# TAB SOCIETY REVIEW COMMITTEE QUESTIONNAIRE 

IEEE MAGNETICS SOCIETY-33
Reviewed Scheduled February 2003

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Report comments returned by S/C: 23 May 2003
Final report submitted to SPARC: 25 August 2003

## TAB SOCIETY REVIEW COMMITTEE MEMBERS:

Peter Clout Committee Chair
Gerard H. Gaynor Member Julie Adams Member
Reuben Hackam Member Ed Lampo Member

## 1. SRC COMMITTEE AND REPORT

The activities of the Magnetics Society were reviewed on 12 February 2003 during the series of the Board of Directors meetings in Dallas, Texas.
President Ronald Indeck presented the report of the Society. The Society's major activities of Publications and Conferences are technically successful with large participation from the industrial sector. Computer disk storage is currently at about $10^{19}$ bytes and is doubling each year. The finances of the Society show large deficits in 2000 and 2001 but the Society indicated that it intends to be in a positive financial position in 2 to 5 years. The SRC recommends that this objective be reached in a shorter time not exceeding 2 years. The Society is commended for offering large number of traveling awards to students. There is a slight reduction in the membership in 2000 and 2001 and it is recommended that the Society encourage recruitment from new emerging technologies. Considering that the Society has a large industrial constituency but little or no activities in Standards, it is recommended that it consider devoting more attention and be proactive in the Standards area.

## 2. FIELD OF INTEREST / MISSION

The Society/Council Field of Interest Statement (FOI) is:
The Magnetics Society (MagSoc) field of interest is the "Treatment of all matters in which the dominant factors are the fundamental developments, design, and certain applications of magnetic devices. This includes consideration of materials and components as used therein, standardization of definitions, nomenclature, symbols, and operating characteristics; and exchange of information as by technical papers, conference sessions, and demonstrations", as quoted in the IEEE MagSoc Constitution.

The FOI was last updated on: 1980.

## Position in IEEE:

-Overlaps: LOES, PES, COMM, MTT.
-Collaborations: none.
-Memberships in councils/committees: Superconductivity, Nanotechnology, Sensors
-Areas in the field of interest not supported vigorously by your Society activities: none.
Position in overall technical world:
The IEEE Magnetics Society is the leading learned body in our specialty. This is a global Society, both financially and technically. Most of our recent chapter development has been abroad. The viability of the Society is ensured by the recording industry, but we are moving our conferences to add symposia and tutorials on nanotechnology and biomagnetism.

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Threats to the future viability of the Society?
None. We are actively responding to the technical changes within our rapidly moving technology sphere.

What does your Society do to recognize and support New Technologies? Provide specific examples. How successful have you been? What are your future plans?
At each of our major conferences we have Education Department sponsored tutorials and symposia deliberately focused on new and rapidly evolving technologies. As an example, at the forthcoming International Magnetics Conference in Boston [April, 2003] there is a tutorial on biomagnetism and a symposium on nanomagnetics.

These sessions are particularly well attended and are hence successful. Conference sessions are organized around topics that expand traditional areas of magnetics, e.g., spintronics. Our future plans are to continue with these activities.

Where engineering practice crosses Society lines: does your Society have programs with other Societies and Councils?; such as jointly sponsored meetings, publications, committee meetings to identify new technologies and to lend mutual support for these subjects. Provide specific examples. How successful have you been? Do you have future plans for such activities?
At present, none. We envisage possible cross-society activities in the fields of spin electronics, nanotechnology, and biomagnetism

## 3. FINANCES

| Year | $\mathbf{1 9 9 7}$ | $\mathbf{1 9 9 8}$ | $\mathbf{1 9 9 9}$ | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 1}$ | $\mathbf{2 0 0 2}$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Income |  |  |  |  |  |  |
| Conferences | 918.1 | 764.7 | $1,447.4$ | 375.0 | 973.9 | 556.8 |
| Publications | 760.3 | 686.6 | 646.5 | 360.5 | 860.3 | $1,234.0$ |
| Member Fees | 86.2 | 85.2 | 81.7 | 79.3 | 74.1 | 70.1 |
| NM Subscriptions | 231.3 | 212.0 | 197.0 | 182.7 | 175.8 | 262.5 |
| Conf Related Pub | 201.0 | 196.9 | 129.6 | 78.2 | 309.8 | 482.5 |
| Other | 87.0 | 1.7 | 2.0 | 5.4 | 2.8 | 0.9 |
| Total Income | $1,765.4$ | $1,453.0$ | $2,095.9$ | 740.9 | $1,837.0$ | $1,791.7$ |
|  |  |  |  |  |  |  |
| Expenses |  |  |  |  |  |  |
| Conferences | 678.6 | 581.9 | $1,234.8$ | 356.2 | 954.6 | 447.0 |
| Publications | 473.0 | 432.3 | 463.0 | 385.1 | 912.8 | 654.9 |
| IEEE Taxes | - | - | - | 241.6 | 539.3 | 564.7 |
| Administration | 57.7 | $(59.7)$ | $(156.0)$ | $(39.6)$ | 64.1 | 132.9 |
| Other | $1,228.0$ | 987.6 | $1,567.5$ | 988.7 | $2,522.6$ | $1,849.2$ |
| Total Exp. |  |  |  |  |  |  |
|  | 537.4 | 465.4 | 528.4 | $(247.8)$ | $(685.6)$ | $(57.5)$ |
| Net |  |  |  |  |  |  |
|  | $1,145.7$ | $1,611.1$ | $2,139.5$ | $1,891.7$ | $1,206.1$ | $1,148.6$ |
| Reserves |  |  |  |  | 59.4 |  |

Note: In 2002 ASPP income recorded as a negative expense.
In 1997 interest income recorded as an income.
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In 1998-2000 interest income recorded as a negative expense.
In 2001-2002 market flucuation embedded in the IEEE Tax.

Financial goals over next 2-5 years?
We maintain a fiscal prudence that is in line with any IEEE charge that is imposed upon us. We plan to be in a positive financial position year-by-year in the next 2-5 years including infrastructure charges. We have proposed an Electromagnetic Technology Digital Library with several other societies/councils that is now under review by IEEE. We are working through the process of unbundling our paper Transaction from the member fees. This initiative should provide total savings of $\$ 50 \mathrm{k}-\$ 100 \mathrm{k}$ per year. Since there will no longer be a financial burden to add new members we plan to aggressively recruit new members from underrepresented regions. Note: Existing members will no longer receive the paper copy of the Transactions on Magnetics but most Societies have unbundled in a similar manner with very few repercussions. All members will continue to have on-line access to Xplore.

Main sources of income/expenses?
Publications and conferences are our main sources of revenue and expenses.

## 4. GOVERNANCE

Append an electronic or hard copy of Constitution and Bylaws Attached.

The S/C Administrative Committee (Adcom) is composed of (expand each table as needed) ELECTED MEMBERS

| Position or Title | Elected by whom | Term/\# <br> years <br> person on <br> AdCom in <br> any position | Affiliation, <br> Academia/Industry <br> /Retired and <br> Region | Other than <br> those implied <br> by title |
| :--- | :--- | :--- | :--- | :--- |
| 24 ordinary <br> members | Adcom | 3 years | 14 Academia: <br> $(10 \times 1-6 ; 1 \times 7 ; 2 \times 8 ;$ <br> $1 \times 9) /$ <br> 10 Industry: (9x1- <br> $6 ; 1 \times 9)$ |  |

## APPOINTED MEMBERS

| Position or Title | Appointed by <br> whom | Terms/Term <br> s Limit | Affiliation, <br> Academia/Industry <br> /Retired and IEEE <br> Region | Responsibilities |
| :--- | :--- | :--- | :--- | :--- |
| Past President | AdCom | 2 years | Academia/1-6 | Advisor |
| Finance Chair | President | Unlimited | Industry/1-6 | Finance |
| Publications Chair | President | Unlimited | Government/1-6 | Publications |
| Conference <br> Executive <br> Committee (CEC) <br> Chair | President | Unlimited | Industry/1-6 | Conferences |
| Newsletter Editor | Pub Chair | Unlimited | Academia/1-6 | Newsletter |

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| Education Chair | President | Unlimited | Academia/1-6 | Education |
| :--- | :--- | :--- | :--- | :--- |
| Membership | President | Unlimited | Academia/1-6 | Membership |
| Technical <br> Committees Chair | President | Unlimited | Industry/1-6 | Technical <br> Committees |
| Nominations | President | Unlimited | Academia/1-6 | Nominations |
| Chapters | President | Unlimited | Industry/1-6 | Chapters |
| Public Affairs | President | Unlimited | Industry/1-6 | Public Affairs |
| Standards | President | Unlimited | Industry | Standards |

OFFICERS

| Position | Appointed/ <br> Elected <br> by whom | Terms/ <br> Terms Limit | Affiliation, <br> Academia/Industry <br> /Retired and IEEE <br> Region | Responsibilities |
| :--- | :--- | :--- | :--- | :--- |
| President | AdCom | 1 year/2 <br> years | Industry/1-6 |  |
| Vice President | AdCom | 1 year/2 <br> years | Academia/1-6 |  |
| Sec/Treasurer | AdCom | 1 year/2 <br> years | Academia/8 |  |

Are the elections generally contested?
Officer elections are contested at the Secretary/Treasurer level, because two candidates for this position are always proposed. They do allow for write-ins. The AdCom ballot is prepared by the Nominations Committee and candidates for AdCom may alternately petition to be included on the ballot. We are considering methods to solicit nominations for AdCom from throughout the Society membership perhaps by sending emails to the entire membership and publishing an article in the Newsletter.

Is there a succession to Presidency, if so please state?
Generally, but the opportunity for other nominations exists and is publicized.
Number of AdCom meetings per year?
Two AdCom Meetings are held each year, usually as a part of the two largest conferences, the Intermag Conference and the Conference on Magnetism and Magnetic Materials. When it is impossible to follow this pattern, a stand-alone AdCom Meeting is scheduled for a time and location most convenient for the majority of the voting members.

How are new AdCom members brought onto the AdCom and developed into future leaders? Through the Technical Committees, conferences, and open nominations. Develop via progression through departmental activities.

If your Society has an ExCom, how many members are there and how often does it meet? The Planning Committee serves as the Magnetics Society's ExCom. The Planning Committee meets once or twice each year prior to the scheduled AdCom Meeting. When this is not possible, a meeting is held by conference call. The members are the current officers plus the immediate Past President, the Chairs of CEC, Publications, and Awards, and the Executive Director of the Society.

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## 5. TECHNICAL COMMITTEES AND CHAPTERS

## Technical Committees

| Committee | Appointed/Electe <br> d <br> by whom | Terms/ <br> Terms Limit | Level of activity* | Roles, Responsibility, activities <br> (include frequency of reporting) |
| :--- | :--- | :--- | :--- | :--- |
| Magnetooptics | TechCom Chair | Unlimited | Active | See note below |
| GMR Heads | TechCom Chair | Unlimited | Active | See note below |
| Disk Media | TechCom Chair | Unlimited | Active | See note below |
| Soft Materials | TechCom Chair | Unlimited | Active | See note below |
| Sensors | TechCom Chair | Unlimited | Active | See note below |
| Magnets | TechCom Chair | Unlimited | Active | See note below |
| Patterned Media | TechCom Chair | Unlimited | Active | See note below |
| Nanoparticles | TechCom Chair | Unlimited | Active | See note below |
| Tunnel <br> MR | Junction | TechCom Chair | Unlimited | Active |
| Perpendicular <br> Media | TechCom Chair | Unlimited | Active | See note below |
| Instrumentation | TechCom Chair | Unlimited | Active | See note below |
| Micromagnetics | TechCom Chair | Unlimited | Active | See note below |
| Imaging | TechCom Chair | Unlimited | Active | See note below |
| MRAM | TechCom Chair | Unlimited | Active | See note below |
| Biomagnetism | TechCom Chair | Unlimited | Active | See note below |
| Recording Systems | TechCom Chair | Unlimited | Active | See note below |

* Organize meetings? Size? Develop and maintain standards? Take responsibility for standards? Other?

