

Annual Report Relating to the ACM Risks Forum
For the Period 1 July 2022 to 30 June 2023
Submitted by Peter G. Neumann

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To: The ACM Board, 1601 Broadway, 10th Floor, NY, NY 10019

This report summarizes my activities relating to the ACM Forum on Risks to the Public ('RISKS', which I began on 1 August 1985, at the request of the ACM president Adele Goldberg), and the Inside Risks series of 253 articles in the Communications of the ACM (which began in July 1990), for the ACM fiscal year that has just ended.

In addition to the ACM Risks Forum and the Inside Risks articles, I contribute highlights from the online RISKS to each quarterly issue of the ACM SIGSOFT Software Engineering Notes ('SEN', for which I was the founding editor, in 1976). My 1995 book, Computer-Related Risks, drew heavily on materials from SEN and subsequently RISKS. Perhaps surprisingly, many of the risks considered in the book are still with us today in one form or another, and have actually increased in frequency and impact. Not particularly surprising, all of the issues outlined in RISKS vol 1 no 1 are still issues today.

During the 2022-2023 ACM reporting year, there were 41 issues of the ACM Risks Digest (Volume 33, issues 32 through 72). RISKS issues are available online at <ftp.sri.com/risks/> and at <http://www.risks.org> (which redirects to a nicely formatted searchable website at the University of Newcastle in the UK, courtesy of Lindsay Marshall), as well as on USENET (via Panix); it is also mirrored elsewhere around the world. The extent of its readership is considerable, but not easy to estimate. It continues to get new subscribers, and has relatively few unsubscribers.

The CACM Inside Risks columns were initially a monthly one-pager (on the Inside back page of the CACM, to add a pun to its identity as an Insider's view of Risks). The first 216 issues were monthly until June 2008, after which it has appeared as Viewpoint articles typically three times a year; the change was initiated by Moshe Vardi, who noted to me that the Inside Risks articles were the most popular in the CACM, and he wanted to use that space for other purposes. During the 2021-2022 reporting year, there was unfortunately only one column (as a result of various time-consuming events and work/personal conflicts, plus one life-critical medical emergency that caused an invited author to be unable to finish a drafted article):

* June 2022. #252. PGN, Toward Total-System Trustworthiness:

This is a long-term goal to systemically reduce risks.

<http://www.csl.sri.com/neumann/cacm252.pdf>

Although several columns were invited or contemplated for 2022-2023, only one emerged. due to analogous circumstances:

June 2023 #253. PGN, Computer-Related Risks and Remediation Challenges:
Surveying the nontechnical issues interwoven with related technologies
<http://www.csl.sri.com/neumann/cacm253.pdf>

Incidentally, the June 2023 issue of CACM was extraordinarily timely, especially with features on Bob Metcalf, the memorial for Bill Wulf, and numerous outstanding articles.

The above RISKS-related activities provide a highly visible public ACM activity (consistent with Adele Goldberg's original desire). They also serve vital educational roles, and provide useful resources for teachers, researchers, developers, and end-users. Long-time RISKS readers tend to be very savvy when it comes to trustworthiness (safety, security, reliability, system survivability, etc.), and some of them have been reading or contributing to RISKS for decades.

Although the ACM Committee on Computers and Public Policy (CCPP) was transformed into a function of the ACM Council by Cherri Pancake when she took over the ACM reins, the committee still exists for Inside Risks and RISKS activities; it consists of Steve Bellovin, Peter Denning, Virgil Gligor, Kevin Fu, Nancy Leveson, David Parnas, Jerry Saltzer, Zeynep Tufekci, Lauren Weinstein, and Ben Zorn. Fortunately, they are all still present as extremely relevant and diverse advisors, primarily as a review board for potential Inside Risks articles, but also for occasionally helping me deal with occasional quirky considerations relating to the ACM Risks Forum.

Plans Through 30 June 2024

At Yannis Ioannidis's directive, I have had another productive year continuing to moderate the on-line ACM RISKS Forum, to commission and edit future Inside Risks columns, to contribute quarterly RISKS highlights to the SIGSOFT SEN, all closely related to the RISKS activity, as in my past 38 ACM years.

The next column in the works for the CACM Inside Risks series is what I expect to be an outstanding effort from Nancy Leveson relating to software safety, currently slotted in for the October 2023 issue. This one has been long in the works, but was deferred while Nancy finished her newest book and sent it to the MIT Press.

I seem to have had somewhat less spare time regarding RISKS than expected due to SRI proposal and project pressures (particularly related to our CHERI hardware-software development jointly with the University of Cambridge UK), and some early signs of aging -- in July 2023 I will begin my

71st year as computer professional. However, the fewer RISKS issues than last year is offset by the reality that some of the issues were much bigger than usual -- as a result of delays between issues.

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My office phone has been 1-650-859-2375, but not used during COVID. It is
now finally disappearing in favor of SRI getting rid of office telephones - -- being replaced
by Zoom `phones' going directly to e-mail!