Welcome. Welcome to the July issue of the IEEE Magnetics Society Newsletter for 2007. More kudos to Albrecht and Pallavi, our Newsletter editors, for their new and very attractive newsletter format. For each issue, I will provide them with a short welcome article with some specific focus (in addition to newsworthy updates).

TAB Meetings. My focus for this issue is the “Technical Activities Board,” or TAB, meetings. TAB is the next level higher entity in the IEEE under which the Magnetics Society falls. There is also the “Regional Activities Board,” or RAB, the “Educational Activities Board,” or EAB, and the “Publications Services and Products Board,” or PSPB. More about these IEEE boards and operations in later articles.

New Publication Policies to Benefit Members and Conferences

by Ron Goldfarb, Publications Chair

IEEE Transactions on Magnetics has one of the highest levels of institutional downloads from the IEEE Xplore system. The resulting revenue distributed to the Magnetics Society helps finance its many activities.

With the goal of providing greater value to members, the Society’s Administrative Committee (AdCom) recently approved several new policies related to publications.

One of the major expenses of a conference is the publication of conference-related articles in the Transactions. To encourage lower registration fees, conference publication costs for 2008 have been significantly reduced, down to 66% of the cost in 2005 and 75% of the cost in 2006 and 2007. Conferences that use IEEE’s on-line paper submission system will return more funds to the members and to use funds to strengthen the magnetics community (See box on page 3 for details.) To meet these objectives, we have put together a discretionary spending budget for 2008 that is more than twice that for 2007, at $505k. By conservative estimate, this level of expenditure will leave the Society with a 2008 surplus of $146k to add to the existing reserves of around $3.5M.

If you have any suggestions or comments about the budget, I welcome them!

Spending Wisely

by Liesl Folks, Finance Chair

The Magnetics Society has been accumulating large surpluses for several years, largely as a result of publications income, but also from a run of successful conferences. The AdCom has made several resolutions to return more funds to the members and to use funds to strengthen the magnetics community (See box on page 3 for details.) To meet these objectives, we have put together a discretionary spending budget for 2008 that is more than twice that for 2007, at $505k. By conservative estimate, this level of expenditure will leave the Society with a 2008 surplus of $146k to add to the existing reserves of around $3.5M.

If you have any suggestions or comments about the budget, I welcome them!
Chapters Host Grand Events

Bob McMichael, Chapters Chair

In sections that cover large geographical areas, and even in urban sections, it seems that transportation issues can make it difficult for members to attend Chapter meetings. While we can't do much about geography or traffic, we can definitely make the trip worthwhile, and one way to do that is to hold a bigger meeting. This year, Magnetics Society chapters in Romania and in Washington DC/North Virginia sponsored small conferences that drew large audiences.

Romania Chapter Chair, Alexandru Stancu reports that the IEEE ROMSC had about 80 papers, presented over two days (the 28 and 29th of May) with about 90 participants attending from 9 countries (USA, Japan, South Korea, France, Italy, Lithuania, Hungary, Moldavia and Romania). The conference was kicked off with a widely appreciated presentation by Distinguished Lecturer Professor Vince Harris.

The IEEE Magnetism in Nanotechnology & Electronics (IMAGINE) conference was held at NIST in Gaithersburg on June 25 and 26. The meeting was sponsored by the Washington/North Virgina chapter under the leadership of Philip Pong. About 50 participants came from the mid-Atlantic region of the United States. The program included lectures by Magnetics Society Distinguished Lecturers Matthias Bode and Sara Majetic, plenary talks by Mike Donahue and Alan Edelstein, three tutorials and a full program that featured many student presentations.

Prospective Chapters

Are you interested in helping form a chapter in your local area? Contact one of the people below to help start a new chapter.