The members are active in the various conferences that the IEEE sponsored, usually by serving as Session Chairs or as members of Program Committees. For example, one member organized a symposium for Intermag, while another organized a new conference that was subsequently sponsored by the IEEE. The members are available for reviewing papers for the IEEE Transactions on Magnetics. They also assist several times each year in finding referees for papers. Technical questions that are posed to the Magnetics Society are reviewed by the committee Chair and forwarded as appropriate to the other members who can best answer the question. A report is submitted twice yearly to the Society's AdCom.

## CHAPTERS:

| Region | \# of chapters | *Measure of <br> activity | \% active | Financial <br> support <br> chapter) | Awards (ID <br> other <br> recognition for <br> chapter <br> excellence |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{1 - 6}$ | 13 | Active |  |  |  |
| $\mathbf{7}$ | 0 |  |  |  |  |
| $\mathbf{8}$ | 5 | Active |  |  |  |
| $\mathbf{9}$ | 0 |  |  |  |  |
| $\mathbf{1 0}$ | 2 | Active |  |  |  |

* Measure of Activity
**For example, number of meetings held or a subjective judgment.
Support available for Chapters:
Speakers?
Two to three Distinguished Lecturers are sponsored each year. During their tenure the Lecturers each provide between 10 and 40 lectures and speak to several different Chapters each year.

Financial? (how, how much)?
The meeting allowance from each Section is $\$ 25$ per event. Senior Member Elevation is sponsored at $\$ 10$ per event. The Chapters may request special support for innovative efforts by submitting a written request that is then approved by the Chapters Chair and an officer of the Society. The total Chapters Committee budget for this is $\$ 2,000$ per year. Discretionary additional funding is available for the formation of new chapters.

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## IEEE Magnetics Society Distinguished Lecturers

## 1997-1998

1. David C. Jiles

Topic: Modeling Magnetic Properties of Materials
Affiliation: Senior Physicist, Ames Laboratory-USDOE Center for
Nondestructive Evaluation
Professor, Materials Science \& Engineering, Iowa State University
Professor, Electrical \& Computer Engineering, Iowa State University
2. Shmuel. Shtrikman

Topic: A Short Excursion into Magnetic Levitation
Affiliation: Professor, The Weizmann Institute of Science

## 1998-1999

1. Giorgio Bertotti

Topic: Hysteresis in Magnetism
Affliation: Materials Department, IEN Galileo Ferraris
2. Gordon F. Hughes

Topic: Cross-Disciplinary Physics, Tribology, Mechanics, Electronics, and Real-Time Systems in DiskDrive Technology (Revisited)
Affiliation: Professor, Associate Director, CMRR, University of California, San Diego
3. Robert L. White

Topic: Ultra-High Density Magnetic Recording: What Are the Fundamental Physical Bounds?
Affliation: Professor, Materials Science and Engineering, Stanford University Director, Center for Research on Information Storage Materials, Stanford University

## 1999-2000

1. Roy W. Chantrell

Topic: Thermal Activation and Micromagnetics: The Scientific and Technical Challenges
Affiliation: Professor, Computational Magnetism, University of Wales Bangor
2. Fred Jeffers

Topic: A Magnetic Magic Show
Affiliation: Iomega Corporation, San Diego, CA USA
3. Daniel Rugar

Topic: Magnetic Resonance Force microscopy: The Quest for Single-Spin Sensitivity
Affiliation: IBM Almaden Research Center, San Jose CA USA

## 2000-2001

1. Jack H. Judy

Topic: Perpendicular Magnetic Recording: Beyond 100 to 1000 Gigabits per Square Inch Affiliation: Professor, Department of Electrical and Computer Engineering Director, The Center for Micromagnetics and Information Technologies (MINT) University of Minnesota
2. Helmut F. Kronmuller

Topic: Magnetization Processes and Microstructure in Modern Magnetic Materials_ Affiliation: Max Planck Institut fuer Metallforschung

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3. Thomas J. Silva

Topic: Consideration of the Spherical Cow: The Realities of Magnetodynamics in an Imperfect World Affiliation: Electromagnetic Technology Division National Institute of Standards and Technology

## 2001-2002

1. Shan $X$. Wang

Topic: Advanced Magnetic Materials and Transducers: Enabling Factors for the Digital Storage Explosion
Affiliation: Professor, Materials Science and Engineering, Stanford University
2. Josef Fidler

Topic: Advanced Magnetic Materials: Development and Micromagnetics
Affiliation: Professor, Magnetic Materials and Micromagnetics Group, Vienna University of Technology
3. Philip E. Wigen

Topic: Ferromagnetic Resonance Force Microscopy: Probing Ferromagnets at the Micrometer Level Affiliation: Professor, Department of Physics, Ohio State University
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1. John Chapman

Topic: Wall Watching: The progress of Domains in Small Elements
Affiliation: Professor, Department of Physics and Astronomy, University of Glasgow
2. Thomas D. Howell

Topic: Characterization of Magnetic Recording Channels: A Historical Perspective
Affiliation: Professor, Department of Computer Science, San Jose State University
3. Neil Smith

Topic: Thermal Magnetization Noise and Fluctuation-Dissipation in Magnetoresistive Heads, Sensors, and Ferromagnetic Thin-Film Devices
Affiliation: IBM Almaden Research Center, IBM Corporation

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6. MEMBERSHIP (For last 5 years)

| Region | Member Grade | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1-6 | Higher Grade | 1900 | 1891 | 1760 | 1689 | 1564 | 1294 |
|  | Students | 132 | 141 | 109 | 100 | 89 | 70 |
|  | Affiliates | 37 | 35 | 32 | 25 | 23 | 21 |
|  | Gold Members |  |  |  |  | 119 |  |
|  | Percentage Retention |  | 99.9\% | 91.9\% | 87.7\% | 81.0\% | 66.9\% |
|  | TOTAL | 2069 | 2067 | 1901 | 1814 | 1676 | 1385 |
| 7 | Higher Grade | 65 | 68 | 61 | 58 | 57 | 48 |
|  | Students | 11 | 9 | 13 | 5 | 3 | 2 |
|  | Affiliates | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Gold Members |  |  |  |  | 4 |  |
|  | Percentage Retention |  | 101.3\% | 97.4\% | 82.9\% | 78.9\% | 65.8\% |
|  | TOTAL | 76 | 77 | 74 | 63 | 60 | 50 |
| 8 | Higher Grade | 564 | 568 | 594 | 584 | 556 | 520 |
|  | Students | 58 | 68 | 60 | 51 | 53 | 39 |
|  | Affiliates | 7 | 6 | 5 | 5 | 4 | 2 |
|  | Gold Members |  |  |  |  | 44 |  |
|  | Percentage Retention |  | 102.1\% | 104.8\% | 101.7\% | 97.5\% | 89.2\% |
|  | TOTAL | 629 | 642 | 659 | 640 | 613 | 561 |
| 9 | Higher Grade | 55 | 55 | 59 | 58 | 52 | 31 |
|  | Students | 21 | 17 | 19 | 15 | 14 | 8 |
|  | Affiliates | 0 | 1 | 1 | 0 | 0 | 0 |
|  | Gold Members |  |  |  |  | 11 |  |
|  | Percentage Retention |  | 96.1\% | 103.9\% | 96.1\% | 86.8\% | 51.3\% |
|  | TOTAL | 76 | 73 | 79 | 73 | 66 | 39 |
| 10 | Higher Grade | 634 | 615 | 599 | 594 | 593 | 527 |
|  | Students | 42 | 38 | 37 | 37 | 36 | 33 |
|  | Affiliates | 5 | 5 | 5 | 4 | 4 | 3 |
|  | Gold Members |  |  |  |  | 37 |  |
|  | Percentage Retention |  | 96.6\% | 94.1\% | 93.2\% | 93.0\% | 82.7\% |
|  | TOTAL | 681 | 658 | 641 | 635 | 633 | 563 |
| TOTAL | Higher Grade | 3218 | 3197 | 3073 | 2983 | 2822 | 2420 |
|  | Students | 264 | 273 | 238 | 208 | 195 | 152 |
|  | Affiliates | 49 | 47 | 43 | 34 | 31 | 26 |
|  | Gold Members |  |  |  |  | 215 |  |
|  | Percentage Retention |  | 99.6\% | 95.0\% | 91.3\% | 86.3\% | 73.6\% |
|  | TOTAL | 3531 | 3517 | 3354 | 3225 | 3048 | 2598 |

## Please comment on the issues listed below

What does your Society do to retain members?
The IEEE Magnetics Society undertakes direct mailings of conference programs and calls for papers for members and potential members. We offer other benefits such as student travel support and access to the intellectual property of the Society.

What's bundled in the current Membership fee?
IEEE Transactions on Magnetics.
What does the Society do to recruit members?
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New membership initiatives starting in January 2003.
Competition for New Members (Current Market Share?)
None.
Satisfaction feedback from Members - surveys, etc.?
None.
Primary/Secondary Societies of Society Members?
N/A.
Sources of New Members?
Students and new industries.
What is the proportion of members from Industry, Academia, and Government?
Appox. 40\%:55\%:5\%.
Any activity to specifically address the needs of members from industry?
Providing access to leading-edge technical information promptly through the Transactions and conference sessions devoted to current industry topics.

What does your Society do to encourage the elevation of members to Senior level? Encouragement by word of mouth.

What does your Society do to encourage the elevation of members to Fellow grade?
As above.

## 7. MEETINGS

The Society sponsors two major annual conferences. The International Magnetics Conference (INTERMAG) generally draws an attendance of over 1000 and is an applications-oriented conference solely sponsored by the IEEE Magnetics Society. The registration numbers have remained constant in the US and have increased when Intermag is held aboard. It is held every third year in Regions 8-10, and is also held jointly every third year with the Society's other cosponsored conference, the Conference on Magnetism and Magnetic Materials (MMM). The Society considers INTERMAG to be its flagship conference. Exhibits are solicited for these conferences and it normally draws 10-30 exhibitors. Recent conference surpluses have run \$40-\$80k.

MMM is a jointly sponsored conference with the American Institute of Physics, and is more physics oriented. Recent attendance has run 1000-1800, with the greater attendance occurring when the conference is held jointly with INTERMAG. The conference is held in Regions 1-6 annually. Exhibits run 12-25 in number, and conference surpluses run about $\$ 60 \mathrm{k}$, except for years in which the conference is held jointly with INTERMAG, in which case recent surpluses have been \$120k-\$190k.

The Society also sponsors two smaller conferences, each with attendance of about 200 or less. These are the annual Magnetic Recording Conference and the biennial Conference on Electromagnetic Field Computation.

The Magnetic Recording Conference (TMRC) is a small, industry-driven, focused-topic meeting held annually in August. The present format is to focus in alternate years on Heads

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(with some relevant signal processing included) and Media (with some relevant tribology included). TMRC is a three-day conference, with no parallel sessions, all talks are one half hour, and all speakers invited. Attendance is typically in the 250 to 350 range. The focused topic format was chosen because it is our experience that the scientists working on heads and on media are distinct sets, and value a meeting with their own peer group. At TMRC, in contrast to the more general magnetics conferences, the speakers know that the audience is knowledgeable in their topic, so the presentations can be quite sophisticated. Questions and discussions are between informed parties. Since TMRC meetings are held in venues where there is an industry concentration in magnetic recording, bench-level engineers, who may not get to travel to the more remote larger conferences, can attend and interact with their colleagues at all levels of responsibility. The focused nature of the program and the practice of having only invited speakers means that the presentations can be of high quality. For all these reasons TMRC occupies a very active niche in the magnetics world, and has been very successful attracting the speakers and audience it is intended to serve.

