Recognizing the efforts individuals make to the IEEE at the Section, Region, Chapter and Society levels is key to encouraging and appreciating them. Our Region offers recognition in eight, individual and section, areas of support. They are:

- New Technical Concepts in Electrical Engineering
- Electrical Engineering Professionalism
- Promotion of Self-Development for Practicing Electrical Engineers
- Enhancement of IEEE IN Industry and Community Service.
- Electrical Engineering Management
- Electrical Engineering Support for Student Activities
- The William Terry Distinguished Lifetime Service Award
- Alex Gruenwald PACE Award

The submission of an application form and three endorsement letters are all that is required for nomination. I’m sure all of you out there know of someone worthy of one of these awards.

Our Section Awards Chair stands ready to facilitate the process and help in any way possible. The deadline, however, for submission is fast approaching. Our Awards Chair must forward all nominations to the Region 1 Awards Chair by June 15. Additionally, technical Societies and Chapters should contact the Chair of the Society or Chapter for additional information and help.

Another reward, though not often thought as such, available to many IEEE members is elevation to the rank of Senior Member. Any member who has been in professional practice for at least ten years and has shown significant performance over a period of five of those years is eligible. Visit http://www.ieee.org/organizations/rab/md/smprogram.html for additional information. The Section encourages all eligible members to apply for the Senior Member rank and is willing to sponsor and assist all who are qualified.

When we take the time to reward and recognize our achievements, not only do we thank those who care about our profession but also encourage new individuals to become involved.

Sincerely,
Paul Sartori

---

**IEEE Spectrum Journalism Internship**

The IEEE, the world’s largest professional technical organization with over 360,000 members worldwide, produces 30 percent of the world’s published literature in electrical engineering, computers and control technology. We’re proud to be the world’s leading publisher in electrotechnology, and want to add you to our success story. *IEEE Spectrum* (www.spectrum.ieee.org), the flagship magazine of the IEEE, is inviting applications for an internship program in technology journalism.

Developing journalists will help write and edit articles on issues in areas such as telecommunications, computer technology, and power and energy.

Internships range from a minimum of three months to a maximum of nine months. The deadline for applications is 2 May 2005. Support of $2,800 a month will be provided to successful candidates. The internship will begin 6 September 2005.

Applicants should have an undergraduate background in engineering or science and ideally will have completed one year in a graduate program in journalism or have equivalent early work experience in journalism. Successful candidate will work in New York City under the direction of senior editorial staff. To receive an application, contact Nancy T. Hantman at 212 419 7561 or n.hantman@ieee.org.
Spring Greetings to the NY Section

Announcing our newest members to the GOLD team. May Erne - GOLD Secretary & Adele Okoubo - GOLD Treasurer. Both are accomplished Graduate students at Columbia University. And there are more future leaders in the pipeline. Take the time to visit our site http://ieee.org/gold/nyc and keep up to date on GOLD's upcoming events and activities. Stay in touch during the summer months and subscribe to our distribution list. Write to LISTSERV@LISTSERV.IEEE.ORG and, in the text of your message (not the subject line), write: SUBSCRIBE GOLD-NY.

Best Wishes,
Nick Nonis - GOLD Chair
n.nonis@ieee.org

From the Editor

This month is full of events so take a look at our Calendar of Events page (see page 5).

The Monitor is in the process of developing a web site located at: http://ewh.ieee.org/cmte/nymonitor/ so please check it out. It will feature a full view calendar featuring events posted in the Monitor, an archive of old issues (which will include a text-only version), and will highlight important events each month.

You will also be able to opt-in for an email digest of the Monitor for your convenience on the website.

Check http://ewh.ieee.org/cmte/nymonitor/ for more details!

Sincerely,
IEEE NY Section
Monitor Editor
Victor Butler
At the recent IEEE-USA Leadership workshop a new tool for helping our members seeking employment was discussed. As some of you know the IEEE-USA website, under careers navigator has some support programs for this. Coming soon will be a new addition to this site. IEEE-USA Job Navigator. This tool will provide members to quickly connect to employers that are hiring, build and send effective resumes, and link to salary levels and other career resources. The service will be available on trial basis and then requires a minimal fee to get access for a period of six months to a year.