Australia      Robert Stamps      stamps@pd.uwa.edu.au
Beijing        Zhaohua Cheng      zhcheng@aphy.iphy.ac.cn
Changwon       Chan-Gyu Lee       chglee@changwon.ac.kr
France         Bernard Dieny      bernard.dieny@cea.fr
Nanjing        Xiaoshan Wu        xswu@nju.edu.cn
Pacific N.W.   Pallavi Dhagat     dhagat@eeecs.orst.edu
Slovenia       Spomenka Kobe      spomenka.kobe@ijs.si

Attendees at the IEEE ROMSC 2007 conference gather for a group photo.
Publication Policies (continued from page 1)

and peer review system, Manuscript Central, will no longer be charged fees for manuscript submission or editorial assistance. (Currently Intermag is the only magnetics conference authorized to use Manuscript Central.)

In addition, all conferences sponsored by the Magnetics Society that allow authors at least 4 pages per article will not be charged for one of those pages. As a consequence, Intermag 2008 will allow authors 4 pages instead of 3.

Beginning in 2008, IEEE will no longer solicit, on behalf of the Magnetics Society, voluntary page charges from authors of regular Transactions papers. Authors may still order paper reprints if they wish. We are investigating ways to provide all authors with PDF reprints of their articles. (Members may currently download their own PDFs from Xplore, of course.)

The cost of membership in the Magnetics Society in 2008 will be unchanged at $20 ($10 for students), above the cost of IEEE membership. Members get free on-line access to the Transactions via IEEE Xplore and an annual CD-ROM. Members may subscribe to the print edition for an additional $20.

A note on color figures in the Transactions: There is no charge to authors for color figures for the electronic (Xplore) PDF version of a paper. However, if any figures must be in color for the print version of the paper, authors pay approximately $1050 per article plus $125 for each color figure. Authors are billed directly by IEEE. When authors send the final versions of their manuscripts, they should indicate very clearly if they want color in the print versions. In the absence of such instructions, color will be used only for the electronic versions. In that case, authors should be certain that the black-and-white print versions are understandable without the color information.

Plans for Summer School

J.W. Harrell, Education Committee Chair

The Magnetics Society is planning on sponsoring a one-week summer school on magnetism for graduate students and young researchers beginning in summer 2008. The planning is being carried out by the Education Committee.

The concept, depending on initial success, is to have a summer school in Asia, Europe, and North America during consecutive summers, with the sequence of locations to be determined.

Discussions are currently underway with Nanjing University to host the first summer school in 2008. More details will be forthcoming as the plans develop.

Suggestions for venues or topics for the summer school will be greatly appreciated. If you have suggestions or comments, please send me an email: jwharrell@gmail.com.

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New Initiatives in the 2008 Budget

**Intermag registration discount**

There will be a Magnetics Society member registration discount at the Intermag in Madrid of $100 for full and affiliate members and $50 for students and retirees. We hope our members will take advantage of this discount to turn out in droves and make the conference a great success!

**Internet Cafe Promotions at Intermag and MMM**

The Magnetics Society will be sponsoring the Internet Cafe at Intermag in Madrid and at MMM in Austin. We will be using the area to promote IEEE MagSoc membership as well as the Wiley-IEEE publishing activities.

**Graduate Summer School on Magnetism**

The AdCom is keen to see a MagSoc-sponsored Graduate Summer School program started to encourage and support students of magnetism. Funds have been set aside to bring this plan to fruition in 2008.

**Distinguished Lecturers (DL) Funding Expanded**

The DL program has been highly successful in recent years, and extra funds have been allocated in 2008 to support increased DL travel to new chapters in Asia and Europe.