Overall, What is your Society doing to anticipate the need to conduct virtual technical meetings and equipment shows that are web based?
No activity at present.
As above.
General description as above.
Co-sponsors (if any, financial co-sponsors with proportion)
Topic of Meeting: The Magnetic Recording Conference (TMRC)

| Meeting | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Member fee | $\$ 190$ | $\$ 225$ | $\$ 235$ | $\$ 220$ | $\$ 215$ | $\$ 220$ |
| Region Held | Minneapolis | Boulder, <br> CO | San <br> Diego, CA | Santa <br> Clara, CA | St Paul, <br> MN | Santa <br> Clara CA |
| Attendance | 190 | 225 | 235 | 220 | 215 | 218 |
| \% from Region <br> 7 |  |  |  |  |  |  |
| \% from Region <br> 8 |  |  |  |  |  |  |
| \% from Region <br> 9 |  |  |  |  |  |  |
| \% from Region <br> 10 |  |  |  |  |  |  |
| Total \# Papers | 32 | 34 | 32 | 26 | 32 |  |
| Acceptance <br> ratio | $90 \%$ | $95 \%$ | $90 \%$ | $80 \%$ | $90 \%$ |  |
|  |  |  |  |  |  |  |
| No. Exhibitors |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Financial |  |  |  |  |  |  |
| Income | $\$ 65,309$ | $\$ 99,095$ | $\$ 67,950$ | $\$ 74,398$ | $\$ 69,354$ | $\$ 56,060$ |
| Expenditure | $\$ 50,545$ | $\$ 64,270$ | $\$ 60,721$ | $\$ 58,386$ | $\$ 52,080$ | $\$ 48,030$ |
| Surplus | $\$ 14,764$ | $\$ 34,825$ | $\$ 7,229$ | $\$ 16,012$ | $\$ 17,274$ | $\$ 8,030$ |

* of accepted papers

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Any trends noted in the meeting?

## What student activities?

Any trends noted? Actions taken on these?
Topic of Meeting: Magnetism and Magnetic Materials Conference (MMM)

| Meeting | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Member fee |  | $\$ 325$ | $\$ 330$ |  | $\$ 465$ | $\$ 520$ |
| Region Held |  | Miami | San Jose |  | Seattle | Tampa |
| Attendance |  | 1101 | 1409 |  | 902 | 1250 |
| \% from Region 7 |  |  |  |  |  |  |
| \% from Region 8 |  |  |  |  |  |  |
| \% from Region 9 |  |  |  |  |  |  |
| \% from Region 10 |  |  |  |  |  |  |
| Total \# Papers |  | 930 | 1135 |  | 1163 |  |
| Acceptance ratio |  | $71 \%$ | $71 \%$ |  | $69 \%$ |  |
|  |  |  |  |  |  |  |
| No. Exhibitors |  | 19 | 20 |  | 15 |  |
|  |  |  |  |  |  |  |
| Financial |  |  |  |  |  |  |
| Income |  | 357,188 | 596,237 |  |  |  |
| Expenditure |  | 376,197 | 443,468 |  |  |  |
| Surplus |  | $(19,009)$ | 152,769 |  |  |  |

Topic of Meeting: Joint MMM-Intermag Conference (Triennial)

| Meeting | 1997 | 1998 | 1999 | 2000 | 2001 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Member fee |  | $\$ 360$ |  |  | $\$ 475$ |
| Region Held |  | San <br> Fransisco |  |  | San Antonio |
| Attendance |  |  |  |  |  |
| \% from Region 7 |  |  |  |  |  |
| \% from Region 8 |  |  |  |  |  |
| \% from Region 9 |  |  |  |  |  |
| \% from Region 10 |  | 1,143 |  |  |  |
| Total \# Papers |  | $67 \%$ |  | $65 \%$ |  |
| Acceptance ratio |  | 31 |  | 32 |  |
|  |  |  |  |  |  |
| No. Exhibitors |  | 748,973 |  |  |  |
|  |  | 556,034 |  |  | 647,774 |
| Financial |  | 192,939 |  |  | 122,692 |
| Income |  |  |  |  |  |
| Expenditure |  |  |  |  |  |
| Surplus |  |  |  |  |  |

Topic of Meeting: International Magnetics Conference (Intermag)

| Meeting | 1997 | 1998 | 1999 | 2000 | 2002 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Member fee | $\$ 420$ |  | $\$ 380$ | $\$ 400$ | $\$ 545$ |

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| Region Held | New Orleans |  | Korea | Toronto | Amsterdam |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Attendance | 1,210 |  | 1,106 | 1,035 | 1,303 |
| \% from Region 7 |  |  |  |  |  |
| \% from Region 8 |  |  |  |  |  |
| \% from Region 9 |  |  |  |  |  |
| \% from Region 10 |  |  |  |  |  |
| Total \# Papers | 646 |  | 1,183 | 674 | 900 |
| Acceptance ratio |  |  |  | $70 \%$ |  |
|  |  |  |  |  |  |
| No. Exhibitors | 25 |  |  | 20 | 23 |
|  |  |  |  |  |  |
| Financial |  |  |  |  |  |
| Income |  |  |  |  |  |
| Expenditure |  |  |  |  |  |
| Surplus |  |  |  |  |  |

Topic of Meeting: CEFC (Biennial)

| Meeting | 1997 | 1998 | 1999 | 2000 | 2001 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Member fee |  |  |  |  |  |
| Region Held |  | Tuscon. AZ |  | Milwarkee, WI |  |
| Attendance |  |  |  |  |  |
| \% from Region 7 |  |  |  |  |  |
| \% from Region 8 |  |  |  |  |  |
| \% from Region 9 |  |  |  |  |  |
| \% from Region 10 |  |  |  |  |  |
| Total \# Papers |  |  |  |  |  |
| Acceptance ratio |  |  |  |  |  |
|  |  |  |  |  |  |
| No. Exhibitors |  |  |  |  |  |
|  |  |  |  | $\$ 171,728$ |  |
| Financial |  | $\$ 113,695$ |  | $\$ 20,825$ |  |
| Income |  | $\$ 4,560$ |  |  |  |
| Expenditure |  |  |  |  |  |
| Surplus |  |  |  |  |  |

## 8. PUBLICATIONS

Overall, what is your Society doing to anticipate and solve the problems associated with the move from paper to electronic publishing? Use of Manuscript Central beginning in 2003.

## IEEE Transactions on Magnetics

Is every issue of this periodical mailed on or before the cover date?
No.
If not, comment on the reason, and provide a corrective action plan.

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Especially in 2000, IEEE Transactions/Journals Department had staffing problems that resulting in delays in production. Since then IEEE has solved some of its staffing problems. Some of our issues include conference-related papers, and some of these are quite large. As an accommodation to IEEE, we have increased the lead time for conference-related papers to allow IEEE staff more than enough time to process the papers.

There is no reason from the editorial side for late mailings. The Transactions does not seek to equalize the number of papers in each issue nor does it maintain a backlog of papers awaiting publication. The IEEE Managing Editor is instructed to close the issue on the scheduled date. Late papers are deferred to the next issue.

This table is a status report of all submitted papers for the past 5 years, as of the end of year 5.
Account for all papers in the year of submission. For example, the number you insert in row 10 for year 3, is the total number of papers submitted in year 3 that have been published in years 3, 4, and 5 . The Rejection Rate for year 5 cannot be computed since all the Reviews will not be complete.

The statistical information requested cannot be provided in the format requested as we have multiple editors working independently. A number of editor changes have occurred in the time period requested making accurate data impossible to obtain. Where possible, approximate figures have been provided by the Editor in Chief. As of 2003, a centralized publications department has been established using the IEEE Manuscripts Central and overseen by a new executive assistant to the EIC. Hence, such statistics will be available in the future.

This table should be copied from the Periodicals Review Report, Paragraph E.

|  |  | 5 | 4 | 3 | 2 | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | NUMBER OF PAPERS: | 1997 | 1998 | 1999 | 2000 | 2001 |
| 1 | Submitted | 100\% |  |  |  |  |
| 2 | Returned by EIC for scope reasons, obvious poor quality, etc. | 2\%( no conference papers are returned before review) |  |  |  |  |
| 3 | Peer reviewed (row 1 less row 2) | 98\% |  |  |  |  |
| 4 | Accepted |  |  |  |  |  |
| 5 | Rejected |  |  |  |  |  |
| 6 | In review process |  |  |  |  |  |
| 7 | Waiting for author revision |  |  |  |  |  |
| 8 | Other (explain in comments below) |  |  |  |  |  |
| 9 | QUEUED FOR PUBLICATION | 0 | 0 | 1 | 4 | 7 |
| 10 | PUBLISHED | 2004 | 467 | 1798 | 1344 | 386 |
|  | Total: Rows 5-10, should equal Row 3 |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  | PERCENTAGE REJECTED by Peer Review (row5/rowrow3) | N/A |  |  |  |  |
|  |  |  |  |  |  |  |
|  | Average number of months from Author Submission to Publication | $\begin{aligned} & 11.6 \\ & 11.2 \\ & \hline \end{aligned}$ | $\begin{aligned} & 12.3 \\ & 11.6 \\ & \hline \end{aligned}$ | $\begin{aligned} & 13.1 \\ & 11.3 \\ & \hline \end{aligned}$ | $\begin{array}{r} 14.3 \\ 11.8 \\ \hline \end{array}$ | $\begin{aligned} & 10.8 \\ & 9.5 \\ & \hline \end{aligned}$ |
| ** | Geographical distribution of Authors | \% | \% | \% | \% | \% |
|  | Regions 1-6 | ~36\% |  |  |  |  |
|  | Region 7 | $\sim 3 \%$ |  |  |  |  |
|  | Region 8 | ~32\% |  |  |  |  |
|  | Region 9 | $\sim 1 \%$ |  |  |  |  |
|  | Region 10 | $\sim 28 \%$ |  |  |  |  |

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** Geographical distribution of authors of published papers in the year of publication, not year of submittal. Use current location of author as shown in the Biography. Count all authors of a paper. They may represent more than one region.

COMMENTS:
FINANCIAL AND SUBSCRIPTION INFORMATION This periodical is included with membership fee.

## IEEE- Society Title \& \# Magnetics Society - 33

Name/s of Pubs.
Trans on Magnetics

| ITEM | 1997 | 1998 | $\underline{1999}$ | $\underline{2000 *}$ | 2001** | 2002B | $\begin{aligned} & \text { Prelim } \\ & \text { 2003B } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pages/Year (actual) | 4,613 | 4,073 | 4,767 | 4,574 | 5,454 | 3,300 | 3,600 |
| Issues/Year | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| Subscribers |  |  |  |  |  |  |  |
| Regular Member | 3,012 | 2,988 | 2,815 | 2,758 | 2,556 | 2,758 | 2,556 |
| Student Member | 254 | 243 | 242 | 206 | 196 | 206 | 196 |
| Other | 126 | 120 | 91 | 90 | 88 | 90 | 88 |
| Affiliate Members | 49 | 45 | 44 | 34 | 32 | 34 | 32 |
| Individual Non-Member | 632 | 588 | 546 | 479 | 453 | 388 | 388 |
| Subscription Rates |  |  |  |  |  |  |  |
| Regular Member | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| Student Member | 15 | 15 | 15 | 15 | 15 | 15 | 15 |
| Individual Non-Member | 370 | 370 | 370 | 390 | 390 | 650 | 700 |
| Other | 15 | 15 | 15 | 15 | 15 | 15 | 15 |

## 9. GLOBALIZATION EFFORTS

AdCom: $20 \%$ of the elected membership is non-US based and an additional $20 \%$ are non-US nationals.
Membership: No data available.
Technical activities: Our flagship conference (Intermag) is held every third year in Asia and Europe, in turn. Special committees exist to organize these meetings for which financial responsibility rests with the Society. We have a new initiative on utilizing these non-US conferences to form new Chapters and enhance membership outside USA. We also have a policy of trying to ensure that at least one Distinguished Lecturer each year is not US-based. The DL Program is to be used to encourage the formation of new Chapters.

Competition/Cooperation - US and Non-US
Societies: Magnetics Society of Japan.
Publications: None.
Meetings: We are co-sponsoring the next Intermag Conference in Asia with the Magnetics Society of Japan. We are also seeking to sponsor or co-sponsor other non-US based conferences through our expanding Chapters activities.

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## 10. STANDARDS (if applicable)

Number: N/A.
Activity level
The IEEE Magnetics Society advises on standards activities conducted by the National Institute of Standards and Technology (NIST). Input from the Magnetics Society has encouraged the development and release by NIST of several magnetic standard reference materials (SRMs) used to calibrate magnetometers: nickel sphere (SRM 772a), nickel disk (SRM 762), and YIG sphere (SRM 2853). Several other SRMs are planned for 2003 and 2004. Members of the Magnetics Society from the magnetic data storage industry are advising NIST on industry needs in thin-film calibration standards.
The Magnetics Society Publications Chairman is a member of IEEE Standards Coordinating Committee 14 on Quantities, Units, and Letter Symbols.

