
Kenneth I. Heldebrandt, LM
Denis A. Helm, LM
H. Hemami, LF
John C. Hempstead, LSM
Robert D. Hempstead, LM
Peter B. Hendel, LM
Charles Henderson, LM

**Bronze Advocate
(US\$100 to US\$249) cont.**

Paul R. Henneuse, LM
John H. Hennings, LM
Mogens Henriksen, LSM
James J. Henry, LM
Walter O. Henry, LM
Troy F. Henson, LSM
Andrew Herbert, LM
Robert O. Herendeen, LM
John M. Herman, III, LM
Juan L. Hernandez, LSM
Denver W. Herr, LM
Otto E. Herrmann, LM
Seymour I. Hersh, LM
Arthur Heyman, LM
George Hickey, LM
John A. Higgins, LF
Walter T. Higgins, Jr., LM
Douglas W. Hill, LSM
Joseph S. Hills, LM
Narain and Joyce Hingorani, LF
E.J. Hinz, LM
Nobu Hirano, LSM
Khalaf H. Hirmina, LSM
James V. Hirsch, LM
Andrew Hobokan, LM
Daniel B. Hodge, LF
Wallace J. Hoff, LSM
Gunter A. Hofmann, LF
Brian M. Hogg, LSM
Dieter B. Hohmann, LM
Leander H. Hoke, Jr., LF
Dennis L. Holeman, LM
Egon R. Hollm, LSM
J.F. Holmes, LM
Raymond H. Holstead, LSM
William G. Holt, LM
Edward D. Horowitz, LM
Joh D. Horrocks, LM
Nozomu Hoshimiya, LF
Hiroschi Hoshino, LM
R.W. Houskamp, LM
John A. Howard, LSM
Robert P. Howard, LM
E. Keith Howell, LSM
Robert E. Howell, LM
Raphael Hoyda, LM
Richard A. Hrusovskiy, LM
Tien C. Hsia, LF
Henry Y.H. Hsu, LM
Robert M. Hubbard, LM
William J. Huck, Jr., LM
Edward W. Hudson, LM
Mark V. Hughes, LSM
Harold W. Hulst, LM
Hagen E. Hultzs, LM
Richard L. Humphrey, LM
James J. Hurny, LSM
John Hus, LSM
Robert L. Hutchins, LSM
IEEE Orlando Section Executive
Committee, OU
IEEE SoutheastCon 2012
Executive Committee, OU
Hiromasa Ikeda, LF
Kenji Ikeda, LM
Francesco Iliceto, LF
Toru Inoue, LSM
J.M. Intrabartola, LM
Donald T. Irvine, LM
David J. Irwin, LM
Charles E. Isbell, LM
Kokichi Ishibitsu, LM
Katsuyoshi Ito, LM
Noboru Ito, LSM
Kenji Itoh, LM
Ferdo Ivanek, LF
Terje Iversen, LM
Shun-Ichi Iwasaki, LF
Robert W. Jack, LSM
Bruce B. Jackson, LM

Everett V. Jackson, LM
James R. Jackson, LM
Marc Q. Jacobs, LM
James E. Jacobson, LM
Robert A. Jacobson, LM
Tyland L. Jacobson, LM
Richard J. Jaeger, Jr., LF
William J. Jameson, Jr., LSM
Cecelia Jankowski, SM
Fred R. Jarratt, LM
Alexander F. Jaszek, LM
William C. Jenkins, LM
William B. Jervis, LM
Francisco D. Jimenez, LM
Peter A. Johanson, LM
Harold F. John, LSM
Dwight A. Johnsen, LM
Chad Johnson, Nonmember
Donald L. Johnson, LM
Donald W. Johnson, LM
Edward L. Johnson, LM
Richard A. Johnson, LSM
Richard R. Johnson, LSM
George I. Johnston, LSM
Alois Jokl, LM
A.H. Jones, Esq., LM
Brian L. Jones, LM
Colin M. Jones, LF
G.A. Jones, LSM
Howard R. Jones, LSM
Katharine J. Jones, LM
Merrill C. Jones, LM
Thomas J. Jones, LM
Erik Jorgensen, LM
Thomas J. Jorgensen, LM
Edward J. Joscelyn, LM
Frank E. Jump, LM
Adolph J. Kachler, LSM
Thomas Kailath, Sc.D., LF
John Kaiser, 2nd, LM
Robert P. Kappler, LSM
Fred G. Karkalik, LM
E. Karpinski, LM
Paul F. Karshis, LM
Chaman N. Kashkari, Ph.D., LM
John G. Kassakian, LF
Terry T. Katayama, LM
Ravindhar K. Kaw, LF
Haruo Kawahara, LF
Carl M. Kawachi, LM
Edward P. Keenan, LM
J.J. Keenan, LM
John C. Keenan, LM
Gary R. Keesecker, LSM
Walter R. Keevil, LM
Fred R. Keith, Jr., LM
William J. Kent, Jr., LM
William Kern, LM
Lawrence E. Kerr, LM
Joel R. Kesler, LSM
Otto Kessler, LM
E.B.C. Khu, LM
Dallas L. Kibbe, LSM
Donald W. Kilpatrick, LM
John N. Kim, LM
Clive W. Kimblin, LF
David A. King, LM
Denis J. King, LSM
Russell C. King, LM
William P. King, LSM
W.K. Kinkead, LM
James L. Kirtley, Jr., LF
John A. Kise, LM
Harris H. Kitamura, LM
J.J. Kleber, LM
Martin S. Klemes, LM
Frank J. Kloht, LSM
D.R. Klose, LM
Myoung S. Ko, LSM
Susumu Kobayashi, LM
V. Prasad Kodali, LF
Charles W. Koeller, LM

