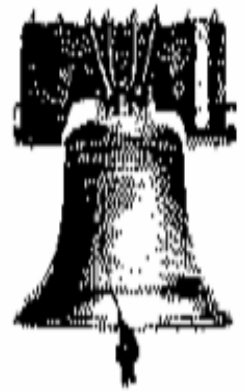




# PhilaSUG newsletter



## Spring 2006 Meeting Announcement

### PhilaSUG Spring 2006 Meeting Wednesday June 14, 2006

The Philadelphia Area SAS Users Group Spring Meeting will be on Wednesday, June 14, 2006 at 1:00 PM, and will be hosted by Deloitte Consulting in the Spring Valley Business Park, 1 Deloitte Way, Glen Mills. A map and detailed driving are available later in the newsletter.

Registration will begin at 12:15 PM and the meeting will commence at 1 PM. Dues for the year are \$20. There are no other fees for attending PhilaSUG meetings. We will accept cash, but a check is preferred. If you are a student and present a current matriculation card, or an employee of our host, fees for this meeting will be waived. A tip – **to breeze through registration** – bring in the completed registration form found in the back of this newsletter to the meeting, otherwise Registration can still be simplified if you attach a business card to a check or \$20 bill, as there is less writing to do and it is more legible. Please do not mail in your registration fee before hand. Receipts will be available at registration time.



**IMPORTANT:** In order to gain access every non-Deloitte attendee must complete the **SECURITY SIGN-IN FORM** found on the PhilaSUG web site. Deloitte requests that you do this by June 11<sup>th</sup>. If you do not have web access send an email message

**TO:** registrar@PhilaSUG.org with the **SUBJECT:** Security, with the body of the message containing your name and company affiliation. Thank you.

### PhilaSUG Spring Meeting Deloitte Consulting 1 Deloitte Way Glen Mills, PA 19342

<b>12:15-1:00</b>	Registration, Posters and light lunch
<b>1:00-1:10</b>	Opening Remarks, Barry Cohen
<b>1:10-2:00</b>	Wendy Wright - The Plot Thickens from Plot to Gplot
<b>2:00-2:20</b>	Balakrishna Dandamudi - DBCompare: A Powerful Tool to Compare Data Definitions of Data sets Across Multiple Databases
<b>2:20-2:50</b>	Break, Posters, and refreshments
<b>2:50-3:20</b>	Michael Davis - Cheesy, Sleazy SAS Tricks
<b>3:20-3:35</b>	Open Forum and door prizes
<b>3:35-4:25</b>	Paul Dorfman & Lessia Shajenko - DATA Step Hash Objects and How to Use Them
<b>4:25-4:30</b>	Closing Remarks