**Transactions on Magnetics**

Several changes which will reduce the costs of publishing in the Transactions are being implemented.
TMRC Conference Report

by Juan Fernandez-de-Castro, Conference Chairman

The 18th annual TMRC was held May 21-23, 2007, on the campus of the University of Minnesota in Minneapolis, MN. This year, the focus of the TMRC conference was on magnetic recording heads and systems. TMRC-2007 was sponsored by the IEEE and co-sponsored by the following institutions:

- Data Storage Systems Center (DSSC) - Carnegie Mellon U.
- Center for Magnetic Recording Research (CMRR) - UCSD.
- Center for Micromagnetics & Information Technologies (MINT) University of Minnesota.
- Center for Materials for Information Technology (MINT) - University of Alabama.
- Center for Magnetic Nanotechnology - Stanford University.
- Computer Mechanics Laboratory (CML) – UC, Berkeley

Dr. Klaas Klaassen, Dr. Dean Palmer and the Program Committee put together an excellent program with 35 invited papers out of 55 nominations. The conference program consisted of six sessions:

- A - Read Heads
- B - Write Heads
- C - Head-Disc Interface
- D - Systems, Modeling and Interconnects
- E, F – Mostly Channels

A copy of the digest book may be found at the TMRC-2007 web-site “http://www.ece.umn.edu/~MINT/TMRC2007”.

Authors and contributors represented academia as well as a wide range of international companies. There were 208 participants at the conference and they represented the US-Industry 72.6%, Japan-Industry 6.73%, Europe-Industry 3.37%, Asia-Industry 3.85% and Universities 13.46%. Reviewed and accepted papers will be published in the IEEE Transactions on Magnetics by the end of 2007. The Poster Sessions were organized by Mr. Scott Schaefer. Posters presentations from each oral paper plus graduate student work took place at the end of each afternoon.

The conference banquet was held Tuesday evening at the Weismann Art Museum. The keynote address was presented by Dr. Currie Munce of HGST Research, San Jose. The title of his talk was “Research Challenges for our Recording Industry”.

INTRODUCTION

First of all I want to thank the IEEE Magnetics Society for this splendid award – I am profoundly honored.

It has been suggested that I start this talk with the statement “I invented Magnetic Recording” – but that would be a lie! However, as has been known, since George Washington chopped down his father’s cherry tree, telling lies is not acceptable behavior.

What I do propose doing is telling you a little about the state of recording when I joined the field in 1962. And after that, I’ll try to convey to you what it was like being a physicist in magnetic recording research in the ’60 and ’70s.

I will conclude with a few remarks upon mentoring.

ON MAGNETIC RECORDING IN THE ‘60s & ‘70s

Apart from the digital tape and hard disc recording used to this day in computers, all other recording was analog. There were analog audio, instrumentation and video recorders. It is difficult to realize, bombarded constantly as we are by the shrieks of the Madison Avenue flacks insisting that everything digital is infinitely superior to analog, that that, too, is a lie!

The analog audio recordings, for example, those made on an Ampex 300 ac biased audio recorder are considered by audio professionals, even today, to be the finest recordings ever made!

Indeed, it is hard to recall the “transparent” or “crystalline” perfection of the images produced by an Ampex 2000 frequency modulated video recorder, when the recorder was correctly adjusted by a highly trained engineer. Apart from the added noise, the recorder duplicated perfectly everything that the TV camera produced.

In neither of these recorders were any supposedly imperceptible “tricks”, such as the omission of high frequency content partially masked by large amplitude low frequencies, employed—and the exceptional results just mentioned were the result. In contrast, digital recordings today not only employ such “tricks” but are compromised further by compression algorithms, such as MP3 and MPEG 3 in audio and video respectively.

Eventually, of course, digital recording was adopted for a number of excellent reasons. The ability to self correct errors and, therefore, produce error free multiple generation copies is the most important of these reasons.

However, there is no doubt in my mind that history will record that the adoption of digital recording for analog material represents – A Triumph of Brute Force over Elegance!

(continued on next page)
ON MAGNETIC RECORDING RESEARCH IN THE ’60s AND ’70s

What was it like being a researcher in the ’60s and 70’s? The answer is simple — it was paradise because this was surely the golden era of research in magnetic recording!

Of course, the fundamentals had been thoroughly investigated by Westmijze’s landmark “Studies in Magnetic Recording” in 1953, but there remained nevertheless a seemingly endless number of problems to investigate.