David C. Koelsch, LSM
R.A. Koelzer, LM
Harlen N. Koen, LM
J.I. Koeper, LM
Gordon M. Koizumi, LM
George E. Koleszar, LM
H.F. Kongabel, LM
Warren L. Koontz, LSM
Gerald L. Kopischke, LSM
Robert J. Kost, LM
Dennis V. Kostrzewski, LM
Charles J. Kovarik, LSM
Richard A. Kowalski, LSM
Taisaku Kozuma, LSM
Paul C. Krause, LF
Emil Krenn, LM
Walter F. Krolikowski, LM
John C. Kroon, LSM
Paul A. Kuckein, LM
James F. Kuder, LM
Chandra M. Kudsia, LF
Tadashi Kurachi, LM
Noritaka Kurauchi, LM
Jerome I. Kurshan, LSM
Joel S. Kvitky, LM
Young D. Kwon, Ph.D., LM
Pang C. Kwong, LM
Donald A. Lacer, LSM
Bruce Lager, LM
Jack N. Lahti, LM
Hungchi Lai, LM
Keith O. Laing, LM
Philip M. Lally, LSM
Lawrence L. Lam, LSM
Dennis W. Lamont, LSM
Paolo Lampariello, LF
Edward J. Lancevich, LM
Carl Landinger, LM
Raymond H. Lanier, LM
Louis J. Lanzerotti, LF
Beril J. Lapson, LM
Wallace E. Larimore, LM
John D. Larson, LF
Martin E. Larson, LM
Richard L. Larson, LM
George T. Laughlin, II, LSM
Larry G. Layman, LM
Howard H. Leach, Jr., LSM
Ronald B. Leask, LM
Kwang Y. Lee, LF
Song P. Lee, LM
Steven Y. Lee, LM
G. Robert Leef, LM
Ralph K. Leidy, LM
Gordon A. Leiter, LM
Gary W. Leive, LM
Donald H. Lenhart, LSM
Benjamin J. Leon, LF
Mark G. Leonard, LSM
Richard A. Lercche, LM
Harry Letaw, Jr., LSM
M.E. Levi, LM
George K. Lewis, LM
Richard E. Lewis, LM
J.F. Libbe, LM
Zvie Liberman, LSM
Thomas E. Lietman, LM
Arthur H. Light, LSM
Mao-Shiu Lin, Ph.D., LSM
Ernest R. Lindahl, LM
W.J. Lindblad, LM
Philip E. Lindquist, LM
Tok W. Ling, LSM
Duane P. Lingafelter, LM
Alan W. Lingham, LM
John C. Linz, LM
Michael S. Liu, LSM
Ming T. Liu, LF
Joseph G. Llauro, M.D.,
Ph.D., LSM
Kenneth C. Lockwood, LM
Jaan A. Loger, LSM

L.R. Lombardo, LM
James R. Long, LM
Alfred R. Lopez, LF
William Lorber, LM
Joseph R. Loring, LM
Jean-Francois Loude, LSM
Burton J. Loupee, LSM
Daniel J. Love, LF
Lester H. Lowe, Jr., LSM
Clark E. Lowman, LM
Frank E. Lowther, LSM
John P. Lozes, Jr., LSM
Albert R. Lubarsky, LSM
Fabrizio Luccio, LF
#Louis A. Luceri, LSM
Wolodymyr Luciw, LM
Robert A. Ludtke, LM
Edgar J. Luecke, LSM
Gerald Luecke, LM
James R. Lusby, LM
G.J. Luszczek, Jr., LM
Arch C. Luther, Jr., LF
Kevin B. Luxford, LM
D.A. Macey, LSM
Gene H C. Mach, LM
Donald R. Machen, LSM
M.L. MacMedan, LM
Alfred U. MacRae, LF
Atsuya Maeda, LM
J.C. Maender, LM
Rowdan K. Maharaj, LM
Haroun Mahrous, LSM
Anthony H. Majewski, LM
John Makhoul, Ph.D., LF
Naoki Maki, LF
Tsutomu Makino, LM
William T. Malanczuk, LM
William T. Maloney, LSM
Joseph D. Manica, LM
George A. Mann, LM
John A. Mann, LM
Roger F. Mann, LSM
William M. Mannel, LSM
Salvatore J. Manno, LM
James R. Manuel, LM
August F. Manz, Sr., LM
Donald L. Margolies, LM
Roger G. Mark, LF
Louis J. Maroglio, LM
Anthony M. Marques, LM
D.E. Marr, LM
James T. Marrs, LM
J.H. Marshall, III, LSM
Peter D. Martin, LM
Richard O. Martin, LSM
Ronald L. Martin, LM
Tom A. Martin, LM
William L. Martino, LM
Thomas Marx, LM
Matthew S. Mashikian, LF
Charles R. Mason, LM
Daniel J. Masse, LSM
Vukota Mastilovic, LSM
Joe T. Mathis, LM
Eiju Matsumoto, LM
S.H. Matthews, LSM
Peter T. Mauzey, LSM
John Mavor, LF
Clifford L. Maxwell, LM
Robert Mayer, Jr., LM
Alexander Mazur, LM
Ehor Mazurok, LM
Shirley C. Mc Carty, LM
Gene W. Mc Pherson, LM
Thomas L. Mc Roberts, LM
D.R. McAvoy, Jr., LM
Thomas G. McBride, LM
Robert H. McCamish, LM
G.B. McCarter, LM
Kenneth R. McClymont, LF
Gary E. McConnell, LM
Ronald C. McConnell, LSM