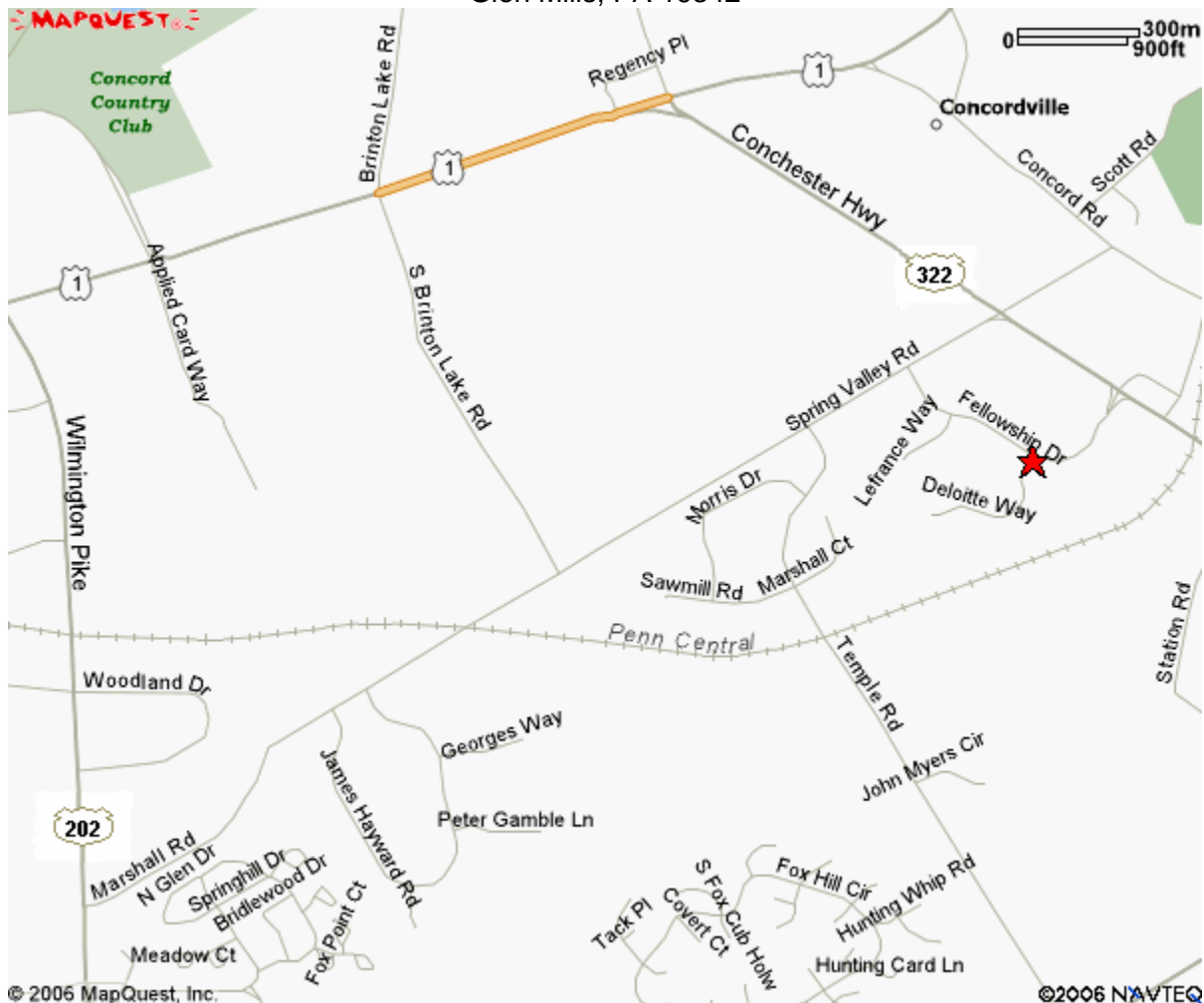
Posters will be on display throughout the meeting. Authors will be present alongside their posters during registration and the breaks for questions and discussions.

Abstracts and bios are found later in the newsletter.

The presenters and the PhilaSUG Executive Committee will adjourn for dinner at a nearby restaurant when the meeting concludes. You are invited to join us. The location will be announced at the meeting.

## Directions to Meeting Site

Deloitte Consulting LLP  
1 Deloitte Way  
Glen Mills, PA 19342



- **FROM PHILADELPHIA INTERNATIONAL AIRPORT :**

Follow signs for I-95 South, exit 322 West (Route 322 is a right hand exit off I-95 just past the Chester/ Highland Avenue exit). Follow Route 322 to 4th traffic light. Turn left onto Fellowship Drive. (Spring Valley Business Park)- proceed to first drive on left, Braxton Way. 1 Braxton Way is the one story building to the right.

- **FROM NJ TURNPIKE (GOING SOUTH) :**

From NJ Turnpike take exit #2 over the Commodore Barry Bridge to I-95 South, exit 322 West (Route 322 West is a right hand exit off I-95 just past the Chester/Highland Avenue exit). Follow Route 322 West to 4th traffic light. Turn left onto Fellowship Drive. (Spring Valley Business Park) - proceed to first drive on left, Braxton Way. 1 Braxton Way is the one story building to the right.

- **FROM WILMINGTON & POINTS SOUTH :**

Take I-95 North, to Rt. 202 North exit (#8). Follow Rt. 202 North approximately 8 miles to Glen Eagle Shopping Center. After light at shopping center go to first road on right, Marshall Road (David Dodge on corner) and turn right. This turns into Spring Valley Road. Continue approximately 3 miles to Fellowship Drive- turn right. Follow Fellowship Drive to 2nd driveway on right- Braxton Way. 1 Braxton Way is the one story building to the right.

• **FROM KING OF PRUSSIA AREA:**

Take south on US 202, past West Chester, to US 1. Left on US 1 (north). Right on US 322 (Conchester Hwy). Right on Fellowship Drive (Spring Valley Business Park). Proceed to first drive on left, Braxton Way. 1 Braxton Way is the one story building to the right.

