

Annual Report of the
ACM Committee on Computers and Public Policy (CCPP)
For the Period 1 July 2009 to 30 June 2010
Submitted by Peter G. Neumann, Chairman

Date: September 30, 2010

To: Rosemary McGuinness

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PURPOSE OF CCPP

The ACM Committee on Computers and Public Policy (CCPP) seeks to

- * aid the ACM with respect to a variety of internationally relevant issues pertaining to computers and public policy, and
- * help make the ACM even better recognized worldwide.

Its most visible project is the ACM Forum on Risks to the Public in Computers and Related Systems, established in August 1986 in response to Adele Goldberg's ACM President's message in the February 1985 issue of the Communications of the ACM (CACM). It has also served as a hands-on review board for the Inside Risks columns in the CACM, since July 1990.

CCPP PERSONNEL

The Chairman of the ACM Committee on Computers and Public Policy (CCPP) is Peter G. Neumann. During the reporting year, the committee consisted of Steve Bellovin, Peter Denning, Virgil Gligor, Jim Horning, Nancy Leveson, David Parnas, Jerry Saltzer, and Lauren Weinstein. This body exists as an expert advisory group rather than a membership organization, and has considerable impact worldwide even though it maintains a low profile. I am extraordinarily grateful to them for their continued long-standing participation and their incisive reviewing of CACM Inside Risks columns and helping resolve occasional potentially sticky issues relating to the ACM Risks Forum. The intellectual memory span and diversity of interests that they represent is extraordinary. I continue to value their incisive contributions on many issues that require insight and wisdom. Although their oversight efforts regarding Inside Risks are often not visible to readers, some of the CACM columns have led to intense interactions with the authors that occasionally escalated to coauthorship. The intellectual thoughtfulness and expertise that they have consistently contributed have greatly improved the quality of the Inside Risks content and kept the ACM Risks Forum on track.

CCPP internal interactions generally involve e-mail, with occasional telephone calls and in-person discussions. Many constructive interchanges have occurred during the year, as in the past.

There is some overlap with other ACM committees. For example, Horning, and Neumann are active members of both CCPP and USACM. Although there is some commonality of problem areas, the charters of CCPP and USACM are quite different. USACM has a specifically U.S.-centric focus, whereas CCPP tends to consider problems within a global perspective. For example, Neumann remains active in risks related to election systems, which is a common interests of CCPP and USACM;

Neumann and Horning both testified for the National Research Council Computer Science and Technology Board on risks of voter registration databases, which is primarily a concern of USACM.

CCPP Efforts

CCPP has several manifestations, including

- * RISKS online: The ACM Forum on Risks to the Public in Computers as a newsgroup (a digest by e-mail, and distributed as comp.risks via USENET). See Item 1 below.
- * RISKS highlights in ACM Software Engineering Notes (SEN): Edited and distilled from the online ACM Risks Forum. See Item 2 below.
- * The CACM Inside Risks monthly column. See Item 3 below.
- * RISKS: The Book, Computer-Related Risks. See Item 4 below.

Neumann has been highly visible in those efforts, but other CCPP members have also been active participants. Additionally, some other efforts have been undertaken, and CCPP members have continued to be active in ACM advisory roles and in computer policy issues, either directly related to CCPP or otherwise.

Neumann contributes many hours each week pro bono, moderating RISKS, responding to queries, engaging in individual dialogues with readers, and distilling the RISKS highlights for SIGSOFT's Software Engineering Notes (SEN). From the feedback we receive, RISKS appears to be one of the most widely read and most useful of the moderated on-line digests relating to computer technology. It serves a real educational purpose.

Despite its high profile and the occasionally controversial nature of some of the material, RISKS has been a relatively noninflammatory operation; this reflects the fact that Neumann takes his moderator's role quite seriously. (The advisory members of CCPP are invoked as informal reviewers whenever a potentially controversial contribution must be considered. In addition, each member of the committee has typically played an advisory role during the year on various sensitive issues.)

CCPP represents an extraordinary collection of creative thinking ability and resources for ACM, and its members are invoked as appropriate.

RELEVANT ACTIVITIES DURING THE REPORTING YEAR

Following is a list of CCPP-relevant activities. Almost all were done essentially pro-bono, and in my case with the considerable blessing and computer support of SRI International's Computer Science Lab -- for which I am hugely grateful.

ITEMS OF IMMEDIATE RELEVANCE to CCPP

1. The on-line ACM Forum on Risks to the Public in Computers and Related Systems. In addition to various unofficial mirrored sites on the Internet, the official archives are available by anonymous ftp in the U.S. at <ftp://ftp.sri.com/risks/>, and in a nicely formatted searchable site in the U.K., courtesy of Lindsay Marshall:

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<http://catless.ncl.ac.uk/Risks/> <PRE>
which is also accessible as
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The ACM Risks Forum activity involves many tens or even hundreds of thousands of people around the world, some of whom are contributing to the CCPP effort through their RISKS submissions. There are always many new first-time contributors each year.