Bronze Advocate**(US\$100 to US\$249) cont.**

Edward D. McCormick, LM
Martin J. McCormick, Jr., LM
T. McDonagh, LM
Arthur McDonald, LSM
William C. McDonald, LM
Richard McFee, LF
Bryan W. McGhee, LM
August L. McGuffin, LSM
John P. McHenry, LM
George A. McIntosh, LM
Jack D. McKinney, LM
Robert W. McMillan, LF
Grayson E. McNair, LSM
A.J. McNeerney, LSM
Robert J. McSweeney, LM
James F. McVeigh, LM
G.W. Meeker, LM
Thomas H. Mehling, LM
Roy W. Meinke, LSM
H. Paul Meisel, LSM
David Meltzer, LSM
John W. Mench, LSM
Hans U. Meyer, LM
James R. Meyers, LM
James R. Michalec, LF
Harry Mieras, LSM
Tetsuya Miki, LF
John M. Milan, LSM
Harold G. Miller, LM
John O. Miller, LM
Roger L. Miller, LM
William G. Minahan, LM
Paul O. Minear, LM
Milton J. Minneman, LSM
N. Minnici, LM
Douglas B. Miron, LSM
Yoshinori Mitamura, LM
Edward F. Mitchell, LM
Glenwood J. Mitchell, LM
Hisayasu Mitsui, LF
Tsuneo Mitsui, LF
Tohru Miyake, LM
John K. Miyasaki, LM
Toyokatsu Miyashita, LM
Kunika Mizushima, LF
Eugene L. Mleczo, LM
H.G. Mochizuki, LM
John I. Molinder, LSM
Ronald L. Monahan, LM
Laurence L. Moon, LM
James L. Moore, LM
Robert A. Moore, LF
Thomas C. Moore, LM
Sundaram C. Moorthy, LM
Leonard W. Morgan, LM
Mititada Morisue, LM
Yuji Morita, LM
James B. Moritz, LM
Lloyd A. Morley, LF
Maynard B. Morris, LSM
Donald E. Morton, LM
Roger S. Morton, LM
Sigmund W. Mosko, LSM
Rangaswamy Mukundan, LSM
Fred F. Mulholland, Jr., LM
Erwin E. Muller, LSM
Walter D. Mullins, LM
R.A. Munroe, LM
John C. Munson, LF
Jay H. Murdock, LM
Patrick R. Murphy, LSM
Wilbur C. Myers, LSM
Warren L. Nadler, LM
Laurence W. Nagel, LF
H. Troy Nagle, LF
Kyoji Naitoh, LM
Yoshimi Nakano, LM
Edward M. Nakauchi, LSM
Toshihiko Nakayama, LM

Seiichi Namba, Ph.D., LF
Grama K. Nandakumar, LM
F.P. Naredo, LM
August Neitzel, LM
Howard N. Nelson, LM
Patricia M. Nelson, LM
Robert G. Nettles, LM
Peter G. Neumann, LF
Robert W. Newcomb, LF
Donald J. Newman, LM
Won K. Ng, LM
Howard E. Nichols, LM
Roger A. Nichols, LM
John L. Nicolettos, LM
James A. Niederer, LM
Robert L. Nielsen, LSM
Jorma U. Nieminen, LF
Charles W. Niessen, Ph.D., LM
Gene M. Nishimura, LM
Robert D. Noble, LM
Alexander R. Norden, LSM
George G. North, LM
Paul J. Notarian, LSM
Eddie T. Nozawa, LM
Thomas P. O'Brien, LSM
Michael J. O'Connor, LM
John F. O'Connor, LM
William M. Ogden, LM
Bunichi Oguchi, LF
Gilbert M. Ohlen, LM
Boris V. Ohman, LM
Ryoichi Ohnishi, LF
Katsuhiko Ohsaki, M
Carl A. Ohsiek, Jr., LM
Akira Ohte, LF
Arthur G. Olsen, LM
Richard G. Olsen, LSM
William A. Olsen, LM
Sigeru Omatu, LM
James E. O'Neil, LF
Ibrahim Onyuksel, LM
William H. Oost, LM
Joseph R. Oranchak, LM
Vincent J. Organic, LM
Kanji Otsuka, LF
Thomas W. Otto, LM
Arlen L. Overvig, M
Bill L. Pack, LM
E. Valdes Pages, LM
Daniel R. Paige, LM
James D. Palmer, LF
L.C. Palmer, LSM
Claude J. Pany, LM
Frank C. Pao, LSM
Robert E. Papsco, LM
David J. Park, LM
Robert D. Parker, LM
Lowell C. Parode, LSM
Micheal E. Parten, LSM
Bernard M. Pasternack, LSM
Devendra J. Patel, LM
Mahendra R. Patel, LM
Richard G. Patrick, LSM
John P. Patterson, LM
Neal A. Patterson, LSM
John E. Patton, LM
Boonsong Paukatong, LM
K. Bradley Paxton, LM
D.R. Pearson, LM
Jack O. Pearson, Ph.D., LM
William E. Peck, LM
Palo A. Peirce, LM
Leroy S. Pendleton, LM
N.P. Penny, LSM
Frank Perkins, LM
Richard T. Perron, LSM
James L. Perry, LM
Elmer M. Petercsak, LM
Emanuel P. Peters, LM
Hans K. Pfyffer, LM
Robert C. Phares, LM

P.G. Phillips, LM
Robert R. Phillips, LM
Roland Plottel, LM
Harold J. Podell, LM
A.J. Poggio, LSM
Joseph D. Polack, LM
Bohumil Polata, LSM
William D. Pollard, LSM
Charles W. Pond, LM
Charruk Pongklub, LM
Albert G. Ponte, LM
Donald N. Ponsler, LM
Paul Popenoe, Jr., LM
Don J. Popp, LM
David Porter, LM
Edwin L. Post, LSM
H.L. Post, LSM
Anthony S. Pototzky, LM
Ramesh S. Pradhan, LM
Ronald E. Pratt, LM
Ronald L. Prevost, LM
Jordan H. Prince, LSM
P.A. Probst, LM
Edward J. Prochaska, LSM
B.J. Procopio, LM
E. Norris Procter, LSM
Roger J. Provencal, LM
James W. Pryde, LM
Lee J. Pryor, LM
PSE&G, Corporation
Robert J. Puckett, LM
Emerson W. Pugh, LF
Walter C. Pumo, LM
Tarsem S. Purewal, LM
Mallik S. Putcha, LSM
William A. Radasky, LF
Joseph A. Radocchio, LM
John R. Ragase, LM
Srinivasa H. Raghavan, LSM
Yudh V. Rajput, LSM
G. Ramakrishnan, LSM
Ramachandra Ramakumar, LF
Robert W. Ramsey, Jr., LM
Clarence F. Ramstedt, LM
James C. Rand, LM
Russell K. Raney, LF
Alfonso F. Ratcliffe, LSM
R.L. Raybold, LM
John A. Reagan, LF
Vellenki U. Reddy, Ph.D., LF
Robert H. Rediker, LF
Fredrick H. Reed, LM
Paul M. Reeves, LM
George T. Reich, LM
Konrad Reichert, LF
John A. Reif, LM
Julius Reiner, LSM
Clyde J. Reinhard, LM
William N. Reining, LM
William F. Reinke, LM
John A. Reiter, Jr., LM
Carl F. Rench, LM
R.K. Reynolds, LM
Eugene A. Rheingans, LM
Richard G. Rhoda, LM
V.T. Rhyne, LF
Laurence B. Rice, LM
John Richards, LF
Alexander L. Richardson, LSM
Paul Richman, LF
Thomas J. Richter, LM
Gunnar Ridell, LM
Leland Riffel, LM
Anthony L. Rigas, LF
Robert N. Riley, LSM
Milton H. Ritchie, LM
David Rivkin, LM
John D. Robbins, LSM
Robert Robbins, LM
Harry Roberts, LM
Larry W. Roberts, LM