The Magnetics Society is not currently involved in the development of consensus standards on measurement best practices.

## 11. EDUCATION

Short Courses: The Society does not operate a program of short courses.
Distinguished Lecture Program: Details of our DL Program have been presented in Section 5.

University Interaction: The Society has a balanced AdCom with near equal representation from industry and academia. A similar balance is maintained in our technical committees and those committees that organize our conferences. Hence a healthy interaction between the Society, industry, and academia is assured.
A number of special measures are provided and include an Education Department tutorial session held during each of our major technical conferences. We also provide up to 75 student travel awards for students nominated by society members. Approximately $30 \%$ of these awards are allocated to non-US based students as part of our globalization effort and non-US membership drive.
Continuing Education: We currently have no activity in this area.
Books/IEEE Press: Over the past five years, the Magnetics Society has become actively involved in sponsoring titles for the IEEE Press. New sponsored titles are:

- Mee, Daniel and Clark, "Magnetic Recording: The First 100 Years" (1998)
- Della Torre, "Magnetic Hysteresis" (1999)
- Gambino and Suzuki, "Magneto-Optical Recording Materials" (1999)
- Morrish, "The Physical Principles of Magnetism" (Classic Re-Issue, 2000)

The Society now has three Liaisons to the Press. One of them promotes IEEE Press books and solicits authors at Society-sponsored conferences.

## 12. AWARDS AND RECOGNITION

Please list the awards given by your Society?

| Award | Frequency | Cost to Society |
| :--- | :--- | :--- |
| Magnetics Society <br> Achievement Award | Annual | $\$ 2500$ plus travel |
| Student Travel | Up to 75 annually | $\$ 30,000$ |

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IEEE Awards (Technical Field Awards and others) - What does your Society do to stimulate nominations for IEEE Technical Field Awards, other IEEE Awards and Medals? Provide examples. How successful have you been? What are your future plans on this topic?"
The IEEE Information Storage Award was a Magnetics Society Award before being elevated to a Field Award. More than $50 \%$ of the winners tend to be MagSoc members. The Society advertises for both this and our Achievement Award in the Society Newsletter and by email. We do not actively advertise the other Field Awards, although we have had some success with this in the past.

## 13. Web Site

Does your society maintain a web site? What is the effort involved in maintaining? Has there been any feedback from members or others?-
The IEEE Magnetics Society maintains an active web site. The URL for the web site is http://www.ieeemagnetics.org. The Publicity Chairman of the IEEE Magnetics Society oversees the organization and content of the web site. The Chair retains a person to take selected input and to handle the mechanics of posting the selected content onto the web site that is hosted using a commercial web site provider. A Newsletter Editor prepares a quarterly newsletter that is posted on the web site. The Chairs of other Society committees, such as Publications and Chapters, help to provide content to for use in the web site.

Links are available to conferences and additional sources of information of interest to magnetics Society members. Information is provided on the Society itself, such as its organization, Constitution, and how to become a member. Links that are of interest to Society members are provided to conferences, academic sites, centers, companies and other organizations.

Feedback is received from members and others through email that can be sent through the web site. Feedback indicates that the web site is a valuable resource and an important service to members. Dozens of inquiries per month are processed to provide a wide variety of information. Inquiries that are received regard Society publications, conferences, technical issues, requests for information, points of contact, and the offering and airing of a range of topics and concerns.

In summary, the Society's web site is generally viewed as a valuable resource to members of the IEEE itself, the Society and the community at large.

## 14. LONG TERM GOALS/NEW DIRECTIONS

How do you do long term planning?
Our Executive or Planning Committee which is chaired by the Vice President, and is charged with the duty of long term planning. The Planning Committee meets at least twice annually.

How do you recognize and stimulate new areas?
The members of the IEEE Magnetics Society are well represented within the National Laboratories, Academia, and Industry. These institutions drive change in the area of magnetism and our members respond to these changes with papers and presentations at our topical conferences. Our Technical Committee provides guidance to our conference program organizers to include new topical areas of interest to our membership. Two examples for Intermag 2003 are a Symposium on Nano-Processing for Magnetic Information Storage Applications and a Symposium on Bio-Magnetism Applications.

Long term goals/plans to reach goals?
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Goal 1: Grow membership by attracting students and full through conference registration incentives and Chapter activities. Increase membership of non-US based engineers and scientists though new Chapter and non-US conference activities. Transition student members into full membership by providing topical and meaningful intellectual content (conferences, publications) in the field of magnetism.
Goal 2: Identify and promote new areas for magnetic applications. Recognize "change" in the mature magnetic based technologies. Use conference programs and new conferences to accomplish these goals.

5-year question: "Where do you see your society being in five years?"
Today's Environment
Our technical activities have been dominated by the requirements of the magnetic information storage industries for the last 15 to 20 years. These include both materials and systems requirements. We perceive that a change is now underway with significant consolidation of the information storage industries with the emergence of new areas such as spin electronics and biomedical applications.
The Future Environment--Technology

- Magnetic phenomena and magnetic materials will continue to be critical for information storage applications of the future. The IEEE Magnetics Society will retain in its field of interest the support of technologies that enable information storage applications
- The emerging areas of "bio-magnetism" and "nano-magnetism" will become major technical fields for the IEEE Magnetics Society
- Non-volatile magnetic memories employing spin transfer and integrating silicon and magnetic materials and processes will become a major device application that can compliment the magnetic hard drive in PC systems


## The Future Environment-Membership

- We believe that to grow our membership in the face of the consolidation of the US-based information storage industries that significant growth will come from non-US based countries
- US-based growth will come from the emerging technologies such as nanomagnetics, spin electronics and biomagnetism


## 15. INTERACTION WITH TAB

How do you view your Society/Council's role in TAB?
The IEEE Magnetics Society is statistically near the mean of societies for both membership (3000) and reserves (\$1200K). However, these numbers are small in comparison to the larger societies in the IEEE. As a result, our impact on TAB is small. This is a reality that at least 20 other societies share. Small societies only have impact if they have a pro-active Division Director.

Does TAB help/hinder your Society/Council and its activities?
TAB, or more specifically TAD, has helped our society significantly with ongoing issues related to the AIP and a co-sponsored conference. In particular Mary Ward-Callan must be complimented on her support for our difficult negotiations with the AIP over a two year period.

How can TAB be of more benefit to your Society/Council?

- TAB must be more conscious that the Society Presidents are volunteers and not full time employees of the IEEE or their respective societies. More efficient TAB meetings are required and probably a reduction from 3 to 2 meetings per year.

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- Division Director Candidates must be more carefully selected and must be aware of the needs of the societies within the Division.
- There is a perception of "old boys' network" that must be corrected for the committee chairs and division directors.


## 16. SUMMARY

## Greatest successes?

- In the face of the major consolidation in the main industry in which we support the society has maintained both the quality and vibrancy of our extensive conference program
- We have put in place a formal mechanism for organizing our flagship conference in both Europe and Asia as part of our commitment to globalization. An example of this was the largest ever Intermag Conference held in Amsterdam in 2002.
- We have increased non-US representation on our AdCom and Technical Committees while simultaneously reducing the average age of our volunteers.
- We have completely digitized the back catalog of our Transactions and moved to an all electronic publication process.


## Biggest opportunities?

Interdisciplinary activities such as hybrid magnetic-semiconductor spin electronic devices and biomagnetism will come to dominate magnetics technology in the next decade. Both these topics will require the Society to cooperate with other parts of the IEEE.

Biggest weaknesses?
Our biggest challenge is to recapture member growth, recognizing that our strongest membership base is changing.

## 17. BEST PRACTICES

List any Best Practices you'd like to share with other Society/Councils

## Society Leadership Structure

- The IEEE Magnetics Society purposefully separates the functions of society governance and society operation to maximize volunteer time and learning.
- Through the expansion of the Technical Committees we have increased non-US representation and lowered the age distribution on our AdCom and conference organizing bodies.
- The IEEE Magnetics Society is governed by three elected officers, Secretary/Treasurer, Vice President, and President and advised by the Past President, all with effective terms of two years. The operating issues of the IEEE Magnetics Society are administered by three primary committee chairs, Publications, Conferences, and Finance, with terms of at least 5 years and by an Executive Director.
- The same individual progresses through all three elected offices. As Secretary/Treasurer, the officer receives mentoring from the three primary committee chairs on society operations. As Vice President, the elected officer chairs the Planning Committee. As President, the elected officer assumes the leadership of the Society with 4 years of society governance experiences.
- The IEEE Magnetics Society President involves the Vice President in three TAB meetings. The Vice President attends the June TAB meeting in his first year, the February TAB meeting in his second year to attend the new officers' workshop, and the November TAB meeting in his second year to prepare for the leadership transition of the next year.

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## 18. PREVIOUS REVIEW

Following is the date of the previous review and any recommendations made at that time. Describe any changes resulting from each recommendation:
We have maintained an extremely strong Transactions. Through our fiscal prudence and forethought we have established the capability to be proactive.

The Planning Committee has become a forum for our new initiatives. It served to focus the AdCom on the issues. The Planning Committee discussed and studied the issues and then presented the facts in a brief, cogent message to the AdCom that enabled them to act quickly and efficiently.

The date of the last review of the Magnetics Society was February 1998. Follow-up to the recommendations of the Review Committee was complicated owing to the long delay before receiving the report: it was received in June of 2000. By this time much continuity was lost.

The Review Committee believed the Society to be generally well-managed, but did make several suggestions, as discussed below.

1. The Society had traditionally chosen to price the non-member subscription to the Transactions below that recommended by the IEEE. The Review Committee suggested that the Society rethink this position, as we may be giving up significant revenue. We are now in line with the IEEE recommendation.
2. The Review Committee suggested that the Society rethink the process by which members of the AdCom are elected. Many societies have a direct member vote, and this approach is encouraged by the IEEE. This is now under discussion in the AdCom and should be brought to a vote this year (2003).
3. The Review Committee suggested that the pricing of conference registration and exhibit space be re-examined. They believed these items may be underpriced relative to the market. In response, the cost of conference registration has been one of the most contentious topics over the past five years. Increasing it further would not strengthen member relations. The Society believes these items are not underpriced relative to the market in the Magnetics Community.
4. The Review Committee recommended increasing the speed of publication and strengthening the Newsletter. Since the review, the Society has gone to all-electronic distribution of the Newsletter, and has increased the frequency of its distribution.
5. The Review Committee recommended that the Society continue to strengthen the Long Range Planning Committee Process. The Society now has an active Planning Committee chaired by our Vice-President.
6. With regard to publications, the Periodicals Review Committee recommended that the Society move away from camera-ready copy, as it can be perceived to be of lower quality, and is not electronically searchable. The Society is pleased to report that camera-ready copy has been eliminated since the date of the last review.
7. The Periodicals Review Committee recommended that the Society provide executive support for editors, and centralize the editorial operations. It was suggested that

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discussions with the IEEE Periodicals Department would be helpful. The Magnetics Society now employs an Editorial Assistant and has centralized editorial operations as part of the implementation of Manuscript Central on-line peer review.

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THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.
CONSTITUTION
for the
IEEE MAGNETICS SOCIETY
Article I
Name and Object

Section 1.1 This organization shall be known as the IEEE Magnetics Society.

Section 1.2 Its objects shall be scientific, literary, and educational in character. The Society shall strive for the advancement of the theory and practice of electrical and electronics engineering and of the allied arts and sciences, and the maintenance of a high professional standing among its members, all in consonance with the Constitution and Bylaws of the IEEE and with special attention to such aims within the field of interest of the Society as are hereinafter defined.

Section 1.3 The Society shall aid in promoting close cooperation and exchange of technical information among its members and to this end shall hold meetings for the presentation of papers and their discussion, and through its committees shall study and provide for the needs of its members.

