WAVELENGTHS

IEEE/SEM Secretary Column

by John M. Miller, IEEE/SEM Secretary

In my experience, active participation with the IEEE/SEM Section is rewarding and interesting. It offers opportunities to meet colleagues from diverse engineering occupations. I would like to share my experiences as the Treasurer (1997-98) and Secretary (1998-99) of this section and what these positions entail. This article also includes the priorities for the Section Secretary for the 1998-99 program year.

My year as Section Treasurer was, to say the least, quite an experience. Now, after having been elected Secretary, I can see firsthand that these two offices are crucial to keeping the IEEE/SEM ship afloat. While the Chair and Vice Chair chart the course for the section into the new year, the Secretary and Treasurer manage the meetings and financial affairs of this large and geographically dispersed organization. To do this they have to rely on electronic communications and available software applications. Without computer tools these jobs would be too time consuming to manage on a volunteer basis. For instance, during 1997-98 as Treasurer, I converted our financial accounting system to use Quicken which streamlined monthly and yearly report generation. Now, as the Secretary, my duties include updating the officer roster, keeping track of the event calendar and publishing meeting minutes. Finally, the year end duties of both of these offices also include filing financial and meeting statements with IEEE Headquarters that will be used to determine next year's

rebate, which is most of the section's operating budget. As I noted in my report last year, the section provides many benefits to its members, but all of these activities require a substantial budget. To keep this section financially sound, we have instituted a plan to keep IEEE/SEM in the black through a three pronged approach. In the recent chair's report, Ms. Hunter described these goals for the 1998-99 year. First, our goals are to promote more meetings at the chapter level to not only capture our rebate from IEEE Headquarters, but to encourage more participation by section members and students. Second, and very important, is to encourage our section and chapters to sponsor and host local and national level workshops, conferences and symposiums. Third, we must expand our efforts to obtain corporate contributions and sponsorship of IEEE/SEM events from industry within our area, many of whose employees benefit from participation in technical society chapters.

Request for Nomination of IEEE/SEM Section and Chapter Officers

by George Peters, Nominations Committee Chair

It's the time of year when our valued IEEE/SEM Section members have the opportunity to be nominated for Chapter and Section Officer positions. This can be facilitated by either nominating yourself or having someone nominate you. Being elected to one of the section executive committee or chapter positions can prove to be career-enhancing in many ways: you can improve your leadership abilities, develop new industrial contacts, and fortify your technical knowledge, to name a few examples.

We are seeking nominations for the following section officer positions: Chair, Vice Chair, Secretary, Treasurer, Director of Student Activities and Director of Educational Activities. We are also seeking nominations for all chapter officer positions: Chapter Chair, Vice Chair, and Secretary-Treasurer. The ten chapters along with the societies they represent are listed on page 3 of this issue.

To nominate someone for a chapter position, both nominator and nominee must be members of that chapter's technical society (or at least one of the societies in joint chapter cases). For example to be a Chapter IV officer, the candidate and nominator must be a member of one of the following societies: Electron Devices, Microwave Theory and Techniques, or Antennas and Propagation.

To become a section officer, you must be an IEEE member or commit to becoming one before the start of the term of office. The next term of office will begin on July 1, 1999, and will have a duration of one year. The director positions have a duration of two years.

More information about the open positions and how to submit a nomination are on page 4.

Technical Societies and Trends Within Chapter I: Looking into the Future
by Fathi M. Salam, Chapter I Chair

My warm greetings to all section members. I am currently serving the IEEE/SEM Section as Chair of Chapter I. This article will present a brief synopsis of all the activities in the technical societies comprising the Chapter I.

Chapter I of the IEEE/SEM Section includes several IEEE technical societies under its umbrella. The disciplines included are: *systems theory, control, circuits, signal processing, and communications*. This combining of multiple IEEE technical societies under one umbrella is probably representative of the times we are in, where multidisciplinary knowledge is becoming a necessity.