Lester A. Roberts, LM
Joseph E. Robertshaw, LM
George A. Robertson, LM
J. Darrell Robinson, LM
J.S. Robinson, LM
James K. Robinson, LM
Leslie L. Robinson, LM
N. David Robinson, M.D., LM
Willard A. Robinson, LSM
Rocco Robortaccio, LSM
Richard B. Robrock, II, LF
William M. Robson, LM
George P. Rodrigue, LF
Manuel F. Rodriguez-Perazza,
LSM
David V. Rogers, LSM
Heljar B. Rognerud, LM
Hans G. Rolfes, LM
William S. Roman, LM
Salvatore A. Romano, Jr., LSM
Albert J. Rosa, LSM
Lawrence Rosenthal, LM
R.G. Ross, LM
Tarunbikash Roy, LM
John Rozema, LM
Lawrence G. Rubin, LF
Raymond L. Rudolph, LM
Arthur K. Rue, LSM
Ivan N. Russell, LM
Harold A. Sabbagh, LSM
Sevier Sabin, LM
J. Sada-Gamiz, LM
Athanasios N. Safacas, LSM
Michael B. Saft, LM
Thomas Y. Sakaguchi, LM
Maurice S. Salamy, LSM
Richard A. Salo, LM
Alberto Sanchez, LM
David W. Sanders, LM
L.J. Sanders, LM
Phillip A. Sandford, LM
Jun-Ichi Sano, LM
Hal M. Sappington, LM
Taiji Saruwatari, LM
Isao Sasajima, LM
Yozo Satoda, LM
Peter W. Sauer, LF
Monroe B. Savage, Jr., LSM
R.W. Saxon, Jr., LM
S.G. Scaglia, LM
William A. Scanga, LSM
John F. Scarzello, LM
Mervin G. Schaefer, LM
Martin M. Schaffel, LM
Herbert Schanker, LM
Larry L. Schedin, LM
Robert A. Scheman, LSM
Frank E. Schink, LF
Theodore C. Schirmer, LM
Edward L. Schlossberg, LSM
Frank W. Schmechel, LM
Dean J. Schmidlin, Ph.D., LM
Martin S. Schmookler, LSM
Dorothy L. Schnabel, LM
John N. Schneider, PE, LSM
Robert L. Schneider, LM
David H. Schraeder, LM
Stanley M. Schreiner, LSM
Dieter K. Schroder, Ph.D., LF
Bernard S. Schuchner, LSM
Richard A. Schultz, LM
Mischa Schwartz, LF
R.A. Schwinn, LM
Robert A. Scoll, LSM
Richard J. Scott, LM
William A. Scott, LM
David A. Seamans, LSM
Charles R. Seashore, LM
John R. Seiver, LSM
W. Semenik, LM
Douglas R. Semmes, Jr., LM

Bronze Advocate
(US\$100 to US\$249) cont.

John G. Sendlein, LM
Ashis K. Sengupta, LM
Dipak L. Sengupta, LF
Sukanta Sengupta, LSM
Benjamin Senitzky, LM
Donald N. Senzig, LM
Peter G. Serev, LM
John E. Setaro, LM
Walter D. Seward, LSM
Robert G. Sewell, LSM
Melvin H. Shadbolt, LSM
D.G. Shaless, LM
Charles K. Shanks, PE, NSPE,
LSM
George A. Shaton, LM
Kenneth A. Shaw, LSM
William Shepherd, LF
Albert P. Sheppard, LSM
Masamichi Shimura, LM
James P. Shipley, LM
Douglas K. Shirachi, Ph.D., LM
Chris M. Shirai, LM
Koichiro Shoda, LM
Francis R. Shoemaker, LM
Ernest J. Shoji, LM
Barry L. Shoop, Fellow
Chen-Wen Shou, LM
Roy W. Shoup, Jr., LSM
Gary L. Shrock, LM
K.R. Siarkiewicz, LF
John J. Sideravage, LM
Rubens A. Sigelmann, LSM
Thomas W. Sigmon, LF
D.D. Siljak, LF
Peter M. Silverberg, LSM
Carl F. Simone, LSM
Donald C. Simoneaux, LM
Dolph Simons, LM
Mayrant Simons, LSM
James E. Simpson, LM
Murray Simpson, LF
William A. Sims, LM
Robert S. Sindlar, LM
Byron R. Skinner, LM
John W. Skooglund, LF
Walter Skuggevig, LM
Leslie H. Sladen, LM
James G. Sliney, Jr., LSM
Martha Sloan, LF
Douglas C. Smathers, LM
Kenneth B. Smernoff, LM
Charles W. Smith, PE, LM
Douglas B. Smith, LM
Gerald S. Smith, LSM
Jeffrey E. Smith, LM
Lawrence G. Smith, LM
Richard A. Smith, LM
Richard L. Smith, LM
Robert B. Smith, LM
Robert D. Smith, LM
Robert T. Smith, LSM
Thomas D. Smith, LM
Warren D. Smith, LM
William C. Smith, LM
William H. Smith, LM
Ronald C. Snare, LSM
Richard M. Snell, LM
R.W. Snyder, LM
Charles Sobel, LM
Frank G. Soltis, LM
James H. Somers, LM
John H. Spare, LSM
John S. Spencer, LSM
Spyridon N. Spetsieris, LM
Joel S. Spira, LF
Thomas L. Springall, LM
K.D. Srivastava, LF
Dale E. St. John, LSM
Henry S. St. John, Jr., LM