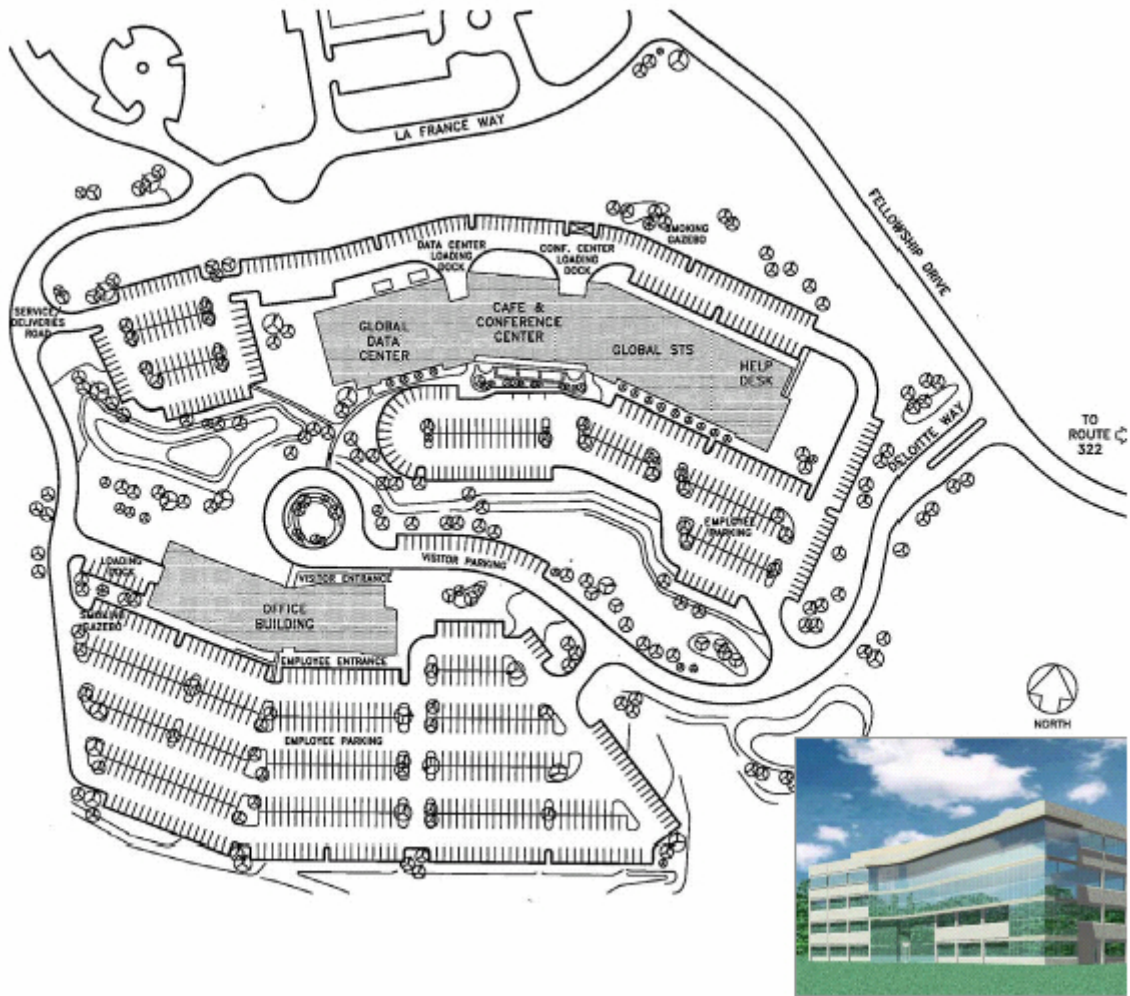
• **FROM CHADDS FORD / WEST CHESTER:**

Heading north on Rt. 1, you don't have to go all the way to Rt. 322 East. Turn right onto Brinton Lake Rd. (barn and Duffer's on corner). Go to "T" and make left onto Spring Valley and right onto Fellowship. Proceed to second drive on right, Braxton Way. 1 Braxton Way is the one story building to the right.

• **FROM 202 WEST CHESTER BYPASS :**

Take Matlack Rd., which becomes Oakbourne Rd., which becomes S. Concord Rd.. Go right on Brinton Lake Rd. and cross over Rt. 1. Go to "T" and make left onto Spring Valley and right onto Fellowship. Proceed to second drive on right, Braxton Way. 1 Braxton Way is the one story building to the right. You could also take a left onto Rt. 926 or Pleasant Grove Rd. from Rt. 202. Turn right onto S. Concord Rd. and follow directions above.