Signals can be corrupted only by interference, distortion and noise but very little was understood about these critically important phenomena. The side-reading of adjacent tracks is an example of an interference that had to be understood. The distortion in fm video recorders, arising from the incorrect positioning of the zero-crossings in the output waveform, had to be analyzed.

And then there was the question of the signal to noise ratio. I am proud to be able to stand here and to remind you that I am the man who brought you the seminal idea that the SNR is equal to the number of independent magnetic sources in a bit cell! This is surely the principal idea that has guided the phenomenal advances in hard disc recording media for more than the last 35 years!

It is important for you to understand that all these investigations were, of necessity, performed by closed form mathematical methods. In the ’60s and ’70s, computers were used principally for accounting and business purposes with scientific computation being so difficult to accomplish that it usually had to be orchestrated by a dedicated mathematician or computer specialist.

In classical mathematical analyses, perfors one is able to study only a relatively small part of the recording channel at a time. However, that small portion was studied in exhaustive detail and a complete, in-depth understanding could usually be achieved.

This contrasts vividly with R&D work today where, in many cases, the entire recording system, from current into the write head to voltage out of the read head, is computer simulated. Moreover, in many cases, the investigator uses a commercially available “black box” software package and he or she has no idea, and presumably little interest, in how the program actually works!

That person is, of course, completely unable to tell you why something happened! Personally, I find this kind of work to be completely unsatisfying because it provides almost no insight or understanding into the nature of things.

It seems to me that it’s analogous to baking a cake. One follows the recipe, bakes for a certain time/temp and out comes the cake. Of course, the cook cannot answer any probing questions about why the cake has a particular moisture, density or texture!

I do understand that from the standpoint of engineering, massive computer simulation is a very powerful tool—indeed, if it is correct, it can act as the proof of a design.

Doubtless, history will record that the change from classical, mathematical analysis to massive computer simulation is again – A Triumph of Brute Force over Elegance! (continued on next page)

AdCom News

Society Wide AdCom Elections. Ron Indeck, Past President (2003-2004) and current Nominations Committee Chair is moving forward on the first ever Society wide election of AdCom members for a 2008-2010 term. All members with e-mail addresses in their profiles received a Call for Nominations to the AdCom Ballot. From those received, the Nominations Committee selected 16 individuals to be placed on the ballot that will be mailed in hard copy to the membership on 15 August. Completed (mail in) ballots will be due at IEEE on 15 October. PLEASE VOTE!

Budgets for 2008 Approved. The proposed budget for the Society for 2008 was approved through a web based message AdCom meeting that ended 11 June. Out of the 38 voting members of the AdCom, 32 votes were cast, all in favor. One of our objectives for the 2008 budget exercise was to better involve the AdCom in the budget formation process from the early stages and to adopt a non-binding line item approach to the determination of the budget numbers. Many AdCom members and others provided inputs over a time span of several months. Special thanks to Liesl Folks, Finance Committee Chair, for her energetic and efficient work on these tedious but critical budget matters. A summary of the AdCom approved 2008 budget is provided on page 3 of this newsletter.

Status of revised Constitution and Bylaws. After action at the June TAB meeting, the revised Constitution and Bylaws of the Society are now official. Thanks to all members of the AdCom for their inputs and perseverance through this process. Thanks also to the staff at IEEE, and especially to Rosanne Loyal, for advice and support during this tedious process.