Roger I. Staab, LM
Thomas D. Stade, LM
Ronald J. Stahara, LM
Altan C. Stalker, LM
Gordon R. Stallings, LM
Bernard A. Stankevich, LM
L. Robert Starkey, LM
Malcolm G. Stearns, LM
Roy H. Stehle, LM
Gerhard Steinbrenner, LM
L.A. Steinert, LM
Dave W. Steinmeier, LSM
George G. Stephen, LM
Robert A. Stern, LM
Richard C. Stevens, LM
David B. Stewart, LM
Donald M. Stewart, LM
Frederick A. Stich, LSM
Jack J. Stiffler, LF
M.A. Stiffman, LM
John F. Stledger, LM
James C. Stoffel, Ph.D., LF
Ronald B. Stokes, LM
Virgil Stokes, LM
William T. Storey, LM
Edmund R. Stoughton, LM
Fred J. Stover, Jr., LM
Richard W. Strahan, LM
Bradley J. Strait, LF
Robert D. Strattan, LSM
Richard L. Strombotne, LM
C.R. Sublett, LM
Stephen Suckenic, LM
R. Sudarsanam, LSM
Hisanobu Sugano, LM
Yukiyasu Suguri, LM
F.J. Sullivan, LM
Jerry S. Sullivan, LM
R.L. Sullivan, LF
Peter G. Sulzer, LF
Thomas H. Sumida, LM
Arthur H. Summers, LSM
David Sun, Ph.D., LM
Jayaraman Sundareshan, LM
Kantilal K. Surti, LSM
James E. Svarovsky, LM
Philip H. Swain, LSM
James A. Swetlikoe, LSM
D.W. Swift, LSM
John M. Sylvester, LM
Joseph P. Szafranski, LM
Margaret R. Taber, LSM
Kunio Tada, LF
Toshikiyo Takemori, LM
Hatsukazu Tanaka, LF
Kunio Tanaka, LM
Richard I. Tanaka, LF
Morris Tanenbaum, LF
Katsunori Taniguchi, LSM
Duncan N. Tanner, LM
Eugene C. Tappis, LM
Isamu Tatsuguchi, LM
Alistair W. Taylor, LM
Charles A. Taylor, LM
John H. Taylor, LM
Raymond M. Taylor, LM
Michael D. Teems, LM
John T. Tengdin, LF
Lewis M. Terman, LF
R.S. Terry, LF
Ronald J. Texel, LM
James L. Thacker, LM
Herbert L. Thal, Jr., LF
John L. Theimer, LM
Paul W. Thiede, LM
Cecil W. Thomas, LSM
David M. Thomas, LM
George M. Thomas, LSM
John R. Thomas, LM
Joseph F. Thomason, LM
David L. Thompson, LM

James R. Thompson, LSM
Maurice R. Thompson, LM
Roger W. Thompson, LM
C. Nortoft Thomsen, LSM
D.J. Thomson, Ph.D., LF
J.R. Thornton, LM
Peter M. Thorp, LSM
Robert G. Thurman, LSM
Benjamin E. Thurston, LM
James M. Tien, Ph.D., LF
Emery P. Todd, Jr., LM
Carlos A. Tomaszewski, LM
Shoji Tominaga, LF
Kiyoi Tomiyasu, LF
Willis J. Tompkins, LF
P. Torgrimson, LM
Sven Treitel, LF
Alexander B. Trevor, LSM
John B. Trevor III, LM
Richard True, Ph.D., LF
Wiwat C. True, LM
Henry P. Trujillo, LM
Henry J. Trussell, LF
John J. Trutwin, LM
Tung-Lin Tsai, LM
Takehiko Tsuiki, LSM
Saburo Tsuji, LF
Albert J. Tucker, LM
Seppo E. Tuominen, LM
David M. Turner, LM
Hubbard C. Turner, Jr., LM
John M. Turner, LM
P.D. Tuttle, LSM
Jay R. Tyne, LM
Katsumi Uchida, LM
Teiji Uchida, LF
George R. Ufen, LM
Malcolm R. Uffelman, LF
Thomas E. Ullman, LM
Warren W. Umholtz, LM
Gerald S. Ustach, LM
Ramasamy Uthurusamy, LM
Kiminori Utsunomiya, LM
Bob Uyetani, LM
Bernhard U. Vainik, LM
D.G. Van Coevering, LM
James C. Van Zee, LM
Kenneth E. Vannice, LM
P. Varanasi, LM
William A. Vaughan, PE, LM
Robert A. Veitch, LF
John E. Vetack, LM
Alfred E. Victor, LM
Vince G. Vidas, LM
Richard C. Viinikainen, LM
Robert S. Vincent, LM
Ronald F. Virostek, LM
Joseph R. Volpe, Jr., LM
Howard T. Voorheis, LM
G.G. Vurek, LM
Edward L. Walker, LSM
Ralph E. Walker, LM
Ronald G. Wallace, LM
Robert M. Walp, LF
Robert R. Walsh, LM
Thomas D. Walsh, LSM
John W. Walter, LSM
Robert E. Warakomsky, LM
Brendan J. Ware, LF
Ralph E. Warmack, LSM
Janusz Warszawski, LM
John T. Wasdi, LM
Yasuo Watanabe, Ph.D., LM
Laurence S. Watkins, LSM
David J. Watson, LM
Lewis R. Wears, LM
Thomas L. Weaver, LF
Joseph D. Webster, LM
Felipe N. Weffer, LM
H.L. Weidemann, LM
Don M. Weigle, LM