Features of the Job Navigator will include:
- Job Search Capabilities
- Saved Searches
- Resume Builder and Storage
- Resume Blast, for distribution
- Applied job Tracking
- Job Description Lookup
- Salary & Career Resources

IEEE-USA Job Navigator will provide members to quickly connect to employers that are hiring, build and send effective resumes, and link to salary levels and other career resources. The service will be available on trial basis and then requires a minimal fee to get access for a period of six months to a year.

Get on the IEEE-USA web site and check out this addition to resources for helping our members seek and retain employment.

New York Section PACE Calendar of Upcoming Events:
The following are proposed Section activities. Please contact me if you plan to attend a meeting.

May 11;    General Meeting
June 8;    General Meeting

If you have suggestions on areas of professional activities that interest you please contact me.

Peter Greco
PACE Chairman
Tel.: 212-614-3357    Fax: 212-529 5237
e-mail: p.j.greco@ieee.org

The Engineers Guide to Lifelong Employability
This is a practical complete resource book on locating and obtaining good jobs throughout your career. Features over 200 pages of in-depth text that will allow you to master the engineering job search.
IEEE Members: $19.95

Engineering Careers into the 21st Century
Offers strategies and insights for engineers working in today’s dynamic professional environment IEEE Members: $20.00

Entry-Level Employment Assistance Site:
If you are an engineering graduate, recent graduate, of IEEE Student Member looking for the first job this is one of the best places to begin your career. Special entry-level employment services include job listings, links to company sites and job-search tips and techniques:
<www.ieeeusa.org/EMPLOYMENT/entry.html>
Calendar of Upcoming Events

May 11, 2005 (Wednesday) Instrumentation & Measurement Chapter presents: Power Systems Operation and Control: Challenges and Future Directions. Speaker will be Behruz Fardanesh. 1 PDH credit will be awarded. Additional information: 718-862-7153; gsilverman@ieee.org; parking available.

May 17, 2005 (Tuesday) PES/IAS Presentation: Multi Scale Engineering and System Complexity. Reservation to: John Michelsen @ 914 798-9821 JohnM@GraphAlloy.com or Michael A. Miller @ 212 460-4911 MillerM@ConEd.com

May 17, 2005 (Tuesday) Tappan Zee Subsection — Research Challenge: Extending Invention Toward Innovation Ecosystem with speaker Shu-Ping Chang.

May 19th, 2005 (Thursday) Women in Engineering (WIE) and Graduates of the Last Decade (GOLD) Affinity Groups host a 2nd Social Networking Event. RSVP by Close of Business Day Thursday, May 12th. Email all inquiries & RSVPs to gold-nyc@ieee.org or drivera938@ieee.org.

June 16, 2005 (Thursday) PES/IAS Technical Discussion Group Meeting and the Edison Engineering Society – Presentation: To Be Determined in the Con Edison Executive Dining Room, 4 Irving Place, 19th Floor, New York, NY. For information or Reservation call : Sukumar Alampur Sukumar@JRLA.com or (646) 674-6351 / Jim Nucito J.R.Nucito@IEEE.org or (732) 380-1100 Ext. 4149

June 22, 2005 (Wednesday) PES/IAS & ASME present Managing Risks in Design and Construction Projects. Reservation to: John Michelsen @ 914-798-9821 JohnM@GraphAlloy.com or Jill Anderson @ 212-460-3393 AndersonJi@ConEd.com

June 23, 2005 (Thursday) Engineering Management Society presents Redevelopment of the World Trade Center Site. RSVP by May 31, 2005. Contact Victor Simuoli, EMS Vice Chair, NY Section, 212-736-9100 x2237, vrsimuoli@urbanengineers.com

October 12, 2005 (Wednesday) Computer Society Meeting. Topic: Computer Communication Architectures by Dr. Morris Schwartz, Chief Communication Engineer from NYCT.

These events are also located on the Monitor website:
http://ewh.ieee.org/cmte/nymonitor
Please check here for event changes/updates.
IEEE New York Section,

GOLD and WIE Affinity Groups

By Adele Okoubo, Treasurer

On March 31, 2005, IEEE New York Section Women In Engineering (WIE) and Graduate of the Last Decade (GOLD) Affinity Groups co-hosted a social networking event at Metro Grill on 45 West 35th street. Darlene Rivera, WIE’s Chair and Nick Nonis, GOLD’s Chair superbly coordinated the event and it was a big success.