The ACM Risks Forum continues as an institution. Since its first issue on August 1, 1985, its readership continues to expand, with a steady flow of new direct subscribers, via USENET newsgroups as comp.risks, and through redistribution centers and mirrored websites throughout the Internet. It reaches essentially every country that supports the Internet.

During the 2009-2010 year, 45 issues of the Digest appeared. The number of submissions for consideration continues to be considerable, and the primary limitation on the frequency of issues is the scarcity of my time (and having to cope with thousands of spam messages that are not caught by our filters).

2. Highlights from the on-line RISKS Forum continue to appear generally six times each year in the ACM SIGSOFT Software Engineering Notes. Neumann was SEN's founding editor in 1976. After Will Tracz took over as Editor in 1995, Neumann has continued to contribute a RISKS section to essentially every regular issue. Will continues the process of making current and back issues available online in the ACM Digital Archive. (SEN's circulation is one of the larger among SIGs.)

3. P.G. Neumann (ed). Inside Risks began in July 1990 as a monthly one-page column, originally inside the back cover of the CACM for 18 years. and now slated for three longer columns each year. We continue to expand the diversity among the authors. The following articles appeared or were written within the reporting year, as Viewpoints:

Oct 09.219 Reflections on Conficker: An insider's view of the analysis
and implications of the Conficker conundrum, Phillip Porras Feb 10.220 The
Need for a National Cybersecurity Research and Development
Agenda, Douglas Maughan

Jun 10.221 Privacy By Design: Moving from Art to Practice, Stuart S. Shapiro Oct
10.222 Risks of Undisciplined Development, David L. Parnas

These columns are available online at
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<http://www.CSL.sri.com/neumann/insiderisks.html><PRE>

4. Neumann's RISKS BOOK ("Computer-Related Risks", ACM Press and

Addison-Wesley, 1995), having transcended its fifth printing, is now being printed "on demand". It is also available in a Japanese translation. More recent source material is online in the ACM Risks Forum

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and summarized in SEN (item 2).

5. PGN's Illustrative Risks document provides a topical index for SEN and RISKS. It is updated regularly and is available online as

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[http://www.CSL.sri.com/neumann/illustrative.html<PRE>](http://www.CSL.sri.com/neumann/illustrative.html/)

as well as

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[http://www.CSL.sri.com/neumann/illustrative.pdf<PRE>](http://www.CSL.sri.com/neumann/illustrative.pdf/)

and

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[http://www.CSL.sri.com/neumann/illustrative.ps<PRE>](http://www.CSL.sri.com/neumann/illustrative.ps/).

The task of maintaining the currency of this resource has become more daunting over time, and this index is not keeping up to date. However, the search engine at risks.org tends to compensate for that.

6. Numerous additional activities of PGN are enumerated in Appendix I below.

7. Lauren Weinstein continues his operation of the PRIVACY Forum and the Network Neutrality Squad under the partial aegis of CCP.

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PRIVACY FORUM: [http://www.vortex.com/privacy<PRE>](http://www.vortex.com/privacy/)

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NETWORK NEUTRALITY SQUAD: **Error! Hyperlink reference not valid.**

The Privacy Forum and related services from People For Internet Responsibility (PFIR, which he co-founded with PGN), and his other outreach efforts continue to provide discussions, information, and other services that include the many areas of privacy -- which intersect virtually every aspect of our lives. The PRIVACY Forum, Network Neutrality Squad, and other archives are continually referenced from around the world, and have been listed as major network resources in the links of many private, commercial, and governmental entities globally.

As is the case with PGN, Lauren receives numerous e-mail and telephone contacts from all manner of media points, and continues to participate in newspaper and magazine articles, local and network radio and television interviews, and similar discussions on privacy and related technology topics. He has also been a commentator for National Public Radio's "Morning Edition" and for "Wired News" regarding technology and society.

8. Other CCPP members have also interacted with various ACM people on ACM and CCPP-related issues, reviewed drafts, refereed papers, etc.
9. Other CCPP members wrote papers and gave talks that bear on computers and public policy.
10. This CCPP report is accessible from the acm.org pages, via a link to my CCPP Web page:
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<http://www.CSL.sri.com/neumann/ccpp.html><PRE>
11. PGN, Computer-Related Risk Futures, ACSAC 2009, Honolulu, December 2009. See the proceedings.
12. PGN, Combatting Insider Threats, in Insider Threats in Cyber Security and Beyond, Christian Probst, Jeffrey Hunker, Dieter Gollmann, and Matt Bishop (editors), Springer Verlag, 2010.
13. PGN, Matt Bishop, Sean Peisert, and Marv Schaefer, Reflections on the 30th Anniversary of the IEEE Symposium on Security and Privacy, See the proceedings.