As new thresholds in digital microelectronics are achieved, new challenges of materials and matter at the quantum-level will define new paradigms for "computations", processing, communications, and control using novel microelectronics. These innovations in microelectronics will revolutionize our notion of systems, circuits, controls, communication, etc., even far beyond today's high tech revolutions in the Internet, and tele-communications.

In the near future, perhaps the word "compute" will become richer than a simple arithmetic calculation or digital sequential processing. Self-configurable (or adaptive) systems will reduce or alter the arduous effort of programming digital devices to switch the transistors on and off. Computing may then include the evolution of particles at the quantum level from some configuration (or state) to a new configuration. Clearly the elements of such a change would require platforms or devices capable of realizing more flexible paradigms of computations (or architectures). It would also require fusing knowledge from multiple disciplines such as the ones included in

Chapter I. Of course, economic necessity must promote such a change by identifying higher benefits than what is achieved from present technologies. The so-called quantum limit may give rise to such driving economic necessity by the year 2000+.

At our local IEEE level, several multi-tech industries and academic institutions are involved to various degrees with several issues pertaining to changes in technology and methodologies. These include the areas of systems, circuits, control, communications, etc., in both educating new graduates and in conducting high level research. In fact, all Michigan institutions are well represented in these efforts.

Chapter I holds meetings, seminars, presentations, and communications among the groups in our chapter to bring issues of education, outreach, services as well as high level research to the local members.

We have been holding a variety of seminars at academic institutions and companies in the state. Moreover, we are very well represented in the Fall and Spring Section meetings by inviting distinguished knowledgeable visitors in order to bring attention to the latest trends in technology as well as to promote our section at the national level. We always welcome and seek your suggestions, ideas, and participation. On behalf of the chapter, therefore, I extend my personal invitation and request of your input and participation in Chapter I.

Please feel free to contact me with your suggestions and input at `salam@egr.msu.edu`, 517-355-7695, or check the IEEE/SEM website for further information.

IEEE/SEM Chapter VIII Meeting Report
by Kimball Williams

"EMC Concerns in Automotive Radar" was the presentation for the EMC Chapter meeting held on Tuesday, July 21, 1998, at 6:00 p.m. at the Eaton Corporation Innovation Center. The presenter was Dr. Jim McDade of Eaton Vorad Technologies in San Diego, Calfornia.

Automotive Radar engineers must execute their designs within limits imposed by both the FCC and the Society of Automotive Engineers (SAE). The former deals with the ability of the equipment to operate without interference among co-existing electronics systems. The latter is concerned with the ability of the equipment to continue to operate in a severe electromagnetic environment. The FCC has allocated frequency slots within the electromagnetic spectrum with limits on the power that may be radiated. These restrictions set limits on the level of performance of the radar systems that can affect their effectiveness as collision warning systems (CWS) or automatic cruise control (ACC) systems.

The author discussed the impact of FCC limits on system design. He also talked about interference problems with actual systems and the means by which they were mitigated. He further presented some of

the design challenges for installation and housing for electromagnetic compatibility of a radar on a truck platform.

Jim McDade is in charge of the Advanced Products Group at Eaton VORAD Technologies in San Diego. He is involved with the design and development of the E-V's automotive radar products. Jim has worked on radar and related technology for several years. For 15 years he helped develop phased array antenna systems for the General Electric Company in Utica, NY. In 1987 he joined Alcoa Defense Systems in San Diego, where he established a department for radar design and development. That group went on to develop several advanced radar systems for forward air defense.

He worked for four years at TRW in San Diego, where he participated in the development of a millimeter wave radar system for a synthetic vision landing system and worked on the payload definition for the unmanned aerial vehicle (UAV). He has been with Eaton VORAD for three and a half years. Jim has a doctorate degree in physics from the Catholic University of America in Washington, DC.