Article II
Field of Interest
Section 2.1 The Field of Interest of the Society shall be:
"Treatment of all matters in which the dominant factors are the fundamental developments, design, and certain applications of magnetic devices. This includes consideration of materials and components as used therein, standardization of definitions, nomenclature, symbols, and operating characteristics; and exchange of information as by technical papers, conference sessions, and demonstrations."

Section 2.2 The field of interest of the Society may be enlarged, reduced or shifted moderately as the needs of the occasion indicate with the provision that such revisions shall be processed as an amendment to this constitution.

Article III
Membership
Section 3.1 Society Membership shall be available exclusively to IEEE members as defined by the IEEE Bylaws.

Section 3.2 Society Affiliates as defined by IEEE Bylaws may participate in the Society activities, as provided by the IEEE Bylaws, the TAB Manual, and any additional limitations imposed by the Society Bylaws.

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Article IV
Financial Support
Section 4.1 The Society shall collect from its members and affiliates an annual assessment or fee, in accordance with the IEEE Bylaws and the TAB Manual. The amount of the fee shall be prescribed in the Society Bylaws.

Section 4.2 The Society may make registration charges at its Society meetings, symposia, conferences, and conventions. The registration fee for non members of the IEEE may be higher than for IEEE members.

Section 4.3 The Society may raise revenues by other means, such as advertising, shows, requests for contributions, and charges for sending out notices to non-Society members, provided such means are consistent with the TAB Manual, and do not encroach on revenue fields of prior established groups or of sections. Any new revenue means not explicitly covered by the TAB Manual must be approved by the General Manager before being adopted by the Society.

## Article V <br> Administration of the Society

Section 5.1 Administrative Committee Membership and Offices.
5.1.1 The Society shall be managed by an Administrative Committee of 18, expandable to not more than 24 elected members of the Society plus ex-officio members with or without vote, as specified in the Bylaws. No less than $70 \%$ of the voting members of the Administrative Committee shall be elected members.
5.1.2 The Terms of the 18-24 members at large of the Administrative Committee shall be for three years, $1 / 3$ of which are to be elected each year. Only two consecutive full terms are permitted, but eligibility is restored after a lapse of one year.
5.1.3 The Administrative Committee shall annually elect one of its elected members as President, and another as Vice President, whose terms shall be for one year. A SecretaryTreasurer shall also be elected annually for a one-year term. A President may not be re-elected for more than two consecutive terms.
5.1.4 Newly elected President, Vice-President and members of the Administrative Committee shall assume office on the first of January of each year, unless a different time is provided by the Bylaws.

Section 5.2 Duties and Responsibilities of the Administrative Committee.
5.2.1 The duties and responsibilities of the officers shall be as defined hereunder and in the Bylaws and as delineated by the Administrative Committee.

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5.2.2 The President, under direction of the Administrative Committee, shall have general supervision of the affairs of the Society. He/She shall preside at meetings of the Administrative Committee, at general meetings of the Society, and at the Annual Meeting of the Society, and have such other powers and perform such other duties as may be provided in the Society Bylaws, or as may be delegated to him/her by vote of the Society Administrative Committee. In his/her absence or incapacity his/her duties shall be performed by the Vice President.

The president is a member of the IEEE Technical Activities Board (TAB) and when notified of a meeting of said Board, he/she shall insure representation of the Society at such meeting by himself/herself, or by an alternate. If an alternate cannot be found, the President shall present the views of the Society by a letter of proxy.
5.2.4 The Administrative Committee may utilize the services of Headquarters as bursar, for all or part of the Society funds, as provided by the TAB Manual. If any part of the Society funds is received and deposited separately, the terms and conditions shall be in accordance with the TAB Manual and subject to the provisions of the Society Bylaws and to any special limitations imposed by the Administrative Committee.
5.2.5 Neither the Magnetics Society, nor any officer or representative thereof, shall have any authority to contract debts for, pledge the credit of, or in any way bind the IEEE, except in accordance with budgets previously approved.

Section 5.3 Sub Organization of the Society
5.3.1 The Administrative Committee may establish standing or ad hoc committees as prescribed in the Bylaws, including both Standing Committees (e.g., Awards, Chapters, Membership, Nominations) and Technical Committees. All appointments to committees and similar posts shall be for a term of one year or until successors are appointed or the committees dissolved, except where other specifically designated terms of office are established by the Administrative Committee. Technical Committees may be established as needed to develop specific areas of the field of interest.
5.3.2 The President of the Administrative Committee shall be an ex-officio member of all committees of the Society.
5.3.3 Sub-groups may be formed as provided in the TAB Manual. The nature of sub-groups and the supervision of sub-group affairs other than by the Administrative Committee, shall be as prescribed in the Bylaws.
5.3.4 The President of the Society, with the advice and consent of the Administrative Committee, shall appoint the Chairperson of and give the charge to each Committee within the Society.

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Article VI
Nomination and Election of Administrative Committee
Section 6.1 Nominations.
A Nominating Committee shall prepare a ballot for the election of members at large to vacancies on the Administrative Committee.
6.1.2 A provision shall be made whereby Society Members can place a nominee for member at large on the ballot by petition.
6.1.3 The Nominating Committee shall prepare a ballot for the election of officers of the Administrative Committee.
6.1.4 Makeup of the Nominating Committee and the nomination procedure shall be prescribed by the Bylaws.

Section 6.2 Elections.
6.2.1 Election of new members of the Administrative Committee shall be made by the incumbent voting Administrative members.
6.2.2 Election of new officers of the Administrative Committee shall be made by the voting Administrative Committee members with retiring elected members replaced by the newly elected members resulting from the election of Section 6.2.1.

Section 6.3 Vacancies.
6.3.1 Within-term vacancies on the Administrative Committee shall be filled by appointments, for the unexpired terms, by the President. The appointment shall be ratified by a majority vote of the Committee.

## Article VII Meetings

Section 7.1 The Society may hold meetings, conferences, symposia or conventions either alone or in cooperation with Sectional, Regional, or National Convention Committee of the IEEE, or other technical organizations, subject to the TAB Manual. The Society shall sponsor at least one technical conference of international scope each year, which may be held during the International Convention, or during some other IEEE meeting, or as a separate conference.

Section 7.2 Meeting, Conferences or Conventions of the Society shall be open on an equal basis to all members of the IEEE. The Society may not sponsor or co-sponsor a meeting which is subject to security clearance.

Section 7.3 The Administrative Committee shall hold at least two meetings per year, one an Annual Meeting, usually at the Intermag Conference (or the Joint Intermag-MMM Conference). A second meeting may be conducted by electronic media, if agreed to by a

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majority of the elected members of the Administrative Committee, but only if there is no suitable major Magnetics Society Conference for a second meeting in any calendar year. Other meetings of the Administrative Committee shall be held at such times as are found necessary and/or convenient. Special meetings of the Committee may be called by the President of the Society at his/her own discretion or upon request of three other members of the Committee, with at least 20 days notice. Such additional meetings may also be conducted by electronic media.

Section 7.4 Seven elected members of the Administrative Committee shall constitute a quorum. All voting members shall have an equal vote.

Section 7.5 A majority vote of those voting members of the Administrative Committee attending a meeting shall be necessary for the approval of actions except as otherwise provided in this constitution.

Section 7.6 Business of the Administrative Committee may be handled by correspondence, telephone, or telegraph where in the opinion of the President matters requiring action can be adequately handled in that manner. A majority vote of the members of the Committee is necessary for approval of actions handled in that manner, unless otherwise provided.

Article VIII
Publications
Section 8.1 Publications undertaken by the Society shall be subject to IEEE policies and to any further guidance or controls prescribed by the Administrative Committee or its duly appointed committees. The Society shall be responsible for the financial aspects of its publications program.

Section 8.2 The President, with the advice and consent of the Administrative Committee, shall appoint such editors as may be required to implement the publication program. The duties of an editor, and his/her compensation, if any, shall be prescribed in the Bylaws.

Article IX
Amendments and Bylaws
Section 9.1 Amendments.
9.1.1 Amendments to this Constitution may be initiated by petition submitted either by twenty-five members of the Society or by the Administrative Committee, such petition being submitted to the TAB, and by the TAB to the Executive Committee of the IEEE for approval.
9.1.2 Amendments to the Constitution may be adopted by a two-thirds of the Administrative Committee members present at a meeting provided that notice of the proposed amendment has been

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sent to each member of the Administrative Committee at least 20 days prior to such meeting; or an amendment may be adopted by a two-thirds mail vote of the members of the Administrative Committee provided a 30-day period is provided for such responses. After approval by the Executive Committee of the IEEE, the proposed amendment shall be published within 120 days after said approval in the Society Transactions or Newsletter, or otherwise publicized by direct mailing to the membership, with notice that it goes into effect unless ten percent of the Society members object within 30 days. If such objections are received, a copy of the proposed amendment shall be mailed with a ballot to all members of the Society at least 30 days before the date appointed for return of the ballots, and the ballots shall carry a statement of the time limit for their return to the IEEE office. When a mail vote of the entire Society membership is made necessary, approval of the amendment by at least two-thirds of the ballots returned shall be necessary for its enactment or by publication on the World Wide Web Magnetics Society pages.

Section 9.2 Bylaws
9.2.1 Suitable Bylaws, and Amendments thereto, may be adopted by a two-thirds vote of the voting Administrative Committee members present at a meeting provided that notice of the proposed Bylaw, or Amendment, has been sent to each member of the Administrative Committee at least 20 days prior to such meeting; or a Bylaw, or Amendment, may be adopted by a two-thirds mail vote of the members of the Administrative Committee provided a 30-day period is provided for such responses In either event, the proposed Bylaw, or Amendment, shall be published in the Society Transactions or Newsletter. No Bylaw, or Amendment, shall take effect until it has been mailed to the TAB Secretary for the TAB file.

## IEEE MAGNETICS SOCIETY BYLAWS

1. Nature of Bylaws: These Bylaws are intended to provide general, and in some cases explicit instructions on the conduct of SMAG affairs. For some information on the underlying regulations, reference should be made to the SMAG Constitution and the IEEE Technical Activities Manual which includes the Constitution and Bylaws of the IEEE. These may be obtained through the SMAG Secretary. Amendments to these Bylaws may be made by means of the procedures described in Article IX, Section 9.2 of the SMAG Constitution. Decisions on procedures made and voted by the AdCom as reported in its Minutes are binding as written and approved. Only the most important and time independent procedures shall be incorporated into the Bylaws. The AdCom is required to establish a formal procedure for review of the Bylaws. The minutes of the AdCom shall show the results of examining the Bylaws for needed changes at least once a year.
2. Membership: There shall be only one grade of Society membership available to all IEEE members, based on payment of the annual fee prescribed in Bylaw 5.4.1.

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2.1 Honorary Life Members: Such membership, exempt of the payment of the annual fee, shall be based on the recommendation of the Society Awards Committee, the endorsement of the Society Administrative Committee, and the approval of the General Manager of IEEE. (See 7.5.1a and 7.5.6))
2.2 Affiliates: Affiliation may be based on membership in other societies that have been recognized for affiliate purposes by specific action of the Administrative Committee. A list of approved societies will be maintained by the IEEE. Further, affiliates may join in accordance with any other provision that may be incorporated in the IEEE Technical Activities Manual.