Note – Braxton Way on the instructions above is the same street as Deloitte Way in both maps.



## PhilaSUG Executive Committee

Barry Cohen, President	
John Cohen, Membership	
Diane Foose, Secretary	
Robert Schechter, Web Master	
Ellen Asam	Jonas V. Bilenas
Max Cherny	Michael Davis
John Dennis	Lee Dodoo
Timothy Kelly	Karin Lapann
Russell Lavery	Robert Nicol
Randy Noga	
Terek Peterson	Donna Usavage

## About Our Host

### Deloitte.

Deloitte Consulting LLP and Deloitte & Touche LLP have used data analytics products from SAS as the foundation of several Audit & Enterprise Risk Services and Consulting projects. Our alliance centers on enhancing SAS's Corporate Compliance for Sarbanes-Oxley (SCC) software solution and integrating it into Deloitte's Corporate Compliance framework.

Deloitte's collaboration with SAS is expanding to include other SAS products such as SAS's SAS9 analytics solution, the SAS Intelligence Platform and various risk and analysis products and industry specific solutions such as Retail Pharmaceuticals, and Financial Services.

This alliance is also relevant for companies interested in our Sarbanes-Oxley, Human Capital, Customer Relationship Management, Supply Chain and Enterprise Applications services.

## Thank You!

The PhilaSUG Executive Committee wishes to thank Deloitte Consulting for hosting this event. Many thanks to Michael Richard at Deloitte Consulting for providing this meeting space. In addition, we also appreciate the assistance of John Cohen and Robert Schechter of the PhilaSUG Executive Committee for their efforts to coordinate this meeting.

## Host Sites Wanted

We continuously seek host sites for future PhilaSUG meetings. There is not a lot of work involved, and it is a great way to put your company on the local SAS map. We need your help with this. If your company would like to host a meeting, within reasonable geographic proximity to Philadelphia, PhilaSUG would be grateful if you would contact Barry Cohen E-mail [President@PhilaSUG.org](mailto:President@PhilaSUG.org)

## Presenters Wanted

You are invited to be a Presenter - PhilaSUG constantly seeks individuals who wish to participate actively in our meetings by presenting various SAS topics in the form of delivered papers or posters. This is a great way to share your knowledge with others, to brush up your presentation prior to delivery at NESUG or SUGI or some other major conference, and to gain confidence as a speaker. Short technical SAS related articles are also desired for inclusion in the Newsletter. If this is of interest to you, please use the online abstract submission form found on our web site. Presentations can be from a few minutes to 50 minutes. We are in the fortunate position of having a complete speaker program lined up for the Fall meeting, but we still need poster presenters. If you are interested please submit your abstract on our online form by August 18<sup>th</sup>. Any paper abstracts submitted will be considered in early January for the Winter 2007 meeting in March 2007.

## E-mail Announcements

PhilaSUG-L Distribution List is a low volume, announcement-only e-mail notification service provided free of charge to all members who wish to subscribe. In order to sign up for this service, you need only send a blank e-mail message to: [PhilaSUG-L-subscribe@onelist.com](mailto:PhilaSUG-L-subscribe@onelist.com). Note that you can subscribe as many times with as many different e-mail addresses as you wish to have the e-mail sent to; e.g., home and office.

## PhilaSUG Web Site

Our site on the World Wide Web always contains the latest information concerning upcoming meetings, SAS training and seminars, links to SAS related hot topics, and local SAS job opportunities.



Visit us regularly at: <http://www.PhilaSUG.org>

## Future Meetings and Events



### Next PhilaSUG Meeting

PhilaSUG Fall 2006 Meeting  
will be hosted by  
Octagon Research Solutions, Inc.  
Exact date and location is still to be determined

Plan now to attend the 2006 NorthEast SAS Users Group Annual Conference – September 17 to 20 in historic, center city, Philadelphia.

Get a preview of what's planned for the future of Base SAS from keynote speaker Rick Langston (manager of SAS' Core Systems Department in the Platform R&D Division).