IEEE Southeastern Michigan Section Executive Committee

Calendar of Events

Tuesday November 24
Meeting: **Fuzzy and Neuro Control for Complex Systems**
Speaker: Prof. Akram Fayaz, C.N.A.M., Paris, France
Time: 4:00 p.m. - 5:00 p.m.
Location: Michigan State University, East Lansing, MI
Engineering Building room 2120
EE Conference Room
Sponsor: Chapter I: Circuits & Signal Processing
Contact: Fathi Salam, salam@egr.msu.edu

Monday December 1
Event: **Executive Committee**
Time: Dinner at 6 p.m., meeting 6:30 p.m.
Location: Eaton Corp., 26201 Northwestern Highway, Southfield
Contact: Kimball Williams, 248-354-2845

Friday January 1
Event: **Nomination Deadlines**
Section Award Nomination Deadline
Section and Chapter Officer Nomination Deadline
Contact: Send nominations to
George Peters, gp@ican.net
St. Clair College, 2000 Talbot Rd. W., Windsor, Ontario, Canada, N9A 6S4
Comments: See articles on pages 1, 4 and 5

Monday January 4
Event: **Executive Committee**
Time: Dinner at 6 p.m., meeting 6:30 p.m.
Location: Eaton Corp., 26201 Northwestern Highway, Southfield
Contact: Kimball Williams, 248-354-2845

January TBD
Meeting: **Tour of New High Definition TV Studio**
Sponsor: Chapter III, Comm. & Aero. Electronics
Contact: Robert Desoff, r.desoff@ieee.org
Comments: Final date and location will be posted on the section web page when available.

Request for Nomination of IEEE/SEM Section and Chapter Officers

SECTION & CHAPTER OFFICER DUTIES :

The Section Chair, Vice Chair, Secretary, Treasurer, Directors, and Chapter Chairs are members of the section's Executive Committee, known as EXCOM. This body directs and coordinates the section's activities. EXCOM meetings are typically held once a month. EXCOM members should attend or have a representative at all EXCOM meetings. They are responsible for providing a status report to the Section Secretary if they cannot attend. EXCOM members are also assigned at least one article for *Wavelengths* during the program year.

SECTION OFFICERS

Chair:
- Leads the IEEE/SEM Section.
- Chairs the EXCOM meetings

Vice Chair:
- Organizes the spring and fall section meetings
- Chairs the EXCOM meetings in the Section Chair's absence.

Secretary:
- Handles section's communications with other entities
- Compiles annual section report for IEEE headquarters
- Prepares EXCOM meeting agendas
- Takes and disseminates meeting minutes

Treasurer:
- Handles the section's finances
- Reports monthly on spending and income
- Provides information to auditor for annual report

Student Activities Director:
- Shares information about IEEE and Region 4 programs with student branch advisors and student branch officers
- Coordinates section-wide student activities such as contests and officer training

Educational Activities Director:
- Coordinates with chapters and IEEE Headquarters to bring tutorials, video seminars, and other educational opportunities to the section
- Coordinates volunteers for pre-college education activities, which strive to interest elementary, middle, and high school students in science and engineering
- Encourages non-student members to continue their learning

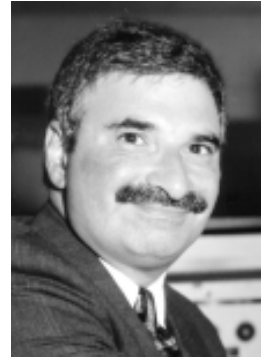## CHAPTER OFFICERS :

Chapter Chair:
- Ensures that at least two chapter meetings are held during the program year. (Meetings can be held jointly with another chapter.)
- Coordinates the chapter activities

George Peters
Nominations
Committee Chair

Vice Chair:
- Responsible for organizing at least one meeting and coordinating chapter volunteer efforts

Secretary-Treasurer:
- Submits meeting report forms to the Section Secretary for all chapter meetings in order to remain in good standing with the IEEE
- Coordinates with the Section Treasurer regarding chapter funding needs

INFORMATION REQUIRED
WHEN SUBMITTING A NOMINATION

1) Candidate's name as it should appear on the ballot
2) Candidate's employer
3) Candidate's phone number
4) Candidate's mailing address
5) Candidate's email address
6) Candidate's IEEE member number
7) Specific position for which candidate is applying

DEADLINE : Officer nominations must be received by **January 1, 1999**.