A Society Affiliate cannot serve in elective office in the Society or in a Chapter or vote for candidates for these offices. An Affiliate can serve in any appointive office in the Society or a Chapter of the Society. A Society Affiliate is entitled to receive notices of all meetings sent to Society members, to receive copies of publications of the Society, to attend and participate in any function of the Society by payment of IEEE member charges, and to receive any award bestowed upon him/her by the Society. A Society Affiliate may not receive any IEEE benefits that are derived through IEEE membership except as approved by the Executive Committee of the IEEE.
2.3 Students: An exception to the annual fee shall be made for students, as prescribed by IEEE rules and regulations. The current student fee for membership in each Society or Group.
3. Administrative Committee: Function: The AdCom is responsible for organizing the Society operating structure. It shall provide administrative support for those who directly manage Society activities. It shall charge the managers of Society affairs with their specific responsibility and authority where not specifically covered by the Bylaws or Constitution. It shall ensure that Society activities are conducted so as to advance the professional interests and integrity of its members and the IEEE, make effective use of Society funds, and avoid incurring unnecessary financial risks. Many provisions for duties, terms of office and eligibility are covered in the SMAG Constitution, Article V.
3.1 Elected Members: Article V, Section 5.1 of the SMAG Constitution provides that the AdCom shall consist of 18, expandable to not more than 24 , elected members, plus ex-officio members. The number of elected members of the AdCom shall be determined by the president in consultation with the AdCom. At last 70 percent of the voting members of the AdCom shall be elected members.
3.2 Ex-Officio Members: The IEEE TAB Secretary shall be an exofficio member of the AdCom without vote. The Chairperson of each Department shall be an ex-officio member of the AdCom with vote, if he/she is not already an elected member. Each former President of the AdCom shall be an ex-officio member with vote

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for the two years following his/her service as President, if he/she is not an elected member. The Chairperson of the Nominating Committee shall be a voting ex-officio member of the AdCom if he/she is not an elected member. The President of the AdCom may appoint other ex-officio members with the consent of the AdCom. The voting privileges of appointed ex-officio members of AdCom shall be determined at the time of their appointment. In View of other provisions for the management of Departments, the number of ex-officio members of the AdCom should be kept as low as is practical.
3.3 In order to ensure a continuously active AdCom, elected members who miss three consecutive meetings will be dropped from membership in the absence of extenuating circumstances. Vacancies thus or otherwise created shall be filled by the appointments for the unexpired terms by the President with the consent of the AdCom.
4. Nomination, Election and Terms of Office of the AdCom: Basic provisions for elections are included in the SMAG Constitution Article V, Section 5.1, and Article VI. Members and officers of the AdCom are elected from a slate of nominees prepared by the Nominating Committee. The Nominating Committee, whose operations are covered in Section 6.2.7 of the Bylaws, shall be reconstituted on or before April 15 of each year. Elections to fill AdCom vacancies must be completed before September 15 of each year. Elections of officers shall be completed before November 1. All Terms of office commence on January 1.
4.1 AdCom Members: The term of office of each elected AdCom member shall be three years. Terms shall be staggered so that one-third of the terms of office expire each year.
4.2 AdCom Makeup, Terms of Office: These are covered in the SMAG Constitution, Article V, Section 5.1. An AdCom member whose second term is about to expire may be nominated and elected an officer. In such cases, his/her membership shall be extended on an ex-officio basis, with vote, for as long as he/she serves as an officer.
4.3 Nomination for AdCom Members: A slate of nominees for vacancies on the AdCom shall be prepared each year by the Nominating Committee. The Chairperson of the Nominating Committee shall cause to be published and distributed to the entire Society membership a call for nominations, prior to July 15. A Nominating petition carrying 25 or more names of Society Members shall automatically place that nominee on the slate to be presented to the AdCom.
4.4 Elections to the AdCom: The AdCom currently in office shall elect nominees to fill the vacancies to occur on the succeeding January 1. Election shall be by secret-letter ballot. The election shall be completed by September 15. The election shall be conducted by the Chairperson of the Nominating Committee. The ballot shall be mailed to the AdCom members by the Nominating Committee Chairperson at least 30 days in advance of the September 15 election date. A plurality of votes returned shall

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elect. The Chairperson of the Nominating Committee shall not vote unless there is a tie, in which case the Chairperson shall break the tie. The Chairperson and Secretary of the Nominating Committee shall submit the names of newly elected members to the Chairperson of the IEEE Technical Activities Board. Unless disapproval of such elected members is received within 50 days of such transmittal, the elections shall become final.
4.5 Nomination and Election of Officers: Following the election of the incoming AdCom members, the Nominating Committee shall submit nominations for President, Vice President, Secretary and Treasurer to all who will be members of the AdCom in the succeeding year. Nominees must be elected members of the AdCom or incumbent officers on ex-officio term extensions. Again, the Nominating Committee Chairperson shall conduct the election, and not vote unless there is a tie. Elections shall be by secretletter ballot. Ballots shall be mailed to AdCom members before October 1, and the returned ballots must be postmarked before November 1. A majority of the returned ballots shall determine the election. Election by secret-letter ballot and the one month for voting are intended to give each AdCom member the opportunity to vote.
4.6 In-Term Vacancies: Filling of vacancies among members of the AdCom is by appointment as specified in the SMAG Constitution, Article VI, Section 6.3. If an officer, other than the President leaves a vacancy, the Nominating Committee shall present one or more nominees by letter ballot to the AdCom, which will vote. Procedures of Section 4.5 above should be followed. Newly elected members of the AdCom and officers who leave vacancies before taking office shall be replaced by the above procedure after the new members and officers take office. If the Presidentship is left vacant, the Nominating Committee shall within one month, if possible, initiate the normal election procedure for officers, Section 4.5.
5. AdCom Operations: The President and officers shall conduct the business of the AdCom subject to the pattern established by the AdCom except where specifically provided for in the SMAG Constitution and Bylaws. As provided by the SMAG Constitution, Article VII, Section 7.4, the quorum shall be seven elected members. Each elected member and ex-officio member with vote shall have one vote. The presiding officers shall vote only in the event of a tie. Except where otherwise provided in the Constitution or Bylaws, business shall be transacted on the basis of a simple majority of those (voting) members of the AdCom attending the meeting.
5.1 Agenda: No AdCom meetings shall be held for the purpose of transacting business unless each member shall have been sent notice of the time and place of such meeting 20 days prior to the scheduled data of the meeting. If less than a quorum attend a duly called meeting, tentative actions may be taken which will become effective upon subsequent ratification, either at a meeting or by mail by a sufficient number of members as to constitute a majority. Minutes of such meetings shall be mailed by the Secretary to each Committee member who shall register

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his/her disapproval of any actions taken at such meetings within ten days after receiving said minutes, or he/she shall be deemed to have ratified.
5.2 Robert's Rule of Order (Revised), shall govern conduct of AdCom meetings on all matters not otherwise specified in these Bylaws or the Constitution.
5.3 Duties of Officers and Members of the AdCom: It is intended to retain as much flexibility in the operations of the AdCom as possible. Therefore, with the exception of a few minimum requirements, the provisions of this section are intended to serve as general guidelines without being binding in detail. It is the responsibility of all officers to continue in service until their successors have the opportunity to be briefed, receive the official files appropriate to their offices, and in other respects take the reins of office. Transfer of Society records and files should always be confirmed in writing, and with copies to the other officers of the Society. Files and records of the Society should never be transmitted except in person or by registered mail.

Each officer should transmit his/her file for the past year in toto to his/her successor. The complete file transmitted to him/her from the previous year should be first weeded out of all but important documentary correspondence, amalgamated with the similar collection from the past, and then transmitted to his/her successor. In this manner, an officer retains at all times a complete file for the previous year and an "archive" file for prior years. At the discretion of the AdCom President, all or portions of the "archive" files can be transferred to the SMAG section of the IEEE Archives.
5.3.1 President: The president shall supervise the affairs of the Society and shall speak for the Society on all matters not specifically delegated to others. Although many specific provisions for operating procedure are included in the Constitution and Bylaws, it is the President who heads the Society, and strong initiative on his/her part is to be expected. The President is automatically a member of certain IEEE governing committees and is the equivalent of heads of similar groups in IEEE, in other societies, and in other countries. The President is therefore expected to use the example of successful SMAG activities to influence for the better the conduct of IEEE affairs, and where appropriate the affairs of other professional groups in the field of magnetics.
5.3.2 Vice-President: The Vice-President shall fulfill the duties of the President in his/her absence or incapacity. He/She shall fulfill such other functions as the President of the AdCom shall from time to time direct.
5.3.3. Secretary-Treasurer: The Secretary-Treasurer shall be responsible for keeping the records of the AdCom in the areas commonly ascribable to his/her functions. He/She shall prepare and distribute meeting notices and minutes in sufficient detail that they by themselves,

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with a minimum of supplementary material, constitute a satisfactory record of decisions made by the AdCom, and other Society affairs. He/She shall maintain a scrupulously dated sequential file of minutes, Division reports, and other primary correspondence for transmittal to his/her successor. This file is the permanent record of the SMAG.

The Secretary-Treasurer shall keep the financial records of the Society. He/She should be able to match rates of receipts and expenditures with those projected in order to evaluate progress of the Society financial plan. The Secretary-Treasurer
endorse and transmit for payment by the Society all bills not otherwise provided for specifically in the Bylaws in order to ensure that all payments are within the limits authorized by the AdCom.
5.4 Society Funds: The Society may raise funds as specified in Article IV of the Constitution and in the IEEE Bylaws and the IEEE Technical Activities Manual augmented by IEEE directives. The Society may spend funds within the same restrictions. Receipts and expenditures must fall within the classifications established by the SMAG Annual Budget. If the expenditures do not correspond with the budget projections, the Treasurer should consult with the Finance Chairperson. It is the responsibility of the Finance Chairperson to see that expenditures follow the budget plan and to obtain AdCom approval for the modifications of this plan when necessary. 5.4.1 The annual Society fee shall be set by the AdCom and is approved by the IEEE General Manager. The Affiliate fee shall be equal to the Society fee plus an IEEE support surcharge set by the IEEE Executive Committee. Actual fees are to be found in the current IEEE fee schedule.
5.4.2 IEEE shall act as bursar for all Society funds except as specified hereunder. Billings and receipt of the annual fee shall be via the IEEE, Membership and Fiscal Departments. All other fiscal affairs shall be handled through the office of the TAB Secretary.
5.4.3 Financial arrangements of symposia sponsored or cosponsored by the SMAG shall be covered by a separate budget with adequate safeguards against undue risk. If such symposia are continuing, periodic affairs, they shall be covered by a Constitution containing financial plans and specifying technical scope, which need be approved by the AdCom and IEEE General Manager only once. Specific budgets for each symposium must be approved by the AdCom and the IEEE General Manager. Further details of SMAG conferences, both technical and financial, fall under the jurisdiction of the Conference Executive Committee by Section 7 of these Bylaws.
5.4.4 In other activities involving the Society or any of its activities or subgroups, financial commitments shall be approved by the AdCom. The AdCom and managers of Society activities should make full use of the SMAG Finance Chairperson and the IEEE TAB Secretary to investigate possible risk in order to safeguard Society funds.

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6. Standing Committees: There are certain definable administrative tasks in connection with Society activities which are of a perpetual nature. They would normally be delegated to members of the AdCom. Since these tasks involve gathering of information and coordinating certain Society operations, the advice of these delegated members should be widely useful throughout the SMAG organization. In order to identify these sources of information to others, they are listed in these Bylaws as Standing Committees with short descriptions of their responsibilities. The Standing Committee Chairpersons are appointed by the AdCom President with the consent of the AdCom. The term of office is one year. The number of terms of office is not limited.
6.1 Duties of Standing Committees: Each Standing Committee Chairperson is expected to gather information from IEEE documents, from other IEEE Societies, and from non-IEEE groups where appropriate to establish a frame of reference for SMAG operations. He/She should gather and put in writing the relevant SMAG and IEEE Constitution and Bylaws sections and other rules and regulations which must be observed. He/She should remain aware of the status of the Society within his/her sphere, and should be prepared to report informally at each AdCom meeting. He/She should take the initiative to inform the AdCom of developments which might affect its plans. He/She should prepare a brief annual report which should be sufficient to transfer the task to a successor without wasteful repetition of effort. Each Chairperson may assemble a committee at his/her discretion except as otherwise indicated in 6.2.6.1 and 6.2.7.1. Formation of such committees shall be communicated to the AdCom for its approval.
6.2 Roster of Standing Committees: Standing Committees may be added or deleted by the AdCom as the need arises through amendment of the Bylaws. The following description of tasks is in outline form in most cases. Further detail should be developed by the appointed Chairperson, approved by the AdCom and included in his/her written report.
6.2.1 Finance Committee:

1. Establish long-range Society financial policy and plans.
2. Monitor and analyze financial data and make appropriate recommendations to committees on expenses such as publication costs, meeting expenses, etc.
3. Prepare the SMAG Annual Budget for AdCom approval and submission to IEEE Headquarters.
4. Review proposed conference budgets and act as consultant to treasurers.
6.2.2 Membership Committee:
5. Initiate membership drives, prepare and distribute membership material in special mailing and at SMAG sponsored meetings.
6. Maintain contact with SMAG Chapters and comparable

