Annual Report Relating to the ACM Risks Forum For the Period 1 July 2023 to 30 June 2024 Submitted by Peter G. Neumann

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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 254 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 the early RISKS. Unfortunately, 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. Therefore, it is not particularly surprising that all of the riskful topics outlined in RISKS vol 1 no 1 are still highly relevant today.

During the 2023-2024 ACM reporting year, there were 33 issues of the ACM Risks Digest (Volume 34, issues 03 through 35). All RISKS issues are available online at <u>ftp.sri.com/risks/</u> and at <u>http://www.risks.org</u> (which redirects to a nicely formatted searchable website at the University of Newcastle in the UK, courtesy of Lindsay Marshall; Lindsay has retired, but is still helping us). To the extent that people still rely on USENET, it is available there as comp.risks -- courtesy of Ed Ravin and 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. RISKS has always been international in scope, and attracts many foreign subscribers and contributors.

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 2023-2024 ACM year, we produced only one Inside Risks article (due in part to my recovery from the medical surgery of June 2023 and a broken leg in March 2024, both of which slowed me down - and my regular SRI obligations):

Oct 2023.254. Nancy Leveson, Certification of Safety-Critical Systems: <u>http://www.csl.sri.com/neumann/cacm253.pdf</u>

following the one from the previous June.

June 2023.253. PGN, Computer-Related Risks and Remediation Challenges: Surveying the nontechnical issues interwoven with related technologies. <u>http://www.csl.sri.com/neumann/cacm253.pdf</u> 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 leadership, my oversight/steering committee still exists primarily as an editorial review board for Inside Risks. 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.

Plans Through 30 June 2025

Continuing 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. Assuming everything goes as desired, I will certainly continue these activities. I am also just wrapping up a position paper on Risks in Health Care for the ACM CCS HealthSec workshop in the fall, at the invitation of William Yurcik (DHHS), for a session that also includes invited contributions from John McHugh and Kevin Fu, both long-time colleagues.

There are already two columns lined up for 2024-2025, and anticipate a possible third one in the new ACM year, hoping to get back to the three-per-year schedule agreed upon with Moshe Vardi. I hope that can continue, whenever the material is deemed worthy.

I seem to have been somewhat less productive regarding Inside RISKS than expected, due in part to fewer new risks other than AI and misinformation with which to wrestle (trying to avoid too much repetition), to work pressures of SRI proposals and projects (particularly related to our CHERI hardware-software development jointly with the University of Cambridge UK that began in 2010 and is now approaching fruition), and to some early signs of aging. (On 5 July 2024 I will begin my 72nd year as a computer professional, dating back to programming for the Naval Ordnance Lab during the summer of 1953.) I now have a new four-year DARPA CHERI project that started three months ago, with other new project efforts emerging.

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