NESUG 2006 will be jam-packed with over 150 presentations, posters and hands-on workshops in the following areas:

- Data manipulation
- Analysis
- Applications development
- Coding tips and techniques
- Importing/exporting data between SAS and other applications
- Administrative and support functions

## What is a SAS Index Good for Anyhow?

An article submitted by Michael A. Raithel

If there was a SAS performance tool that could drastically reduce your program's I/O's, lower its CPU time, and decrease its run time, would you use it? Of course you would! Such a performance tool exists; it is called a SAS index. SAS Indexes can dramatically improve the performance of programs that access small subsets of observations from large SAS data sets. They do this by only accessing and returning the observations that you specify in a WHERE expression, instead of reading the entire SAS data set.

It is easy to understand how a SAS index can help you to directly access the observations that you need in a particular SAS data set. As an exercise, do the following: Open SAS Online Documentation, Click on the <Search> tab, enter the word "rtrace" into the Search tab's window, and click on <Search>. The SAS Online Documentation search function returns about a dozen links. When you click on any of those links, you get a page in the documentation that discusses the SAS RTRACE facility.

A SAS index is analogous to the search function, above. A good index allows your programs to quickly access the subset of SAS observations that you need from a large SAS data set when you specify a key variable value (or values) that must be matched. This can dramatically improve the speed and efficiency of your SAS programs.

Conversely, badly conceived SAS indexes return far too many observations and are no better than reading the entire data set sequentially. In the analogy, above, consider how many pages would be returned and how much longer it would take if you searched the SAS Online Documentation for the word "SAS". That is why it is important to know more about the selection criteria for index variables, as well as the actual creation and use of SAS indexes.

After deciding that an index is appropriate for your sub setting purposes, you have three tools to choose from to create one: the DATASETS procedure, the SQL procedure, and the DATA Option in a Procedure or in the DATA step. When you do so, SAS creates an index file and associates it with your SAS data set. SAS stores additional indexes in that file and deletes the file when all indexes have been removed from the data set.

There is enough information about SAS indexes to fill an entire book. If you are interested in learning more, either check the SAS online documentation, or consider my new book: The Complete Guide to SAS Indexes, at:  
<http://www.sas.com/apps/pubscat/bookdetails.jsp?catid=1&pc=60409>

## Paper Abstracts

### The Plot Thickens from Plot to Gplot

Wendi Wright, Educational Testing Service

This presentation starts with a look at basic plotting using PROC PLOT. A dataset with the daily number of hits on three websites is used. The presentation continues with examples of how to create more informative and professional looking plots by adding titles, footnotes, and reference lines and changing the symbols, legends and axes. This is done in a step by step approach with examples of how the plot changes at each step.

A look at PROC Gplot is next using the same Web example. The final PROC PLOT is compared with the same program run in the PROC Gplot procedure. Further improvements are made in the same step by step fashion using various SAS Graph statements. The first change is to the Titles and Footnotes. Then, one at a time, changes are made to the symbols (SYMBOL statement), the legend (LEGEND statement), and the axes, (AXIS statement).

PROC PLOT and PROC Gplot statements are explored as well as the Title, Footnote, Symbol, Legend, and Axis statements.

Wendi Wright received a BS degree in Quantitative Business Analysis from Penn State University in 1985. Since that time, she has worked at Educational Testing Service. Wendi is currently working in the Statistical Analysis Department and has been a SAS programmer for 15 years.



### DBCompare: A powerful tool to compare data definitions of datasets across multiple databases

Balakrishna Dandamudi, SFBC International

SAS programmers often end up working on data from different databases, referring to SAS data only. In this scenario programmer's primary task would be analyzing the inconsistencies in defining the datasets and variables within the database and across databases.

DBCompare generates an extensive analysis report about the databases that are being compared:

- What datasets are in common across databases
- What datasets are in one database and not in the other
- Whether matching datasets have different labels, different variables
- Whether matching variables have different formats, labels, or types

DBCompare is a tool written in Base SAS for the comparison of data definitions of SAS datasets across databases.

Balakrishna Dandamudi is a Senior SAS Programmer providing the programming support to Clinical Data Management department at SFBC International. He has more than 9 years of programming experience and enjoys learning new technologies and applying them in solving business problems. Krishna has the passion to share his learning and enthusiasm for SAS programming. Krishna presented papers in the past at SUGI, NESUG and PhilaSUG meetings.



## The Best of Cheesy, Sleazy SAS(r) Tricks

Michael Davis, Aetna Inc.