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organizations in the U.S.A. and abroad for purposes of developing membership.
3. Initiate steps to have professional societies approved for their members to qualify for SMAG Affiliate.
6.2.3 Publicity Committee:

1. Plan and carry out SMAG publicity campaigns.
2. Monitor Society and SMAG Chapters activities with the purpose of advising them of publicity obtainable.
3. Maintain active lists of publicity outlets.
6.2.4 Standards Committee:
4. Keep informed on IEEE standards activities and international standards commission, and serve on IEEE standards committees if called upon.
5. Transmit SMAG-generated standards to the appropriate IEEE committee.
6. Coordinate generation of standards in Technical Committees and suggest the generation of standards where it appears needed.
7. Act as a consultant to standards generation committees throughout the SMAG organization.
6.2.5 Constitution and Bylaws Committee:
8. Act as consultant to the SMAG on provisions and limitations of the SMAG and IEEE Constitution and Bylaws.
9. By constant surveillance, see to it that SMAG Constitution and Bylaws are consonant with those of IEEE, and current IEEE directives.
10. Examine AdCom decisions for those of sufficient general import to be included in the Bylaws.
11. Make recommendations to the AdCom for changes in the Constitution and Bylaws, and execute them when called upon.
6.2.7 Nominating Committee: The Nominating Committee is intended to assemble a slate of nominees to fill vacancies on the AdCom and present a slate of officers for election by the AdCom. It may be called upon by the AdCom to provide other slates of nominees if they are required and not otherwise provided for in the Bylaws. The Nominating Committee shall also conduct the elections for which it prepares ballots.
6.2.7.1 Membership: The Nominating Committee shall be reconstituted each year before April 15 by the President of the AdCom. The Chairperson shall be appointed by the AdCom President and other members shall be appointed by the AdCom President, with the concurrence of the Chairperson of the Nominating Committee. The Nominating Committee and its Chairperson shall be approved by the AdCom. There shall be at least two, not more than four members other than the Chairperson. The desirability and scheduling of meetings in person should be considered when

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selecting Nominating Committee Members. The Nominating Committee should not be larger than is necessary to perform its functions.
6.2.7.2 Operations: The Nomination Committee shall document in its minutes its methods of operation. These minutes shall be communicated to the AdCom for the permanent AdCom record. The Nominating Committee shall take all necessary steps to ensure that its nominating procedures are in accord with IEEE and SMAG constitution and Bylaws.
6.2.7.3 IEEE Nominations: In accordance with IEEE Bylaws, the duties of the Nominating Committee shall include the submission of nominations for the office of Divisional Director to the Divisional Nominating Committee, and the annual solicitation of names of potential candidates to be considered by the IEEE Nominations and Appointments Committee for service on Institute Committees and Boards.
7. Departments: The Departments are the centers of those activities which are the ultimate purpose of the Society. Each Department shall have a Chairperson who is administratively responsible to the AdCom. The Department Chairperson shall manage their Departments so as to carry out the policies set by the AdCom. Department Chairpersons are appointed for a one-year term by the President with the consent of the AdCom. Each Department Chairperson shall be an ex-officio member of the AdCom if he/she is not already an elected member.
7.1 Publications Department: The function of the Publications Department is to coordinate and execute the publications policy of the Society.
7.1.1 Publications Committee: The Publications Committee, chaired by the Department Chairperson, shall act as an advisory board and coordinating body on questions having to do with carrying out the publications program of the Society. It shall be constituted at the discretion of the Department Chairperson and approved by the AdCom. It will normally include editors and others having primary responsibility for Society publications. The Chairperson shall prepare an annual report consisting at the minimum of a summary listing:

1. Types of publications.
2. Volume, circulation, and cost of each publication.
3. Publication backlog.
4. Average processing time for manuscripts.
5. Publication Committee members.
6. Copies of minutes of Committee meetings.

Copies should be circulated to the AdCom and included in the minutes for the permanent record. The AdCom President and VicePresident shall be ex-officio members of the Publications Committee.
7.1.2 Transaction on Magnetics: The Transaction on Magnetics shall be the primary publication of the Magnetics Society. It shall contain the technical papers, review material, and

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essential notices which constitute the primary output of the Society. Its format, publication schedule, and content are major policy matters which shall be decided by the AdCom and executed by the Publications Department.
7.1.2.1 Editor: The Transactions editor shall be appointed by the Chairperson of the Publications Department with the approval of the AdCom for a term of three years. He/She shall have the responsibility for all aspects of publishing the Transactions.
7.1.2.2 Papers Review: The Transactions Editor may appoint Associate Editors to receive and handle reviews of manuscripts in a limited number of technical areas. The Papers Review Committee shall be appointed by the Editor. Papers review procedures shall be administered in accordance with IEEE and Society policies. Rules for manuscript preparation and review shall be available to those who request them, and shall be published at least once a year in the Transactions.
7.1.2.3 Special Issues: The Transactions Editor may appoint guest editors for special issues of the Transactions, and may delegate corresponding responsibility for assembling the body of technical papers to be included. Other aspects of publication and content of special issues of the Transactions shall remain the responsibility of the Transactions Editor.
7.1.3 SMAG Newsletter: The editor of the SMAG Newsletter shall be appointed by the Chairperson of the Publications Department for a term of three years with the consent of the AdCom. He/She shall have the responsibility for assembling the material and publication of the Newsletter in accordance with SMAG Policy.
7.1.4 Publications Costs: It is essential that publications costs remain within the annual budget prescribed by the AdCom. Projections on direct publication costs and editorial expenses should be initiated by the Chairperson of the Publications Department and submitted to the Chairperson of the Finance Committee for review prior to being presented to the AdCom for approval. Compensation of an Editor or of a secretarial assistant to an Editor is within the provisions of the IEEE rules and regulations.
7.2 Technical Committees Department: The function of the Technical Committee Department is to assemble committees of experts on various specialized technical areas of magnetics. Each Technical Committee shall:

1. Act as a committee to solicit and promote technical papers in cooperation with Transactions Editor.
2. Be available to the AdCom as a sounding board to gauge developments in specialized areas.
3. Act as a reservoir of program committee members and organizers of special sessions at SMAG-sponsored meetings and at IEEE meetings.
4. Organize informal workshops for the benefit of SMAG members on advanced topics.
5. Identify the need for and generate standards in relevant

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special fields.
6. Establish Technical Subgroups within the SMAG where appropriate (Technical subgroups are large and voluntary, whereas Technical Committees are small and appointed).
7. Through the above and other activities, it should be the objective of each topically oriented Technical Committee to develop the SMAG as the focal point for that activity and within its scope to promote the main objectives of IEEE and SMAG.
7.2.1 Technical Committees Council: The Department Chairperson shall form a Council consisting of all Chairpersons of Technical Committees. The Department Chairperson shall chair the Council. The purpose of the Council shall be:

1. To coordinate activities of Technical Committees.
2. To advise the Department Chairperson on initiating, dissolving and populating Technical Committees.
3. To provide one another with ideas stimulus in carrying out the purpose of the Technical Committees.

The Technical Committee Council shall be convened at the discretion of the Department Chairperson. It shall meet at least once a year. The Department Chairperson shall submit an annual report listing at the minimum:

1. Technical Committee personnel.
2. Specific Technical Committee activities such as workshops, sponsoring special issues of the transactions, organization of sessions at meetings, etc.
3. A copy of the minutes of Council meetings.

This report shall be circulated to the AdCom and included in the minutes for the permanent record. The AdCom President and Vice President shall be ex-officio members of the Council.
7.2.2 Technical Committees: A list of Technical Committees and their Chairperson shall be prepared by the Department Chairperson and shall be submitted to the AdCom for approval. The term of each Technical Committee Chairperson shall be one year. Each Technical Committee Chairperson shall prepare a statement of the scope of his/her committee which shall be subject to the approval of the Technical Committee Council. The Chairperson of each Technical Committee shall be responsible for planning and carrying out the activities of his/her committee.
7.2.2.1 Operations: The operation of each Technical Committee shall be in accordance with the Manual for Operation of Technical Committees, or other Administrative Common rules.
7.2.3 Technical Sub-Groups: A Technical sub-group (defined in 7.3) may be organized to cover a specified portion of the field of interest of the society. Each technical sub-group shall be governed by a Technical Committee. Sub-groups may be asked to organize sessions at a Society Symposium or Technical Conference and may also organize separate, specialized symposia. Sub-groups

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may be asked to organize special issues of the transactions or a special section in an issue. Any service for sub-group members, beyond those provided all Society members, must be paid for by the sub-group members. If this takes the form of a special subgroup assessment, its form and amount must be endorsed by the AdCom and approved by the General Manager of the IEEE.
7.3 Regional Chapters Department: Sub-groups of an IEEE Society are voluntary associations of a significant portion of the total Society membership, and hence, are not equivalent to any of the appointive committees. The two kinds of sub-groups are: Chapters, which are organized about a geographical area and cover the full technical scope of the Society; and Technical Subgroups, which are centered about a specific technical area of interest but extend throughout the membership without geographical bounds. Technical sub-groups are administered under the Technical Committees Department. The articles for incorporation of Chapters are fully treated in the IEEE Bylaws, in the IEEE Groups section of the Technical Activities Manual, and in the Section Manual.
7.3.1 Council of Chapter Chairpersons: A council shall be formed of Chapter Chairpersons, chaired by the Department Chairperson. The purpose of the Council shall be to exchange experience and suggestions for more effective programs. The Council shall be convened at the discretion of the Department Chairperson. The Department Chairperson shall prepare an annual report including at the minimum:

1. A list of active Chapters with chairpersons and number of members.
2. A summary of specific chapter activities and attendance.
3. A copy of the minutes of Council meetings.

This report shall be circulated to AdCom for the permanent record. The AdCom President and Vice President shall be exofficio members of the Council.
7.3.2 Chapter Organization: Each Chapter shall organize itself and elect its own officers, in accordance with guides and bylaws cited above.
7.3.3 Operations: The Chapters are largely independent of the normal Society activities. They must adhere only to the guides and bylaws cited above, and cooperate with the Department Chairperson as required herein.
7.4 Conference Department: The Conference Department shall consist of all SMAG Conference activities. It is under the direction of the Conference Executive Committee.

### 7.4.1 Conference Executive Committee (CEC)

7.4.1.1 General Guidelines: The purpose of the CEC is to perform, on the behalf of the Magnetics Society, the functions of coordination, evaluation, long-range planning, and supervision appropriate to each of the conferences sponsored, co-sponsored,

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or participated in by the Magnetics Society. In view of the fact that SMAG may participate in several conferences, each in a different role, the functions of the CEC should be expected to depend upon the specific conference. For any conference, however, the CEC represents the SMAG and IEEE and shall take certain minimum precautions with regard to technical content of the conference, the integrity and legal status of the conference and its sponsors, SMAG representation on conference committees, receipt of conference reports, and dissemination of information.