PLANS THROUGH 1 JULY 2011

14. Neumann will continue moderating the on-line RISKS Forum and contributing RISKS sections to ACM SIGSOFT's Software Engineering Notes.
15. Neumann will continue to coordinate/edit/write the CACM Inside. seeking articles on topical RISKS-related subjects written by members of CCPP and other contributors.
16. CCPP members will continue to interact with USACM as appropriate. We have been encouraging the submission of more Inside Risks columns from the USACM community, without much success. Perhaps in the future that will change.

BUDGET AND FUNDING

The 2009-2010 CCPP expenditures were as usual minimal, and the budget was adequate, with only modest amounts required for computing resources and communications. (SRI continues to provide free disk space for the RISKS FTP archives on <ftp.sri.com>; the CSL.SRI.COM resources are partly subsidized by SRI. In addition, Lindsay Marshall at Newcastle provides the extremely useful searchable risks.org archives on a pro bono basis.) We appreciate ACM's past support, and have been happy to stay within budget each year.

SUMMARY

The ACM RISKS Forum, the monthly CACM Inside Risks columns, Illustrative Risks, and the related efforts have continued to be successful in achieving their intended goals, as well as being highly popular. This year we have intensively renewed our long-term involvement in the risks of electronic voting systems.

We note that several related efforts are already ongoing under the aegis of the External Activities Board. For example, the scientific freedom and human rights, legal, education, and USACM committees involve issues relevant to CCPP that frequently are discussed in the ACM Risks Forum from the RISKS perspective. We are happy to interact with others in those related areas, without CCPP having to be directly in the loop, and to offer the Inside Risks space to those efforts that have a reasonable RISKS-relevant content. Overall, CCPP seems to have a well-defined niche of its own.

The ACM RISKS Forum and the PRIVACY Forum span a large gamut of CCPP issues, and involve reaching out to many thousands of people, throughout the world, quite a few of whom are actively contributing participants. RISKS is heavily involved in human safety, privacy, ethics, legal responsibility, etc., and there is no shortage of public-policy related issues!

The Inside Risks column serves as a popular CACM feature, and seeks to distill timely topics in a broadly accessible form.

Continued support of existing and possibly new CCPP activities is appropriate, and will be appreciated at essentially the same level. We are delighted to be a low-budget high-yield part of the ACM.

In general, we always seek to broaden our scope and deepen our content. We would be delighted to receive from ACM executive folks suggestions for new directions relating to computers and public policy, initiatives that we might address, suggestions for additional CCPP members who might also be willing to be active in writing and reviewing proposed Inside Risks columns, and ideas for making our efforts even more visibly attributable to ACM. The CCPP members represent a valuable cross-section of ACM interests relating to public-policy issues. As noted above, all of their efforts in helping CCPP and the ACM are greatly appreciated, even though many of those efforts are not noted here explicitly.

Respectfully submitted,

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<H2>APPENDIX I: CCPP-Relevant Activities of Peter G. Neumann</H2>

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RELEVANT PGN EVENTS, SECOND-HALF 2009

August 4-5, Invited keynote speaker, Hierarchies, Lowerarchies, Anarchies, Plutarchies: Historical Perspectives of Trustworthy Architectures, AFRL/CPSG-sponsored 3rd Layered Assurance Workshop, SanAntonio TX.

August 10-11, participated in EVT+WOTE, preceding Usenix Security, Montreal, Canada.

August 27-28, attended a DoE workshop on trust and trustworthiness, Seattle.

November 20, Participated in EPIC Advisory Board meeting with Mary Ellen Callahan, new DHS Chief Privacy Officer. (The EPIC Board previously had a meeting with the first DHS CPO, Nuala O'Connor Kelly in 2003.)

December 1, Invited guest at the Google Security Workshop, Mountain View CA.

December 9-11, Invited luncheon speaker -- Risk Futures: Who (or What) May Be Eating Your Lunch? -- and panelist in session on Preparing for 2020, ACSAC 25, Honolulu, Hawaii

December 23, KQED call-in comment on the huge existing trustworthiness gap between research and the marketplace, and a question on how can we incentivize government and industry to achieve trustworthy systems, on the Michael Krasny Forum (NPR) toward the end of a program devoted to cybersecurity threats facing Howard Schmidt. The program's guests were James Lewis (CSIS), John Arquilla (NPS), and Martin Libicki (RAND). Unfortunately, the panelists seemed to have not much to offer on that leading question, other than it might be time to redo the 2003 White House Cybersecurity strategy!

RELEVANT PGN EVENTS, FIRST-HALF 2010

March 1, RSA Security conference, invited participant in an Innovation Sandbox organized Hugh Thompson.

April 27, Talk at CMU Moffet Field, Silicon Valley Computer Technology, A Total-System View: Who and What Should You Trust (Or Not)?

May 17, Organized and moderated the 30th Anniversary celebration of the IEEE Symposium on Security and Privacy at the Claremont in Berkeley.

Jun 17, Panelist for two sessions at Computers, Freedom and Privacy 2010, at San Jose State.

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APPENDIX II:

Current Web and Internet Addresses for CAPP Members </H2>

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