Changes of the Guard Now Official. With the above governing documents now official, Richard Dee of Sun Microsystems has been relieved (I am sure he is relieved!) of his duties as Chair of the combined Chapters and Membership Committee under the old documents, Bob McMichael of NIST is now the official chair of the Chapters Committee, Rysuke (Souk) Hasegawa of Metglas, Inc. is now the official chair of the Membership Committee, and Paulo Freitas of the Instituto Superior Tecnico in Lisbon, Portugal joins the AdCom for the remainder of Souk’s 2007-2009 term. The old Standards Committee is now abolished, with this function absorbed into the Technical Committee chaired by Axel Hoffmann of Argonne National Laboratory. ✪
ON THE IMPORTANCE AND SATISFACTION OF MENTORING

I want to conclude my talk by mentioning the importance and satisfaction of mentoring and to mention a few names. At Ampex, I had the enormous good fortune to work with two video engineers of outstanding talent and ability and, absent this experience, I most probably would not be here giving this little speech!

Michael Felix worked at the world’s first regularly scheduled TV station at Alexandria Palace, London in 1937. I learnt more from him about the obligatory sequence of steps that are necessary in order to realize high recording densities than from any other individual.

Charles Coleman was at America’s first TV station in Chicago in 1947. He taught me that not only could a magnetic recording channel be regarded as a communication channel but that every part of that channel could be measured with less than 1% error—in fact, that it was a highly precise communication channel.

I have mentored many in my 45 year career in recording. I would like to mention two individuals in particular, because I’m sure all of you here are familiar with them.

I hired Neal Bertram, a physicist and author of the little red book, “Theory of Magnetic Recording”, at Ampex around 1970 and I proceeded to tell him everything I knew about recording. In 1985, I arranged for his chaired professorship at CMRR. There can be little question that Neal’s many contributions have had more influence on the work reported at this conference than that of any other person.

I hired Roger Wood, an electrical engineer, at Ampex around 1980 and I proceeded to tell him all I knew. Today, Roger is the de facto leader of the worldwide charge to achieve one terabit per square inch recording! His ideas are evident everywhere in the field of high density hard disc recording.

There have been no more deeply rewarding experiences in my career than seeing those whom I mentored develop and subsequently achieve such outstanding success in their careers. Once again, let me thank the Magnetics Society for this wonderful award.

Distiguished Lectureres Travel Afar

by Roy Chantrell, DL Coordinator

The Distinguished Lecturer (DL) programme is once again providing an exciting and informative series of lectures on a broad series of topics in Magnetism. This year we are privileged to have four DL’s, who are:

Matthias Bode – Imaging Magnetic Surfaces with Atomic Resolution
Vince Harris – Ferrite Nanoparticles, Films, Single Crystals, and Metamaterials: High Frequency Applications
Sara Majetich – Magnetic Nanoparticles: Self-Assembly and Nanoscale Behavior
Takao Suzuki – High Magnetic Anisotropy Materials: From Bulk, Through Multilayers, to Nanoscale Particles

Further information on their lectures and contact details can be found on the Magnetics Society website (http://www.ieeemagnetics.org). The DL programme has a number of aims, one of which, importantly is to support chapter activities; the interaction between the DL programme and the chapters has become increasingly strong over the past few years, which can only enhance the vitality of the magnetics community. However, it is in an equally important sense your programme. The programme provides funds for DL travel to any institution which they wish to visit and they are free to honour any invitations which can be realistically scheduled. Have laptop, will travel.

The programme is also available to be used in innovative ways. One of this year’s highlights is a student meeting in Australia which is being planned for later in the year, based around the DL of Sara Majetich. This idea has been used successfully in the UK and Romania, and it is hoped that the Australian meeting will assist the moves to create a local chapter there. In the same spirit it is encouraging to recognize the support given by visits of Takao Suzuki and Vince Harris to Vietnam and India respectively, (the first such visits as far as I know but I would be more than happy to be corrected on this). In today’s ‘connected’ scientific world, the transnational aims of the Magnetics Society appear increasingly important and it is a pleasure to report that the DL programme is making its own distinctive contribution in this direction. As DL coordinator I would be pleased to receive any feedback on the programme and of course any ideas which would improve its effectiveness.