SEND NOMINATIONS TO:

George Peters
St. Clair College, 2000 Talbot Road W
Winsor, Ontario; N9A 6S4
Email: gp@ican.net
Nominations can be made by phone: 519-972-2727 Ext. 4447#.

IEEE/SEM Secretary Column...

The Fall Section Meeting agenda includes a featured talk on Satellite Cellular Communications and technical presentations by most of the ten chapters in this section. Speakers for chapter technical meetings have generally been nationally and internationally recognized experts in their respective areas. The Fall Section Meeting really provides an outstanding forum for keeping abreast of one's technical specialty without the need to travel great distances.

This is a very vital section. I was reminded of this by one of our keynote speakers this past year. He was absolutely amazed at the organization, the scope of the technical meeting presentations, the number of attendees and participation from both the industry and the academia. He felt that he was at one of the IEEE society international meetings. This type of perception reflects well on the dedication and involvement of the members in the section. To continue developing and maintaining this vitality, we must ensure adequate cash-flow for this and coming years. Section co-sponsorship of workshops, symposiums and conferences is one way of generating an influx of funds. Sponsorship is always a risk because there can be shortfalls in attendance and over prediction of receipts, but for the most part, such meetings generally do generate a surplus.

To provide some idea of planned activities, we currently co-sponsor or intend to co-sponsor the following events:

· Workshop on Power Electronics in Transportation, October 22-23, 1998, hosted by United Technologies Automotive, Dearborn, MI.
· International Conference on Robotics and Automation - 1999
· IEEE Symposium on Circuits and Systems

All of which will be hosted in the Southeastern Michigan area.

I close this article requesting that readers who wish to find out more about the Southeastern Michigan Section read up on the executive committee meeting minutes or visit our web site at: www.ieee.org/region/section/se_michigan.

Call for 1999 IEEE/SEM Section Awards Nominations
by George Peters, Nominations Committee Chair

The IEEE/SEM Section Awards Committee seeks nominations for four awards that are presented annually at the Spring Section Meeting. This is an excellent method by which the section identifies and recognizes outstanding accomplishments from our membership.

Nominees will be considered for one of these four honors: *Outstanding Engineer, Outstanding Chapter Support, Outstanding Section Support and Outstanding Student Branch.* This year something different is being implemented. You can obtain the nomination criteria for each of these awards from the IEEE/SEM web site at: www.ieee.org/regional/section/se_michigan.

The rules for making a nomination are as follows:

1. Both the nominator and nominee must be IEEE/SEM members or student members.

2. The nominator must provide the name, address, phone number, email address, and IEEE member number (if known) of the nominee.

3. Nominations must be in written form (hardcopy or email are acceptable) and provide sufficient information to be a sound basis for nomination. The nomination submission should include specific contributions, dates, locations, etc. for which the nomination is being submitted.

4. Award nominations must be received by **January 1, 1999**.

SEND AWARD NOMINATIONS TO:

George Peters
St. Clair College, 2000 Talbot Rd. W.
Windsor, Ontario Canada
N9A 6S4
E-mail: gp@ican.net

Report on Student Branch Activities: University of Michigan, Ann Arbor

by Sheila K. Pung, Chair

IEEE at the University of Michigan has planned many events for the 1998 academic year. We hold Technical Luncheons, Information Sessions, Student Professional Awareness Venture (S-PAVe), and various intersocietal activities among the groups represented at the University of Michigan.

The weekly technical luncheons are held from 12:30 - 1:30 on Thursdays, where we invite speakers from academia and industry to tell us about the latest technology that people are researching. We found that the membership at the university is flexible to changes made in schedule and agenda of the technical lunches to accommodate the speakers' schedules. This flexibility has created increased interest and response from industry representatives.

We have started hosting information sessions as a way for the student branch at U of M to work with industry. These meetings are held throughout the term to assist companies in their recruitment efforts. Students are able to question and discuss with recruiters the availability of jobs (permanent, co-ops, and internships.) This provides more visibility for the companies and more resources for our membership.