The food and raffle added excitement to the evening.

Our special guests included members of IEEE New York Executive Committee, Ken Vought, Section Vice Chairman, Peter Mauzey, Section Award and Recognition, Robert Pelligrino, Section Past Chair and Erico Guizzo, Associate Editor IEEE Spectrum Magazine.

Nick and Darlene gave the opening remarks, followed by the evening’s speakers, Ken Vought and Robert Pelligrino. They discussed the importance of volunteering and activism in IEEE, and encouraged the audience to get
involved and to expand its horizon. Then came the evening’s highlight, the speed networking presented by Nick Nonis. The goal was to get attendees accustomed to effective networking. A raffle drawing with magnificent prizes ended the gathering. Those who came had a wonderful time.

The next event will be on May 19, 2005 at the same location, Metro Grill on 45 West 35th Street between 5th and 6th Avenues. Hors d’hoerves will be served. This is a great opportunity to have fun and meet other GOLD and WIE members. For those interested, please drop a line or two to Adele Okoubo, Okoubo@ieee.org or Darlene Rivera, drivera938@ieee.org.

Visit the GOLD web site for future events!
http://www.ieee.org/gold/nyc
The New York / Long Island Chapter is on the move growing and expanding under the capable leadership of our chairman, Ralph Mazzatto. We won another PES High Performance Chapter Award. Ralph has a very forward-looking style that promotes programs, activities, and other functions that both encourage participation and increase membership on the executive committee and add additional chairs. Ralph is currently considering a trip to San Francisco to learn more about the PES and its inner workings.

Recently joining us to cosponsor Managing Risks in Design and Construction Projects is Jill Anderson. Jill is very active in the ASME and has been attending IEEE meetings at Con Ed for the past year. She is also a member of the IEEE and PES and looks to become more involved in the IEEE Chapter. She is now active in the ASME NYC Chapter and is planning our joint meeting this June 23. Jill works in Project Engineering and Advanced Planning. Please see the flyer in this issue (page 12) describing the meeting with the speaker Ronald Saporita. Another highlight just completed is our premier Grounding Course organized by John Pascu. This course was a broad introduction to the concepts of grounding.

The participants got an overview of grounding strategies for high voltage applications, industrial and commercial facilities, electronic equipment, and lightning protection techniques. Emphasis was placed on the avoidance of shock hazards due to poor grounding arrangements. A certificate of completion was given to all participants who successfully completed the course along with continuing educational credits for the PE license requirements. Another effort that we are very proud of is our GOLD Program and Student actives organized by our own Balvinder Blah who will be representing the Chapter on her coming trip to Germany arranged by Peter Magyar, IEEE R8 IAS Chapters Area-West Chair, where she will discuss our programs leading to our Outstanding Chapter Award. Two committees run these programs, listed in each edition of the monitor: Technical Discussion and Programs.

John Michelsen heads programs. John, shown below, James Nucito and Sukumar Alampur combine in a winning team to provide exceptional actives for the Chapter and recently we have gained approval to issue CEUs for these programs. Please see the latest actives listed in this issue on the Calendar page.
The International Workshop on Antenna Technology is intended to provide an international forum for the exchange of information on the progress of research and development in innovative antenna technology, particularly, for the miniaturization of antennas and the broad/multiple-band antennas. The workshop will focus on advanced technology such as applications of advanced materials and artificial materials to antenna design, and promote the new technology in antenna academic and industrial communities. The antenna design related to emerging wireless communication and radar systems will also be highlighted.

The topics of interest include but are not limited to the following:

**Small Antennas**
- Adaptive (smart) arrays for mobile terminals
- Antennas on/in IC packages
- Co-design of antennas with RF front-end
- Miniaturization of antennas
- Embedded antennas
- Conformal antennas and arrays
- Broadband/Multiband antennas and arrays
- Diversity for antennas and arrays
- Measurement for antennas with small system ground planes
- Measurement for ultra-wideband (UWB) antennas
- Measurement for SAR of handheld devices
- Reconfigurable antennas
- Millimeter wave antenna and packages
- MEMS/Nano technology for antennas