Finally, it is self evident that the programme can only be as good as the lecturers themselves, who commit significant time and effort on our behalf. This year we have an especially energetic team, who may well become a very hard act to follow. On behalf of myself and the Awards Committee Chair (Bruce Gurney) I would like to offer a large public thank you to Matthias, Sara, Vince and Takao for their prodigious efforts.
News from the Technical Committee

by Axel Hoffmann, Technical Committee Chair

Since I took over from Mel Gomez as the chair of the Technical Committee earlier this year there have been only very limited newsworthy events. One issue that was brought to my attention is that the former Standards Committee was dissolved and any issues with respect to standards should be delegated to the Technical Committee. After querying various people, I found very little interest among researchers in magnetism related industry with respect to standards. Therefore, as of now, no new member has been specifically appointed to the Technical Committee for that function. However, if you are interested in problems relevant to standards, feel free to contact me and I might have a job to do for you.

One new member to the Technical Committee is Prof. Johan Åkerman from the Royal Institute of Technology, Stockholm, Sweden. Before he joined the Royal Institute of Technology, Prof. Åkerman was involved at Freescale in the successful development of magnetic random access memory (MRAM) into a commercial product. MRAM-related research and development is a subject with increasing interest in the Magnetics Society and we welcome the expertise that he brings to the Technical Committee.

Speaking about expertise, members of the Technical Committee are available for advice to organizers of conferences, workshops, etc. For example, the Technical Committee assisted the organizers of the 10th International Conference on Ferrites (ICF10) in their selection of an international advisory committee. I would encourage all members to make use of that resource. In any case, do not hesitate to contact the Technical Committee with your questions and requests.

Membership Report

by Ryusuke Hasegawa, Memberships Chair

Overall, membership in the Magnetics Society has not changed significantly over the last 5 years though student membership registered an increase from 184 to 353 during this period. This trend is similar to the general IEEE membership profile. I would like to request your assistance in increasing the society membership by: 1) encourage non-IEEE member friends of yours to join when you see them at your company meetings, at academic institutions’ seminars, at conferences, chapter/section meetings and at our Society’s Distinguished Lecturer events and 2) present seminal papers at our conferences to attract more people. I believe personal (face-to-face) invitation is the best route to increasing our membership, and is one that brought many of us into IEEE in the first place. Working together to increase our membership will give us the advantage of being exposed not only to more colleagues, but to new science and technology, all of which are beneficial to IEEE/Magnetics Society as a whole.

2007 Conference Calendar

- INTERNATIONAL CONFERENCE ON SPINTRONIC MATERIALS & TECHNOLOGY (WUN-SPIN07)
  - August 7-10, York, UK
  - http://www.wun.ac.uk/wun-spin2007/

- LATIN AMERICAN CONFERENCE ON MAGNETISM, MAGNETIC MATERIALS & APPLICATIONS
  - Aug 12-16, Rio de Janeiro, Brazil
  - http://www.law3m.org

- SPECIALTY GRP. MILITARY SENSING SYMP. (MSS 2007)
  - August 21-23, Laurel, MD, USA
  - http://www.sensiac.gatech.edu

- THIRD SEEHHEIM CONFERENCE ON MAGNETISM
  - August 27-30, Frankfurt, Germany
  - http://www.tu-darmstadt.de/magnetism/

- SOFT MAGNETIC MATERIALS CONFERENCE (SMM 18)
  - September 2-5, Cardiff, UK
  - http://www.magnetism.org

- PERP. MAGNETIC RECORDING CONF. (PMRC 2007)
  - October 15-17, Tokyo, Japan

- CONF. ON MAGN. & MAGN. MAT. (MMM 2007)
  - November 5-9, Tampa, FL, USA
  - http://www.magnetism.org