The student branch at U of M hosted a Student Professional Awareness Venture (S-PAVe) for the first time this year. "Manners 101: Engineering Your Etiquette" was the title for the program with the authors of "The Proper Pig's Guide to Mealtime Manners", Sally Starbuck Stamp and L.A. Kowal, as speakers. A reception and dinner was held to teach etiquette skills to all College of Engineering students who might find themselves at a business dinner soon. Representatives from industry were invited to make the situation more realistic, plus it gave companies a different recruiting opportunity. The event was held on November 3, 1998, at the Michigan League Ballroom.

Besides having technical and career related events, we also have social events throughout the semester. This provides our membership with a networking system that will extend into their professional careers. We are continuing activities such as TGIFs, Rock - n- Bowl, and the U of M vs. MSU hockey game.

Some of the activities planned for this year are :

1) In November, we have planned a trip to Motorola. This trip will provide an opportunity to tour the company along with catching the U of M vs. Northwestern football game.

2) We are holding a workshop in coordination with the SWE branch and Compaq about permanent job negotiations.

3) IEEE, HKN, BEECS, and ACM are planning a Rock - n - Bowl night and the annual Student/Faculty Mixer. The societies still interact with college events such as Spring-Fest which happens on the last day of classes in the winter semester.

4) Finally, we attend activities sponsored by IEEE. Each year we send representatives to the Section meetings along with attending conferences. This past winter semester, seven of the nine officers attended the conference hosted by Purdue on how to increase activity within the student branches of IEEE.

To subsidize all of our activities, we continue to operate the Bagel Stand. From 7:30 a.m. to 12:30 p.m., people can stop by the stand and buy a delicious bagel or muffin and sip on a juice or get the needed caffeine in coffee. This is a joint effort with ACM and has allowed the IEEE student branch to fund numerous events.

The student branch of IEEE at the U of M is constantly looking at ways to get students, industry, or other student branches together. Hopefully, we can continue the growth of the branch and become an example for the rest of the societies at U of M and other colleges.

Free IEEE E-mail Alias Services

IEEE and the Computer Society both offer free e-mail aliases to their members. **This is not a replacement of your current e-mail.** An alias simply forwards mail to your real e-mail address. Benefits include:

- Choose your e-mail alias rather than having one assigned (no more sw1q43@zxyprovider.net).
- Have an e-mail address that is easier to type.
- Update your e-mail address in only one place rather than telling all of your friends and colleagues when you change jobs or service providers.
- Protect yourself from e-mail viruses, ieee.org aliases are scanned.
- Display your affiliation with IEEE or the Computer Society.

Information may be found on the IEEE home page at `www.ieee.org` or `http://mail.ieee.org/eleccomm/personal-aliases.html`.

For a Computer Society alias see `www.computer.org/epub/alias.htm`.

It's Not Too Late!
Help Yourself and Your Section!

The Southeastern Michigan Section can earn $10 for each successful nomination of a person for Senior Member grade approved in 1998. Send in your Senior Membership application now to help the section fund more programs and raise your IEEE membership to the next level. Advancement to IEEE Senior Member grade recognizes your professionalism. Your IEEE dues are not affected.

You can access forms by simply emailing directly, no message, to: senior-member-form@ieee.org. To return the completed forms electronically to IEEE simply email them to senior-member@ieee.org. Make sure that you place "R40035 Southeastern Michigan Section" on the nominator line of the application submitted so that the section receives the bonus!

The last 1998 review meeting for senior member applications is *December 12*, so don't delay. Get those Senior Member nominations in the IEEE as soon as possible. Tell your Region Membership Development Chair Mark Hunter, m.hunter@ieee.org, and Section Membership Director, Maurice Snyder, snyder@adi.com, what you think of this program and what other kinds of membership recognition, recruitment and retention programs you'd like to see developed.