**Innovative Periodic Structures and Materials**
- Electromagnetic bandgap (EBG)
- Photonic bandgap (PBG)
- Left-handed materials (LHS)
- Electromagnetic anisotropy
- Frequency selective surfaces (FSS)
- Artificial magnetic conductors (AMC)
- Fractal structures
- Smart materials
- Analysis and design of EM materials

**Applications**
- UWB systems
- MIMO systems
- 3G and beyond mobile wireless systems
- Bluetooth/WLAN (PDAs, laptops)
- RFID/Sensors
- Radar systems/automotives
- GPS systems
- Medical applications
- Millimeter systems
- Any other topics related to the theme

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**Important Dates**

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**General Chairs**
Duixian Liu, IBM, USA
Brian Gaucher, IBM, USA

**International Advisory Committee Chairs**
Raj Mittra, Pennsylvania State University, USA
John L. Volakis, The Ohio State University, USA

**Technical Program Committee Chairs**
Jennifer Bernhard, Univ. of Illinois at Urbana-Champaign, USA
Koichi Ito, Chiba University, Japan

**IWAT AdCom Chair**
Zhi Ning Chen, I2R, Singapore

For enquiries, please contact: duixian@us.ibm.com
IEEE
Engineering Management Society
New York Section

You are invited to a special presentation:

Redevelopment of the World Trade Center Site
June 23, 2005, 5:30 pm

The challenges of managing one of the most public mega projects ever on a historic site with multiple public and private stakeholders and on a fast track schedule are considerable. Mr. Anthony Cracchiolo, P.E., Director of Priority Capital Programs for the Port Authority of NY and NJ, who is leading the Port Authority’s World Trade Center (WTC) Site Redevelopment Program, will discuss the WTC planning and design to date, and the Port Authority’s management strategy for implementation of the Phase I Redevelopment Program.

Refreshments will be served

Location: Con Edison Building, Room 1425
4 Irving Place, NY 10003

Nearest Subway: Union Square

No Walk-ins Due to Building Security

Limited Space, RSVP by May 31, 2005 to:
Victor Simuoli, EMS Vice Chair, NY Section
212-736-9100 x2237
vrsimuoli@urbanengineers.com

All Invited!

Please Post
Tappan Zee Subsection  
Tuesday, May 17, 2005  
Research Challenge:  
Extending Invention Toward Innovation Ecosystem

Shu-Ping Chang  
Software Development Manager  
IBM T.J. Watson Research Center  
Tel: 1-914-784-7746  
Email: spchang@us.ibm.com

ABSTRACT

What Is Innovation? It's not always about inventing something entirely new. (Sam Palmisano, IBM CEO, 2003). In this talk, we will look into innovation from economic viewpoint and present various innovation approaches which are being deployed to enhance our innovation ecosystem. Innovative projects, lessons learned in turning invention into innovation and future innovation drivers will also be presented during this talk when time permitted.

BIOGRAPHY

Dr. Chang is currently a researcher at IBM T.J. Watson Research Center. He works on the research and design for next generation high speed computer cluster technologies for high volume information analysis and decision making support system.

In his previous assignment, he was the Manager of Integrated Content Management Solution developing the Media Production Suite (MPS) product which is currently used by CNN Library as their news center archive. He worked with customers to understand their business and technical needs, and developed the turnkey technologies for the overall solution. Dr. Chang and his team worked on this product from 2000 to 2003.

Dr. Chang was awarded his Ph. D. and Master degrees in Computer and Information Sciences by the University of Minnesota in Twin Cities. His Bachelor degree is in Communication Engineering from Chao-Tung University, Taiwan, ROC with first-place honor.

He joined IBM T.J. Watson Research Center in 1990 developing microcode for Logical-Link Control in FDDI station. In 1992, he moved to Broadband Networking where he developed high speed memory based packet switch and latter ATM LAN/WAN edge controller. Dr. Chang jointed Industrial Solution Unit in 1996 as senior architect/engineer where he developed several products for Media and Entertainment industries especially in Media Asset Management area with major customers, Warner Brothers, CBS, and British Film Institution. He is a senior member of the IEEE.
YOU ARE INVITED TO A JOINT MEETING
of the IEEE PES & IAS with Edison Engineering Society
on
Managing Risks in Design and Construction Projects
Presented by: Ronald Saporita, P. E.