REMINDER: UPDATE YOUR MEMBER PROFILE

With no e-mail address on record, you will miss out on many items of interest concerning the Magnetics Society and IEEE. Update your profile on-line at: http://www.ieee.org/web/membership/join/update_profile.html
One of the president’s duties (onerous at times) is to represent the Society at the three TAB meetings a year, in February, June, and November. I need to pick my words carefully, but these meetings are generally informative and very collegial. Although some aspects can be boring and tedious, there are many aspects that are genuinely valuable and useful from the perspective of the Society. Over my three TAB meetings so far (one in 2006 as an observer), I have met many new faces from other Societies and Councils, from the TAB, RAB, EAB, and PSPB hierarchies, and from the IEEE. I can say honestly that at the person-to-person level, all appear to be striving to help the IEEE better serve its members. (Now comes the “however.”) However, the sum total is (in my personal view as a new initiate) one big bureaucracy. The TAB meeting itself usually runs from 8 am until sometime in the afternoon on a Saturday. Friday is occupied with the Presidents Forum and the TAB Caucus. These Friday meetings appear to be more informal and the official status of them is still unclear to me. In fact, one big discussion at this last Presidents Forum was whether or not the caucus had any decision making authority.

The TAB meeting proper on Saturday is based on a so-called “Consent Agenda” (CA). The meeting starts with a list of all motions collected into this Consent Agenda. One of the first orders of business is to ask if any voting member wishes to pull any item(s) off of the CA. Things pulled off are then held over for separate consideration and those remaining are passed on one vote. I used this procedure (first introduced to our AdCom by Bob Fontana) for our January 2007 AdCom meeting in Baltimore, with (I believe) some success. At this last TAB meeting, the topics included, among other things, (1) an election for the Chair of the TAB Publications Committee, (2) an extended discussion of a motion (which was then tabled) for the creation of a new Council on Biometrics, and (3) presentations by a young and energetic person from RAB on the IEEE wide initiative to attract and retain the “younger” members, aptly called GOLD (Graduates Of the Last Decade). It is my hope that our Society Membership Committee will become engaged in this important IEEE “GOLD” effort. I believe there are a few things they could learn from us (free memberships and travel grants) and many things from GOLD we could adopt for the Magnetics Society. Souk Hasegawa has made some initial contacts in this regard.

There were other presentations on “new marketing models” for the IEEE (this turned out to be basic “business-speak” for different ways to bundle or un-package the various elements of an IEEE membership), and the implications of the move to an “Open Access,” or OA, approach to publications.

Mary Ward-Callen, the staff person at the head of the TAB operation at IEEE headquarters in New Jersey, also made several presentations. One was on possible long range developments for TAB and the IEEE. It seemed to me to be an exercise in web based virtual reality. Being a GOFODFA (Graduate Of Four Or Five Decades Ago), I prefer real reality. One other was on a major expansion of the TAB operation at IEEE in terms of staff and budget. If I caught it all, this amounts to a jump in staffing of about 25 people and a jump in budget by six to eight million dollars. This looks like a done deal. If nothing else, it gives us ammunition to stand firm on our Society budget increase from $240k to $505k in Cost Center 1900, most of which will actually go to member benefits in a direct and tangible way.

As a final note, I want to thank, once again, all the “volunteers” that keep the Magnetics Society running. We are fortunate to have these volunteers serving the Society so energetically and effectively. Kudos to you all. ♥

Best wishes,
Carl Patton, President
patton@lamar.colostate.edu

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**About the Newsletter**

The purpose of the IEEE Magnetics Society Newsletter is to publicize activities, conferences, workshops and other information of interest to the Society members and technical people in the general area of applied magnetics. Manuscripts are solicited from the Magnetics Society members, organizers of conferences, officers of the Society, local chapters, and other individuals with relevant material.


Submission deadlines are January 1, April 1, July 1, and October 1 respectively. Please send articles, letters and other contributions to the editors:

- Pallavi Dhagat or Albrecht Jander
  School of EECS
  1148 Kelley Engineering Center
  Oregon State University
  Corvallis, OR 97331, USA

  dhagat@eeecs.oregonstate.edu
  jander@eeecs.oregonstate.edu

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