Membership is Everyone's Business (SGS and MGM Re-introduced for 1999)

The *"Member-Get-A-Member"* and *"Student-Get-A-Student"* programs, were very popular with members and responsible for 5,000 new members in 1996-7. These programs have been revised and will be re-introduced in 1999. Instead of the small recognition prizes offered to recruiters in the past, an IEEE voucher, which is good toward IEEE dues or purchase of IEEE products and services, will be offered to recruiters in 1999. The primary purpose of these programs, though, is not awards. We know from experience that our most successful and influential recruiters are our members and their invitation to colleagues to join the IEEE is more effective than any brochure could be. Why? Because our members know that every professional should belong to his or her professional society, and existing members are uniquely qualified to emphasize that IEEE needs the talent and support of every engineer and scientist in the profession.

As in the past, only existing IEEE Student members are eligible to recruit new Student members and existing higher-grade Members to recruit non-Student members. Applications from only new IEEE members or a first-time conversion from affiliate to member status will be eligible for inclusion in the program. Both programs begin September 1, 1998, and will conclude August 15, 1999.

Vouchers will be mailed to all eligible recruiters in September 1999.

In order for an application to qualify for MGM/SGS credit, the recruiter's name and membership number must be clearly printed in the recruiter box on the 1999 application when it arrives at IEEE, and the application must include proper payment. No recruiter will be qualified retroactively.

MGM Recruiter Cash Voucher Awards

NEW MEMBERS RECRUITED	VOUCHER VALUE (IN US $)
1 TO 2	$5
3 TO 5	$10
6 TO 9	$20
10+	IEEE YEAR 2000 MEMBERSHIP

SGS Recruiter Cash Voucher Awards

NEW MEMBERS RECRUITED	VOUCHER VALUE (IN US $)
2 to 4	$5
5 to 7	$10
8+	$15

For more information on the program, please contact Mark Hunter, m.hunter@ieee.org, or Maurice Snyder, snyder@adi.com.

HAPPY HOLIDAYS

From the editors of *Wavelengths…..*

IEEE/SEM Web Site Volunteers Needed

Volunteers are needed to help with regular management of the section's web site as well as creating special pages for one time events.

Communications has always been the most important part of helping the section providing increased membership value to our local members. Electronic media is fast becoming the most effective communication path, and it is gaining popularity in multiples.

The IEEE Southeastern Michigan Section (IEEE/SEM) has been supporting a Web site for quite some time. Key information is placed on the site to benefit our members but this takes lot of effort to keep it updated all the time. The section is dedicated to improving the web site through more frequent updates, increased content and new features.

IEEE/SEM is looking for volunteers to help maintain the IEEE/SEM Web site. Volunteers will be able to define their tasks and duties through the section's newly formed Internet steering committee. There are various levels of time commitments available, and volunteers will be able to carry out most tasks as they fit in to their independent schedules. Tasks will vary from performing minor editing and posting of materials received through e-mail to creating custom pages and scripts to enhance existing pages or support special events. Most regular updates will be done on a monthly basis with occasional announcements or calendars items posted throughout the month.

If you are interested in working with the IEEE/SEM Web site, please contact Sat Basu at *313-235-6523 (Work)* or *248-524-0058 (Home)* or e-mail at *basus@detroitedison.com.*

Wavelengths Notes [November 1998]:

- Make sure that everyone is using PageMaker with the newest patch installed. Look at About PageMaker under the Help menu and make sure that the version is 6.52 (displayed in the lower right corner). Earlier versions cause major problems with links and force someone to redo most of the graphics links.
- In the PageMaker Links Manager - unlink Text items before sending to anyone else.

General Formatting Notes:

- Don't use spaces to position any text in any way! Setup tabs or paragraph settings.
- Use the text wrap options to have text flow around a picture whenever possible otherwise you may get text on top of text or unevenly spaced lines. Spacing will not always be the same from computer to computer. The printer should only have to check for proper spacing and missing text at the end of a story.
- Use full justification on all articles or none of the articles except for rare cases. Don't have some articles on a page left justified and others fully justified definitely do not have part of an article justified differently than other parts.
- Be consistent with how things are noted. Don't use 1998-9 in one part of an article and 1998-99 or 1998/1999 in other parts. Also try to be consistent throughout the whole newsletter. Follow the guidelines that have been distributed to the officers. Also be consistent with office titles like Vice-Chair vs. Vice-chair vs. vice chair vs. Vice Chair.
- Be consistent with formatting. Be careful about changing between italics and non-italics in-consistently and too often in an article. If there is quite a bit of italics in an article then the whole article should probably be reformatted differently. Use italics and bold formatting sparingly. If you decide that Vice Chair should be italicized then it should be formatted that way in all articles not just part of one article.
- Be careful about placing company product names in the newsletter without a trademark, copyright or registered symbol. Review the guides to determine what should be used if you are not sure. If you don't know then contact the author and make them find out.
- Be consistent in the bi-lines. Don't use "by Jane Doe (Chapter I Chairperson)" for one article and "by Jill Smith, Chapter Chair" for another. The second example is more appropriate.

- Web addresses should be in courier and can start with www..., the http// stuff is not needed.
- When specifying dates, don't use Sept and August. Either use September and August or Sept. and Aug.
- Many of these issues may be due to the articles that are sent in but they need to be edited and made consistent prior to publication. This editing can be shared among many people if the standards are followed by all of the editors consistently.
- Avoid lots of Continued... stories except as required. Continued... stories are often needed on the front page so that several major articles are prominent but broken up stories throughout the newsletter make it difficult to read. If stories need to be highlighted towards the beginning of the newsletter then consider having a list of short summaries (or teasers) on page 2 or 3 that indicate which page the full story is on. This is better than breaking a story in mid-sentence to continue it on another page. Some very long stories can also be broken up into one or more sub-stories if there are several major subjects covered in the entire article. Each sub-story is mentioned in the main story with a teaser and page #.
- Don't use periods in the Table of Contents, use tab.
- Using Column Guides in PageMaker rather than guidelines when possible. It will make placing stories easier.

A few advanced layout notes:

- Tombstones – Avoid having stories lined up across the page all with similar headline styles. This is referred to as having "tombstones" on the page. Often, readers only look at the first story and ignore the rest, the stories are often seen as one large story. This can be avoided by changing the text style or placing a line (like our chapter or student black lines) above some of the stories so that they don't line up.

- Armpits – Avoid placing unrelated articles, ads or pictures in the armpit of another story. Elements that are surrounded by another story are seen as part of that story. It creates an improper association between the elements.
- Armpits are worse than Tombstones, at least Tombstones look organized - Armpits just look poorly organized and often confuse readers or cause things to be overlooked.
- There is an advance layout rule relating to the placement of elements on the page. It is called the rule of thirds. Look at the page and draw a vertical line 2/3 of the way across the page (from left to right) and 2/3 of the way down the page. Readers will focus on the upper left portion of the page and the lower right portion of the page more than the upper right and lower left. Reader generally first look at the upper left, then glance at the upper right, quickly glance at the lower left and then look at the lower right. If a story is placed in the lower left corner of the page, it will often be overlooked. Elements with more weight such as pictures or graphics can be placed in the upper right and lower left to capture the reader's attention and prevent these areas from being over looked. Continued… blocks of text are also sometimes placed in these areas since the reader will be specifically looking for that block of text. This is an advanced rule so you might only analyze very important pages and posters.

Questions:
- How are Word documents being placed into the Issue? Suggested approach: Start Word, Load the document and then copy and paste the article into PageMaker. Don't save to RTF format and then place the article.
- How are the disks being created for the printer? Saving the file to the zip disk and setting all of the links to a directory on the zip disk will often not work properly. Some of the linked information will include information specific to the setup of the computer the zip disk is installed on. The links may not be valid on another system. The "Utilities | Plug-ins | Save for Service Provider…" option in PageMaker should be used. To use this utility you MUST first select a postscript printer. If you do not have a postscript printer installed on your computer, try installing the "Dataproducts LZR-2665" printer with the output set to "FILE:". This printer is a postscript printer that has been found to be compatible with the postscript printers used by the current printer. Note: You should compose the file for the Dataproducts printer and make sure that everything lays out properly with the Dataproducts printer selected before saving for the service provider.