Mr. Saporita has nearly forty years experience in planning, research and development, engineering, construction and operation of industrial facilities, as well as the supporting infrastructure required. His experience includes processing and manufacturing facilities for a range of products from chocolate to petrochemicals, as well as schools, hospitals and other commercial facilities.

His most comprehensive assignment was chairman of the team charged with the evaluation and selection of a grass roots Asian site, including negotiating for the land and government incentives, long range planning and permitting, obtaining corporate budgetary approval, selection of contractors for engineering and construction, and project oversight through completion.

Currently, he is Vice President of Wilson Management Associates, Inc. (WMA) in Glen Head, New York, responsible for programs for reducing the risks to owners and contractors in managing projects as well as methods to prevent or minimize construction disputes and the preparation or defense of claims. Prior to joining WMA, he was Vice President of Construction for the NYC School Construction Authority, Director of Engineering for W. R. Grace & Company, and Manager of the Technical Services Division of Stone & Webster Engineering Corporation.

Refreshments: 5:15 pm
Location: Con Edison
19th Floor
Auditorium
4 Irving Place
New York, NY 10003

All activities are posted on the PES & IAS Chapter Web Site:
http://ewh.ieee.org/soc/pes/newyork/

Program Starting at 5:45 pm
Nearest Subway: Union Square

Wednesday, June 22, 2005

Reservation to:
John Michelsen @ 914 798-9821
JohnM@GraphAlloy.com or
Jill Anderson @ 212 460-3393
AndersonJi@ConEd.com

All Invited! NO WALK-INS allowed for security reasons
You are invited to a joint meeting of the IEEE PES & IAS with Edison Engineering Society on Multi Scale Engineering and System Complexity

Presented by: Dr. George P. Korfiatis

Dr. Korfiatis will discuss nano and pico particles and the engineer’s role in developing uses for the information learned from the study of small objects.

Since coming to Stevens as an assistant professor nearly 20 years ago, Dr. Korfiatis founded the Center for Environmental Engineering, raised more than $25 million in research funds and created the Institute’s curriculum for environmental engineering, including the undergraduate, masters, and PhD programs. He received his Bachelors (1978), Masters (1980), and PhD (1984) in water resources and environmental engineering from Rutgers, where he had worked as a research associate. His developments include technologies to clean water of poisonous heavy metals and non-thermal plasma technology offering solutions to critical security and environmental challenges. His talk will center on modeling mechanical behavior of nanoparticles, nano-scale experiments, industry-friendly use of small particle technology relating to homeland security and other industrial applications. He will also discuss Nano-scale technologies that will lead to chemical and biological sensing devices for diagnosing and providing early warning of an eminent biological or chemical danger for homeland defense. This should prove to be a very enlightening evening.
IEEE New York Section
Instrumentation & Measurement Chapter
Manhattan College Colloquium
Joint Sponsorship

Power Systems Operation and Control:
Challenges and Future Directions

The future state of power systems’ operations and control based on a number of assumptions and an analysis of the direction that this area might take over the next 25 years. The main premise will be minimization of operating margins or maximum utilization of existing transmission assets with heavy reliance on traditional as well as new control equipment with increased system security and reliability. Issues related to development of techniques and requirements for fully coordinated, high-bandwidth, and robust controls for power systems will be discussed and some methodologies will be suggested. Proceeding toward this ultimate goal, System-wide Automatic Voltage Control (SAVC) and System-wide Automatic Power Control (SAPC) and the integrated System-wide Automatic Control (SAC) concepts will be introduced for coordination of injection (shunt) and routing (series) controllers for both real and reactive power. The application of Flexible AC Transmission Systems (FACTS) controllers as well as GPS-synchronized instrumentation and measurement techniques to enable more advanced control capabilities will be presented.

Speaker
Behruz (Bruce) Fardanesh received his B.S. in Electrical Engineering from Sharif (formerly Arya-Mehr) University of Technology in Tehran, Iran in 1979. He also received his M.S. and Doctor of Engineering degrees both in Electrical Engineering from the University of Missouri-Rolla and Cleveland State University in 1981 and 1985, respectively. Since 1985 he has been teaching at Manhattan College where he holds the rank of Associate Professor of Electrical Engineering. He is currently affiliated with the New York Power Authority in his capacity as a Senior Research Engineering consultant where his interests include power systems dynamics, operation, and control.