### 7.4.1.2 Responsibilities of the Conference Executive Committee:

1. The CEC has the full executive responsibility for the planning and execution and evaluation of all SMAG conferences.
2. The CEC is required to see that all SMAG conferences are compatible with SMAG policies, IEEE special directives on conferences and IEEE technical activities manual.
3. The CEC is responsible for maintenance and circulation of constitutions for its conferences. It shares the responsibility for action in co-sponsored conferences. In these cases, however, it is responsible to SMAG and IEEE for initiative in the review of constitutions.
4. The CEC is required to give summary reports to the AdCom, and prepare a short annual report suitable for inclusion in the SMAG annual report.
5. The CEC is required to obtain the SMAG President's approval and signature on all agreements which involve financial commitments beyond those provided for in approved budgets.
6. The CEC is required to review and approve, and subsequently to obtain the IEEE General Manager's approval on all conference budgets. In cases of cosponsorship, the CEC must obtain or at least confirm budget approvals from the other sponsors. It must also furnish all required conference and financial reports, to the General Manager. Communications should go via the Secretary of the Technical Activities Board.
7. The CEC should see that announcements of all SMAG conferences, workshops, SMAG technical sessions in General Meetings, etc., are noted in the AdCom minutes and that adequate news of these events is transmitted to the Transactions editor for publication.
8. The CEC should make its experience available to all SMAG members planning workshops, chapter meetings, sessions in General Meetings, etc.
9. The CEC is responsible for appointments to conference management committees, representatives to advisory committees, and all other SMAG representatives to technical conferences.
10. The CEC shall be responsible for the appropriate auditing of all conferences in which SMAG has a financial commitment.
11. The CEC shall arrange to receive, file for the record and distribute as appropriate the minutes, notices, and financial reports of the Conference Committees.
12. The CEC shall administer and approve all disbursements

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from the Conference Fund.
7.4.1.3 Membership: The CEC should ensure that all conferences in which SMAG participates be organized and conducted in the best interests of the SMAG membership. The CEC membership shall consist of:

1. Chairperson to be appointed by SMAG President and approved by AdCom.
2. Junior past, present, and all future (as they are appointed) INTERMAG Chairpersons.
3. Present Chairperson of the Conference on Magnetism and Magnetic Materials Steering Committee if a SMAG member, or its junior past (SMAG Member) Chairperson.
4. IEEE TAB Secretary (ex-officio).
5. At least one SMAG representative from each of the other conferences in which SMAG is involved.
6. Other such persons as the Chairperson may appoint, these appointments to be for one-year terms.
7.4.1.4 Officers: A Secretary shall be appointed by the CEC Chairperson with the consent of the committee. Other officers may be appointed at the discretion of the Chairperson with the consent of the committee.
7.4.1.5 Vacancies: If a member of the CEC ceases to be a member in good standing of his/her sponsoring organization, resigns, or becomes incapacitated, the CEC Chairperson shall take the appropriate steps to replace him/her in order to retain the representation called for in 7.4.1.3 above.
7.4.1.6 Delegation of Powers: With the exception of its explicit responsibilities for budget approvals, committee approvals, and its responsibility to investigate the fiscal and technical propriety of SMAG participation in conferences, the CEC may delegate its specific duties to appropriate persons. Delegation of these duties shall always be made a part of the CEC minutes.
7.4.1.7 Operations:
7. Meetings: The CEC shall meet at least twice a year to make or confirm major conference appointments, to formulate advance plans, and to receive reports from conference chairpersons. To avoid time delays, the CEC should be prepared to convene at the request of the major conference chairperson.
8. Voting: The business of the CEC shall be conducted on the basis of a simple majority of those voting. The quorum shall be $2 / 3$ of the membership. In cases where no policy questions are at issue, and adequate preliminary discussions have taken place, CEC votes can be taken by a mail ballot. In most cases the document to be approved should be initiated and circulated by the appropriate conference chairpersons along with explanatory material, with instructions for collection and tabulation by the CEC secretary.

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7.4.1.8 Conference Funds:

1. The Conference Fund

Disbursements from this fund are loaned to the
particular conference, meeting, or workshop upon request of the conference treasurer. Only meetings, conferences, workshops, etc., approved by the AdCom are eligible to receive loans from the Conference Fund. Upon completion of the conference, the loan is repaid to the Conference fund. In addition, one-half of the SMAG portion of the surplus is returned to the Conference Fund and the other half to the SMAG treasury. The balance in the Conference Fund should not exceed a sum to be determined by the Administrative Committee. When this balance is reached, the excess will be returned to the SMAG treasury.
2. Only the Magnetism and Magnetic Materials Conference is excepted from the provisions of this section. This conference is covered in section 7.4.3.
3. An audit committee will be appointed by the Chairperson of the Group to audit the Conference Fund yearly.
4. The secretary-treasurer of the Society will be bonded and disburse funds from the Conference Fund at the direction of the CEC Chairperson.
7.4.2 INTERMAG: The International Magnetics Conference (INTERMAG) is an annual SMAG sponsored conference which is covered by a separate INTERMAG Constitution.
7.4.2.1 Constitution: The CEC is responsible for maintenance of the INTERMAG Constitution. The Constitution and its revisions must be approved by the AdCom, and subsequently submitted to the IEEE General Manager through the TAB Secretary for approval.
7.4.2.2 INTERMAG Cosponsorship: An agreement for cosponsorship of an INTERMAG Conference is to be spelled out in a letter signed by the AdCom President; such a letter must contain signed agreements on financial responsibility, normally to be negotiated by the CEC and submitted to the AdCom and the IEEE General Manager via the TAB Secretary for approval. All such financial agreements negotiated by the CEC must carry the signature of the AdCom President.
7.4.2.3 Advance Planning: The CEC is expected to set the time, place, format and management of INTERMAG. Final choice of site, date, and Management Committee Chairperson (General Conference Chairperson) must be made at least 18 months prior to the Conference. In view of IEEE date conflicts and heavy demands on conference hotels, the decision should be made three years in advance. The results should be communicated immediately to the IEEE TAB Secretary who will informally clear the date, and pass the request to the IEEE Executive Committee for formal approval. The request for approval should be accompanied by a statement which briefly relates plans for the proposed conference to the most recent one. The CEC should also complete the form "Information on IEEE Sponsored Conferences" or its successor, which is required by the IEEE Executive Committee. One year

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before the Conference date the CEC shall notify the Executive Committee through the TAB Secretary of any substantive change in title, technical content, or budget and request confirmation of Executive Committee approval.
7.4.2.4 Conference Management Committee: The CEC appoints the Management Committee Chairperson. The Management Committee Chairperson in turn selects the members of his/her committee. This roster must then be approved by the CEC. Since the executive value of the CEC depends on its detachment from conference management, it should normally leave these matters in the hands of the Management Committee, including negotiation of agreements with cosponsors.
7.4.2.5 Finances: The CEC shall approve the Conference budget prior to the submission of the budget to the IEEE General Manager for approval. The CEC is obligated to the Management Committee for careful and prompt attention to this step. The CEC shall appoint an auditing committee and see that the audit is carried out promptly and effectively.
7.4.2.6 INTERMAG Bank Account: At the time of his/her appointment, the INTERMAG Treasurer shall become bonded in accordance with instructions from his/her Chairperson and open an account which shall be named (year) INTERMAG. The INTERMAG Treasurer shall request in writing appropriate funds from the CEC Chairperson. The CEC Chairperson will then direct the secretary-treasurer to disburse such funds upon approval of the CEC .
7.4.2.7 Records: The CEC shall insure that financial records are retained for a period of seven years, and that a proper IEEE report is filed. It shall retain such documentation as will make prior experience available to new management committees.
7.4.3 Conference on Magnetism and Magnetic Materials (CM3):
7.4.3.1 Constitution: The CEC is responsible to the SMAG for review of the CM3 constitution and are endorsed by SMAG through the act of annual conference budget approval.
7.4.3.2 Cosponsorship: Agreements concerning cosponsorship are covered by the CM3 constitution and are endorsed by SMAG through the act of annual conference budget approval.
7.4.3.3 Conference Advisory Committee: Management of the CM3 is provided for in its constitution. The CEC shall appoint five members to the Conference Advisory Committee each year for a three-year term, and others as necessary to fill unexpired terms of members who have resigned, etc. Nominations will be made in time for new members to attend the annual meeting at which they take office. These members shall be instructed to represent SMAG interests on the Conference Advisory Committee.
7.4.3.4 Budget: The CEC shall approve the Conference budget. The budget shall then be submitted for approval to the IEEE General Manager through the TAB Secretary along with a statement on SMAG

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approval.
7.4.3.5 Records: The Secretary of the CEC shall circulate minutes of the Steering Committee and the Conference Advisory Committee as part of the CEC minutes.
7.4.4 Other Conferences: The CEC shall assume appropriate responsibility for other conferences involving SMAG. Any conference which is intended to be a continuing periodic event should be covered by a constitution. The CEC responsibilities to such a conference should be covered by an addition to this section of the SMAG Bylaws.

### 7.5 Awards Department

The Awards Department, chaired by the Department Chairperson, shall act as an advisory board to the awards activities of the Society. It will usually include all chairpersons of the various awards committees. It shall be constituted at the discretion of the Department Chairperson and approved by the AdCom. Committees 2, 3, and 9 may be administered by chairpersons alone.

The Chairperson shall prepare an annual report covering all the awards activities. The department shall administer all society awards and those IEEE awards covering the Magnetics Society in accordance with Section 4 of the IEEE Policy and Procedures Manual.

The following committees shall constitute the Awards Department

1. Fellows
2. Distinguished Lecture Program
3. Scholarship Program
4. Equipment Grant Program
5. Student Awards
6. Society Achievement Award
7. Best Paper Award
8. IEEE Awards
9. Society Awards

The Awards Department Chairperson shall be responsible for the appointment of subcommittees to manage special SMAG or IEEE awards as needed to manage special awards situations as they arise.
7.5.1 Fellows. This committee shall consist of two independent subcommittees with no overlap of members.
a) Fellows nominating subcommittee. This committee shall assist in the nomination of qualified SMAG senior members to the Fellow Grade. This committee shall also recommend to the AdCom distinguished retired members of SMAG to receive an "Honorary Life Membership" in the Society. This award is given "in recognition and appreciation of valued service and contributions

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to the Magnetics Society" and, in addition to a waiver of SMAG membership dues (to be paid by the Society), an appropriate certificate shall be presented at a suitable time, ordinarily at the INTERMAG Awards Ceremony during the Plenary Session.
b) Fellow Evaluation Subcommittee. This subcommittee shall evaluate Fellow Grade nominations referred to SMAG in accordance with IEEE procedures.
7.5.2. Distinguished Lecture Program. This committee shall nominate candidates to this program each year. It shall receive suggestions from AdCom and other SMAG members and shall make a selection from among those nominated, based on achieving a balanced program as well as the total votes obtained by each prospective candidate.
7.5.3. Scholarship Program. This program shall be administered in accordance with the contract with the National Merit Scholarship Corporation. The SMAG financial commitment shall be set by the AdCom each year.
The awards of the Magnetics Society shall take account of the transnational character of the Society, in this case by making a specific travel award to two non-U.S. students to compensate for the Scholarship Program available in the United States only.
7.5.4. Equipment Grant Program. This committee shall administer the equipment grant program by issuing an appropriate announcement each year giving details of the application procedure. It shall receive the applications and evaluate them to determine the winner(s). The amount and number of equipment grants to be made each year will be set by the AdCom.
7.5.5. Student Awards. This committee shall administer all student awards. It shall propose to the Awards Department appropriate Student Awards which must be approved by the AdCom to be activated. Student Awards may include, but are not limited to, travel awards to conferences, best student paper award, for example, the H.F. Storm award, research awards, and scholarship awards.
7.5.6. Society Achievement Award. This award, to be presented to a member of the Society for outstanding technical achievements in magnetics and leadership in Society affairs, shall consist of a medal and/or a certificate as well as a monetary award, to be set by the AdCom. A committee shall be constituted of past recipients of this award and chaired by the Department Chairperson or his/her designated delegate to make the selection. This award shall be presented at a suitable time, ordinarily at the INTERMAG Awards Ceremony.

Achievement Award recipients are awarded Honorary Life Membership in the Magnetics Society.
7.5.7. Best Paper Award. The best paper shall be chosen by a committee that consists of the editors of the IEEE Transactions on Magnetics and at least one additional member, appointed by the Department Chairperson to chair this committee. It shall select

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"best papers" from the Transactions, each year, for submission to all IEEE "best paper" awards. Recognition to these papers may also be given in an appropriate manner by the SMAG, as recommended by this committee and approved by the AdCom.
7.5.8. IEEE Awards. This committee shall ensure that SMAG candidates are proposed to all IEEE awards, as appropriate.
7.5.9. Society Awards. IEEE policies regarding Society awards are stated in the IEEE Policy and Procedures Manual. Each Society Award must have a title and a prospectus. The prospectus shall define the qualities for which the award is to be made in such a way as to assist the various Awards Committees in evaluating candidates, and in such a way as to identify the SMAG and IEEE objectives which have been advanced by the candidates to be honored.
The prospectus for each award must be approved by the AdCom and shall be included as a part of these Bylaws.

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Posted by F.J. Friedlaender (fritzj@purdue.edu) September 14, 1998