Marc R. Weinberger, LM
Richard T. Weinsberg, LM
Stephen B. Weinstein, LF
David M. Weiss, LSM
Gregory V. Welch, LSM
William C. Wells, LM
Irving and Virginia Welsted,
LSM
David L. West, LSM
David F. Whalen, LSM
Stanley A. White, LF
T.S. White, LM
Willis S. White, Jr., LSM
Charles L. Whitham, LM
Denis A. Whittaker, LM
A.C. Whittlesey, LM
Allen V. Whitwell, LM
Herman H. Wieder, LF
Robert G. Wilhelm, Jr., LM
Brown F. Williams, LF
Conrad M. Williams, LM
M.L. Williams, Ph.D., LF
Peter A. L. Williams, LM
Peter L. Williams, LM
Robin Williams, LF
Richard C. Williamson, LF
Ronald W. Williamson, LM
Lutz Willner, LM
Howard D. Wilson, LM
John T. Wilson, LM
Kenneth T. Wilson, LM
Ralph E. Wilson, Jr., LM
S.L. Wilson, III, LM
Thomas G. Wilson, LF
William J. Wilson, LF
Charles E. Winn, LM
Arthur W. Winston, LF
B.E. Winter, LM
Edward W. Winters, LM
Leo Wisseman, LM
Ernest E. Witschi, LSM
Horst R. Wittmann, LF
Ronald L. Wolff, LM
P.A. Wolfgang, LM
Harry J. Woll, LF
Lorenzo L. Wong, LSM
R.W. Wong, LSM
R. Wood, LM
H.L. Woodbury, LSM
Woodmoor Pinecrest Citizens
Association, Organization
Lawrence R. Wozniczka, LM
F.L. Wright, LM
James W. Wright, LM
Thomas M. Yackish, LSM
Philip Yaffee, LSM
Hideki Yamamoto, LM
Hideki Yamamoto, LM
Masamichi Yamaniishi, LF
Satoru Yanabu, LF
Sachio Yasufuku, LF
Ying C. Yeh, LF
Kjell-Olo Y. Yngvesson, LM
Robert M. Youngs, LSM
Cleyon O. Yowell, LSM
Francis T.S. Yu, LF
Alexander Yuill-Thornton, II,
LM
H. Oner Yurtseven, LSM
John E. Zabel, LM
Kenneth D. Zastrow, LM
Stanley Zebrowitz, LF
S. Zelencik, LM
En-Jun Zhu, LSM
D.J. Zillig, LM
R.E. Zimmerman, LM
Frank R. Zitzmann, LSM
Stanley E. Zocholl, LF
Javad Zoroofchi, LM
Peter S. Zory, Jr., LF
Herbert W. Zwack, LM

Donor Profile: Fiorenza C. Albert-Howard

—I am not able to sit back and let others do a job I can do, so I volunteer.

Fiorenza C. Albert-Howard started volunteering in her local IEEE Section, then in Vancouver, where she established the Computer Society Chapter. She served on several committees and, in 2011, volunteered for the IEEE Canada Foundation and is serving as a member of the History Committee and as liaison to the History Committee for the IEEE Member and Geographic Activities department. As a member of the IEEE Life Members Committee, she served on the Grants Evaluation Committee for the IEEE Foundation and is also a member of the Grants Committee for the IEEE Canada Foundation.

“I appreciate efforts to help individuals expand their potential, which is an IEEE Foundation initiative,” Albert-Howard says. “I appreciated the scholarships I received to become an engineer, especially at the time in Italy when women were not venturing in technical fields. I was the only female student in the school of engineering at the University of Roma among 750 male students,” she recalls. “I am trying to return the favor for individuals



Fiorenza C. Albert-Howard says that contributing to the Life Members Fund helps “return the support and encouragement we received from IEEE during our careers.”

who need to feel appreciated, through the grants the Foundation distributes,” she added.

The IEEE Milestone, the Electronic Numerical Integrator and Computer (ENIAC) commemorative coaster, depicting the first electronic digital computer, is offered as a giving incentive to the IEEE Life Members Fund. Though before her time, ENIAC was certainly inspirational and significant to Albert-Howard. “My professional life, interests, and hobbies are all related to computers. The image of the lady in the forefront on the coaster makes me feel as if I am in the picture,” she explains.

“There are individuals around the world who need support, certainly financial,” she continues. “It becomes the push to do the best they can to improve the world around them. Being a part of

the efforts of the Life Members Fund of the Foundation, as we achieve Life Member status, make us better individuals, able to return the support and encouragement we received from IEEE during our careers.”

And what better gesture than to provide a donation to the Foundation via your will? What a legacy that will leave!

The IRA Charitable Rollover Is Back!

The IRA Charitable Rollover provision was extended through the end of 2013 within the United States. The “rollover” provision allows U.S. IRA owners, age 70½ and older, to make federally tax-free charitable distributions up to US\$100,000 per year, per person, from

their IRAs directly to eligible charities, such as the IEEE Foundation. Charitable distributions must be issued directly from the IRA administrator and may be used to satisfy the annual IRA required minimum distribution. Visit www.ieee.org/organizations/foundation/iragiving.html to learn more.

What Do the New U.S. Tax Laws Mean to You?

On 1 January 2013, the U.S. Congress passed the American Taxpayer Relief Act of 2012, enabling most Americans to step back from the “fiscal cliff” that would have meant significantly higher income taxes for all taxpayers. Many U.S. IEEE Life Members may be affected by the new rates and rules included in the 2012 Tax Act. Listed here are a few of the provisions that may impact you.

Income Tax Changes

- It created a new top tax bracket of 39.6% for individuals with incomes above US\$400,000 (US\$450,000 for married couples filing jointly). All others remain the same as 2012.

- It capped long-term capital gains tax rates at 15% for most people, except for taxpayers in the 39.6% bracket, who will increase to 20%.
- It continued the maximum tax rate on dividends at 15%, except for those in the 39.6% tax bracket, who will pay 20%.
- It instituted a Medicare surtax of 3.8% on net investment income, including capital gains for individuals with incomes above US\$200,000 (US\$250,000 for married couples filing jointly).
- It returned the Social Security tax to 6.2% of earnings for employees.

Estate and Gift Tax Changes

- It set the exemption for estate tax, gift tax, and generation-skipping transfers permanently to US\$5 million (indexed for inflation = US\$5.25 million in 2013).
- It increased the tax rate to 40% on amounts exceeding the exemption for estate tax, gift tax, and generation-skipping transfers.
- It extended the “portability” provision that allows a surviving spouse to inherit any unused exemption of the first spouse to die.
- It raised the annual gift tax exclusion to US\$14,000 per gift recipient for gifts made by an individual during any year.

Everyone Needs Estate Planning

While only a few thousand estates in the United States per year will be liable for estate tax, a well-planned estate involves much more than estate taxes. Everyone should plan for a thoughtful distribution of their assets at death, reduction of estate expenses such as probate, state death taxes, and income taxes on retirement accounts, as well as leaving a legacy to future generations.

We encourage you to consult your financial advisors to determine how these new provisions may impact your will, trusts, and other estate planning arrangements. In the process, consider making or augmenting a bequest to the IEEE Life Members Fund (LMF) of the IEEE Foundation.