Plan to attend this informative presentation
1 PDH credit will be awarded

Date: Wednesday, May 11, 2005.
Time: Pre-meeting reception with refreshments 6:30-7:30PM; Meeting 7:30PM
Place: Manhattan College
Additional information: 718-862-7153; gsilverman@ieee.org; parking available.

Directions:
By Train: Take the Broadway #1 line to 238th Street. Walk West on 238th Street one (short) block to Corlear Ave. Turn right. LEO Engineering is directly ahead.
By Car: Take Major Deegan to Exit 11 (Van Cortlandt Park So.). Proceed due West on Van Cortlandt Park So. Past Broadway to Corlear Avenue. (Van Cortlandt Park will be on your right as you proceed west. Do not follow sign to Manhattan College but proceed directly under the elevated subway line at Broadway.) Just past the elevated subway, turn left onto Corlear Avenue. LEO Engineering is on your right. Parking lot is just beyond the LEO Building.
NY Section

Women in Engineering (WIE) and Graduates of the Last Decade (GOLD) Affinity Groups

Present

Thursday, May 19th, 2005
6:00PM-8:00PM

Our 2nd Social Networking Event

At

Metro Grill on 45 West 35th Street between 5th and 6th Avenues
(Located in the Hotel Metro-Ground Floor)

☑ Meet NY Section Board Members
☑ Find out about the different active NY section IEEE societies
☑ Investigate volunteer opportunities

Activities Include:
☑ Speed Networking-Bring plenty of business cards!
☑ Raffle for Prizes!

Hors d’hoerves will be provided

Limited space. RSVP by Close of Business Day Thursday, May 12th.
Email all inquiries & RSVPs to gold-nyc@ieee.org or drivera938@ieee.org.

*PLEASE POST*
It Pays to Advertise in the New York IEEE Monitor

PUBLISHER’S STATEMENT
The IEEE MONITOR is the official news publication of the New York Section of The Institute of Electrical and Electronics Engineers, Inc. The New York Section is comprised of the five boroughs of New York City (Brooklyn, Bronx, Manhattan, Queens and Staten Island) plus Rockland and Westchester Counties. The publication reports on events and activities of interest to the general membership composed of electrical and electronics engineers and computer scientists, presents topical feature material relevant to the engineering profession, and carries the monthly IEEE society chapter calendar of events as a service to its readers.

CIRCULATION
The IEEE MONITOR is distributed to all IEEE members in the New York Section plus additional subscribers. Monthly circulation as of January 12, 2005 is 6,246.

ISSUE AND CLOSING DATES
The IEEE MONITOR is published monthly except June, July and August. Advertising order deadline is the first of the month preceding issue date. Camera ready material is due on the 5th of the month preceding issue date.

DISPLAY ADVERTISING RATES
Display advertising space is available in full and fractional page sizes. To qualify for frequency discounts, advertiser must furnish publisher with a schedule of insertion dates. Schedule may be changed by notifying publisher prior to regular deadline date.

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Four pages: $1,070, no frequency discount.

COMMISSIONS
15% commission allowed to all recognized ad agencies providing payment is received by due date. All ads invoiced on publication closing date. Full payment due 10 days after issue date. Rendering invoice to ad agency does not relieve advertiser in case agency default.

MECHANICAL SPECIFICATIONS
Size
Publication trim size 8 1/2" x 11"
Image size is 7 1/2" x 10"
Publication is black and white 3 column format.
Each column is 14 picas wide.
Color is NOT available at this time.

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Materials
Preferred material for black and white ads is right-reading emulsion side down negative. Halftone screen is 100 lines. Veloxes, other reproducible proofs and laser printed materials are acceptable. Photocopied material is not accepted. Original artwork accepted at advertiser's risk. Composition and assembly to advertiser's layout available at nominal charge. Submit copy and layout for quote.

ADVERTISING POLICY
All advertising is subject to the publisher's approval. Advertisers and their advertising agencies assume all liability for all content including text, illustrations, sketches, labels, trademarks, etc., of all advertising submitted for publishing, and also assume responsibility for any claims arising therefrom made against the publisher.

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Address all correspondence concerning advertising to:
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24 Chamber Lane
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