Based on an off-hand comment, the author solicited examples of “cheesy” or “sleazy” SAS tricks from his friends on the SAS-L distribution list. To qualify, the trick might be a coding declaration or other construction that suppresses the over-solicitous manner in which SAS tries to protect coders from themselves. A trick might also qualify if it hinted at an unexpected SAS behavior that works against coding stereotypes. The following paper presents some of the best tricks received.

*Michael Davis is a Senior/Lead Informatics Analyst for Aetna Inc. He develops and maintains web-enabled SAS applications in support of the analytic platform. Prior to joining Aetna, Michael was an independent consultant, during which time he authored this presentation and paper. He previously worked for Blue Cross & Blue Shield of Connecticut and the Connecticut Hospital Association. Michael has been a SAS user since 1985 and has specialized in developing decision support and data warehousing systems. He has frequently presented papers at SUGI, NESUG, and local SAS user groups. Michael holds a Masters in Health Administration from Duke University.*



**Maddie**

## DATA Step Hash Objects: How to Program

Paul Dorfman , Paul Dorfman Consulting  
Lessia Shajenko, Bank of America, Boston

In SAS Version 9.1, the hash table - the very first object introduced via the Data Step Component Interface in Version 9.0 - has finally become robust and syntactically stable. The philosophy and application style of the hash objects are quite different from those of any other structure having ever been used in the DATA step before. The most notable departure from the tradition is their run-time nature, the hash objects being declared, instantiated, deleted, given memory, searched, updated - all at the run-time. It should be intuitively clear such traits must make for innovative and flexible programming of a kind the DATA step of yore has never seen. Although the talk contains ample hash propaedeutics, it is also geared for those already somewhat familiar with the SAS hashigana. Live code examples are used to demonstrate a number of programming techniques utterly unthinkable before the advent of the SAS hash objects. Imagine using “data\_null\_” to write a SAS data set whose name depends on a variable. Fancy sorting a million-element temporary array in a second without the need for sophisticated hand-coding.

*Paul Dorfman started using the SAS System while pursuing his Ph.D. in computational plasma physics. Thereafter, he has used SAS in telecommunications, banking, credit card, pharmaceutical, and managed health care industries. When Paul has nothing useful to do, he plays with high-performance SAS implementations of general algorithms, such as sorting and searching for stuff, preferably rapidly. Over the years, Paul has earned himself a number of honorable nicknames, such as SASHOLE from a group of COBOL critters in Verizon, MOST VALUABLE SAS-LER and Hall-of-Famer from SAS-L, and HASH-MAN from Base SAS R&D Director Paul Kent.*

## Poster Abstracts

### **Macros to get to “Know Thy Data”**

*Diane Foose, Mike Gunshenan, Rick Morales,  
GlaxoSmithKline, Collegeville, Pa*

What if the usual sort and usual group processing would eliminate the existing logical order and grouping of the data that must be maintained to ensure the needed analysis is correct. This paper presents some uses of the NOTSORTED option of the BY statement when group processing in data steps and procedure steps. As an extra, the appendix describes the use of the keyword NOTSORTED with respect to a view, an index, and a user-defined format.

*Co-authored by Diane Foose, Michael P. Gunshenan and Rick Morales who are currently part of GlaxoSmithKline's Oncology department. Each has worked extensively in the areas of Phase I-IV clinical trials in several different therapeutic areas. They each bring a uniqueness and lengthy history using SAS to the area of Statistics and Programming.*



# Philadelphia Area SAS User Group (**PhilaSUG**) Membership Form

To speed through registration complete this form (please print) and return it to the registration desk of any PhilaSUG meeting (do **NOT** mail it). Checks should be made payable to PhilaSUG. Our membership year runs from Jan. 1 to Dec. 31.

This is a \_\_\_ new, \_\_\_ renewal or \_\_\_ update / correction.

Name: \_\_\_\_\_

Affiliation: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

City: \_\_\_\_\_ STATE: \_\_\_\_\_ Zip: \_\_\_\_\_

Day Time Phone Number: (    ) \_\_\_\_\_ - \_\_\_\_\_

PhilaSUG-L is a low volume, announcement-only e-mail notification service provided free of charge. By subscribing you'll be notified of the latest information about upcoming events, especially meeting announcements. By listing your e-mail address below you will be added to the electronic mailing list, you can cancel at anytime.

E-mail: \_\_\_\_\_

(Be sure to clearly distinguish a dash from an underscore)

For updates / corrections, please list your old / incorrect information below:



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