Gifts through an estate are the most cherished of gifts and provide the critical resources the IEEE Life Members Committee needs to sustain and expand its efforts.

When you include the IEEE LMF in your estate plan, we encourage you to share the good news with us by contacting the IEEE Development Office by telephone at +1 732 562 3860 or e-mail at donate@ieee.org. This helps us plan for the future and recognize your generosity during your lifetime by inviting you to join the **IEEE Goldsmith Legacy League**, the IEEE Foundation’s legacy giving donor recognition group.

The IEEE Goldsmith Legacy League is named in memory of Alfred N. and Gertrude Goldsmith, whose planned gifts seeded the IEEE Foundation’s ability to support the mission of IEEE. Members of the **IEEE Goldsmith Legacy League** are *Forever Generous*. In recognition of their special commitment, members of the **IEEE Goldsmith Legacy League** receive a keepsake coin and a certificate of membership in a custom presentation binder, an invitation to attend the annual IEEE Honors Ceremony, the *IEEE Foundation Focus* newsletter, periodic updates on planned giving, as well as recognition in the annual Honor Roll of Donors and on the donor “Wall of Honor.”

This article adapted from material provided by R&R Newkirk. It is not intended as legal advice. Consult your advisers.

Enjoying the Leisure Benefits of Membership

I’ve been giving the Life Members a lot of thought lately, because each year more and more loyal members turn 65 and have different needs than they did during their working years. For example, they may use fewer technical benefits and more of IEEE’s personal discounts. Traditionally, most of our discounts were also selected to help support members during their working years. However, as of 2013, I am happy to report that we are adding the IEEE Vacation Center and a discount on Rosetta Stone TOTALE language learning program—two great programs for lifelong learners and world travelers.

The IEEE Vacation Center is a portal in which members will find links to a variety of exclusive travel offers, such as property rentals. Are you tired of over-priced, skimpy hotel rooms? Now, members can access discounts and last-minute vacation deals and packages to some of the world’s most popular vacation spots. The vacation rental company is able to offer such a diverse group of accommodations in highly sought-after locations through affiliations with property management companies, developers, and condominium and housing associations. Many of the more than 200,000 units offered through Endless Vacation Rentals include all the comforts of home, such as fully equipped kitchens, washer/dryer units, living rooms, dining areas, and balconies and terraces, among other amenities. Some properties also come with a private or communal pool, hot tub, onsite fitness center, and

access to nearby attractions. Members will save up to 25% off public rates.

If active vacations are of interest, you can try bicycling and walking in beautiful international settings. With VBT Bicycling and Walking Vacations, you can save up to US\$200 per person with itineraries around the world. The IEEE Vacation Center portal contains several other types of vacation opportunities. You do need to check each provider for terms and conditions and availability from your location; however most vacation providers serve the global audience.

While you are on a fabulous international trip, wouldn’t it be nice to feel comfortable with the native language? Whether you want to brush up on your college French or start to learn Chinese, Rosetta Stone TOTALE can help you learn in a very enjoyable way. The learning process is completely online and mobile and even includes sessions with native speakers over the Internet. You can choose from 24 languages and seek other IEEE members who are enrolled in the same language module and schedule training sessions together as well. Members pay only US\$219 for a full-year subscription to a language program of their choice.

For more information and to purchase, visit www.ieee.org/discounts. Access to the vendor links requires an active member Web account user name and password.

Lynn Koblin, CAE

Sponsored Discounts and
Insurance Program Manager

Picture Perfect

In 1954, RAND recommended that the Air Defense Command needed auxiliary small radars to cover areas not covered by the Air Defense radars because, for example, mountains masked some areas. I was assigned to work with a company that would eventually produce the required equipment. The equipment was to reproduce the picture seen on the small radars in its proper place on the Air Defense Radar screens so additional operators wouldn't be required to monitor the air situation.

The first task was to reproduce the small-radar picture at a distance. This required a slowed-down video that could be transmitted over conventional telephone lines. It was to be obtained by slowly scanning the small-radar picture. We had it working in desert country, but when we tried it with the receiver in the city, the picture was unsatisfactory. We learned that in the desert, we had used a direct-wire telephone line but in the city, we were connected through a carrier line. We also found that the carrier system of those days suppressed the carrier to

save power; the carrier was restored sloppily at the receiving end. It was fine for voice signals but produced erratic results with our pulses. The carrier system had to be improved before the picture could be transmitted.

Our family then moved to Cambridge, where I consulted with the Lincoln Laboratory on the equipment required to add the remote radar picture to the many Air Defense radar displays that needed it.

Sidney Bertram, LF
Scotts Valley, CA

Call Me "Ace"

I was in the Navy and enrolled in secondary electronics school in 1945. However, I had requested, and subsequently been given, assignment to the school for aircraft electronics near Corpus Christi, Texas. After finishing that school, I was assigned to the training base at Hutchinson, Kansas. (Not too many sailors put in their sea duty near the geographic center of the United States.) NAS "Hutch" was engaged in training Navy pilots to fly the PB4Y2 Privateer, the Navy reconnaissance version of the Army B-24 bomber.

My specific assignment was to the "line" crew, a small group of mechanics and technicians whose job was to make quick fixes to airplane problems that arose when an aircraft was in flying status and usually about to take off on a training mission. That mostly amounted to identifying which black box was malfunctioning, removing it, and plugging in another one.

Aircraft maintenance schedules required that after a number of flight hours, the aircraft be subjected to a thorough check of all equipment. One day, one of the planes needed a 300-h check, a fairly extensive one. Since the line crew wasn't very busy, we were designated to do the check. There were two of us electronics techs working the plane. My partner was



back behind the bomb bay checking IFF gear, and I was in the copilot's seat, turning on power switches for him. There were mechanics working on the engines on elevated platforms attached to small tractors.

As I relaxed in the copilot's seat, I noticed one of the inertia starters on an engine being run up with the familiar rising pitch of a motor bringing an inertia wheel to speed. As I shifted my weight to look at the engine, the starter engaged, the propeller turned and gave the platform on which a mechanic was working a resounding whack,

and the mechanic hit the ground running. I thought to myself, "Who would be stupid enough to start an engine with a mechanic working on it?" I realized with a sinking heart that I was the only person on the aircraft who could have accomplished that, since I was the only one at the controls.

There were two rows of four switches, each at the bottom of the instrument panel in front of the copilot's seat. The bottom row energized the inertia starters for the four engines, and the top row engaged them with the engine. As I relaxed in the seat, I had put my knee on the panel, pushing up on one of the switches, starting the starter motor. As I shifted my weight to see what was happening, I inadvertently pushed up the switch above it, engaging the starter.

A check revealed that the only damage was a small dent in the prop, which did not require it to be replaced. The dent in my self-respect did not go away, however. I could not convince my friends on the line crew that I wasn't "playing" with the controls, and I was thereafter known as "Ace." I should have been given the "TSFW" (Too Stupid for Words) award, but the nickname was the only punishment I received.

LeRoy C. (Lee) Graham, LF
Phoenix, AZ

The Drone Sweepers of Vietnam

In the mid 1960s, I was a young electronics engineer working at the Navy Mine Defense Laboratory in Panama City, Florida. I inherited a drone boat project from the Defense Research Laboratories of the University of Texas at Austin (now Applied Research Laboratories) that used model airplane radio control to guide a small catamaran equipped with a magnetometer for finding sea mines. Vietnam and riverine warfare was starting to become an issue at the time.

The commander of Mine Forces Pacific stated an interest in remotely controlling a minesweeping boat for use in riverine mine countermeasures. I impulsively sent a message back saying that our laboratory was already working in this field and could help. I immediately received a reply that we were to begin working with high priority on a dedicated drone minesweeper that we would develop and test in country. I became the project manager. With support and funding from Jerry Pike of the Naval Ship Systems Command, we found a 23-ft small inboard boat that we configured with armor around the engine, a self-sealing fuel cell, a commercial autopilot, and military drone radio equipment used in the Firebee drone aircraft at nearby Tyndall Air Force Base. We also had an explosive-shaped charge inside the electronics module that would destroy the module if the boat were captured.

We built four prototypes, and our team of four engineers found ourselves on the Saigon River in a free-fire area called the Rung Sat Special Zone, testing them during the summer of 1967. The threat consisted of river mines connected to shore by wires and set off by Viet Cong (VC) insurgents. The drones pulled a chain drag capable of cutting the control wires.



Two prototype minesweeper drones in Nha Be, South Vietnam, in July 1967 with two fellow engineers.

This threat was an early example of an improvised explosive device.

We were given Geneva Convention cards to show the VC that we were noncombatants if we were captured. That was not very reassuring. The small Vietnam village of Nha Be, near our camp, was said to be the source of many VC who worked in the day building of our Navy facilities, but were insurgents at night. A single sailor, who was primarily an electronics technician, guarded our camp overnight. We did not feel especially safe

there. The Tet Offensive occurred the following February.

Our testing was successful, and the Navy ordered 23 production drone boats that were deployed over the next couple of years. The project ended when the Navy pulled out as part of “Vietnamization.” Our minesweeper drone description can be found in *Jane’s Fighting Ships* (1968–1970 editions).

Jim Hammond, LSM
Denton, TX

Do you have a story to tell? No matter how big or small, the IEEE Global History Network would be delighted to add your personal experiences as central participants in the process of technical innovation to its First-Hand Histories collection.

For details on how to contribute your First-Hand History, visit www.ieeeahn.org/wiki/index.php/Special:FirstHandHistories.

IEEE

445 Hoes Lane, Piscataway, NJ 08854 USA

Our Mailing List

The *IEEE Life Members Newsletter* is distributed to Life Members and those who are not Life Members but are 1) IEEE Members 65 years and older, 2) retired IEEE members aged 62–64, and 3) members of special boards and committees.

Submitting Articles

We welcome articles for this newsletter. In particular, we seek articles about projects that are initiated at the Section and Region level by Life Members as well as “Tales from the Vault,” which should focus on novel or interesting technical issues. The suggested length for “Tales from the Vault” submissions is 500 words.

Acronyms should be completely identified once. Reference dates (years) also should be included. Editing, including for length, may occur. If you wish to discuss a story idea before hand, you may contact Craig Causer, managing editor, by e-mail at lm-newsletter@ieee.org. The deadline to submit an article for possible inclusion in the next issue is 1 October 2013. Please include your Life grade, town, state, country, phone number, member number, and/or an e-mail address with your piece.

Stopping IEEE Services

Those Life Members who no longer wish to receive mailings or publications should contact the IEEE Contact Center. If you are doing so on behalf of another Life Member, please submit the member's name, number, grade, address, change date, and your connection (e.g., Section chair) to the Contact Center.

IEEE Contact Center

Contact us online at:
www.ieee.org/contactcenter
or
phone: +1 800 678 4333 (USA)
+1 732 981 0060 (worldwide)
fax: +1 732 562 6380

2013 Life Members Committee

Louis A. Luceri
l.a.luceri@ieee.org

Jacob Baal-Schem
j.baal.schem@ieee.org

V Prasad Kodali
kodalivp@gmail.com

Jose Cruz
jbcruz@ieee.org

Joe Lillie
j.lillie@ieee.org

Marty Izaak
m.izaak@ieee.org

Charles Turner
c.turner@ieee.org

Dave Kemp
d.kemp@ieee.org

Ralph Wyndrum
r.wyndrum@ieee.org

Cecelia Jankowski
Secretary (staff)
c.jankowski@ieee.org

Stacey Waters
Senior Administrator, Member and Geographic Activities (staff)
s.waters@ieee.org

Craig Causer
Managing Editor (staff)
c.causer@ieee.org

Qualifying for Life Member Status

To qualify as a Life Member, an IEEE Member must be at least 65 years old, and the sum of the member's age and the number of years of paid membership effective the following January must equal or exceed 100 years.

Have Questions, Ideas, or Problems?

Have questions regarding your Life Member status? Reach out to the IEEE Contact Center for assistance. Have something else you need to ask or discuss? E-mail the Life Members Committee or its staff at: life-members@ieee.org, or call: +1 732 562 5501, or fax: +1 732 463 3657.

IEEE prohibits discrimination, harassment, and bullying. For more information, visit <http://www.ieee.org/web/aboutus/whatis/policies/p9-26.html>.