



D25 Ethical Conflicts in Science and Engineering: The Theft of Scientific Records, Marginal Practices, and Breach of Confidentiality in the Peer-Review Process

Mark C. Pozzi, MS, Sandia Safety Sciences, 2 Marietta Court, Ste A, Edgewood, NM 87015; and Kenneth J. Saczalski, PhD*, 1440 W Bay Avenue, Newport Beach, CA 92661*

The goal of this presentation is to alert forensic professionals in the ways testing, data, and safety standards have been manipulated and multiple records of taxpayer-supported research and classified information have been intentionally suppressed, stolen, or destroyed. This loss of critical information negatively affects public safety and efforts to improve technology. It also allows defective, dangerous products to continue to be produced, placing the public at risk. None of this could happen if those involved followed the Engineering Code of Ethics.

This presentation will impact the forensic science community by increasing awareness of how automakers, helmet manufacturers, consumer product manufacturers, safety certification groups, government officials, and others who are responsible for generating and maintaining objective and reliable scientific information have failed in many instances to properly carry out this responsibility in an ethical manner. The forensic community and, ultimately, the public will benefit from this presentation.

Many authors have been involved in decades of biodynamics, safety testing, and other engineering research for both the United States Government and the private sector. Several were also associated, before his death, with the legendary Dr. John Paul Stapp of the United States Air Force (USAF) and National Highway Traffic Safety Administration. The theft of scientific records from Dr. Stapp's home and office immediately after his death was briefly described at the 2017 AAFS Annual Scientific Meeting. This presentation expands on that work by providing more detailed contributions from authors, some of whom were actual witnesses to the theft and had early roles in attempts to find the culprits. The author of *Sonic Wind*, a biography of Dr. Stapp published in 2015, later discovered the ultimate fate of these documents.

This presentation will begin with a narrative describing the events preceding re-discovery of the Stapp documents. Legal perspectives and a commentary regarding these documents will then be provided by an aerospace engineer/attorney. Finally, the presentation will conclude with examples outlining the ethical and other pitfalls associated with science and engineering.

One of these examples includes a recently experienced violation of author scientific rights involving a breach of confidentiality by supposedly unbiased, independent peer reviewers. The reviewers acted in collusion so blatant that one copied the review of the other, and submitted it verbatim to an engineering society. It was only after the authors requested and analyzed the comments that the collusion was discovered, then corrected by this engineering society. This is only the latest in a series of similar questionable practices that were encountered from individuals and groups who have lost their ethical compass in conducting science and engineering research.

Another example involves safety standards and test methods for motor vehicles. Specifically, despite objections by the National Transportation Safety Board and other safety professionals, manufacturers have successfully lobbied the United States government to eliminate long-established critical safety standards and test methodologies, with no conceivable benefit to public safety. This has allowed dangerous designs that defeat critical safety systems to be produced, in clear violation of well-established safety principles. Misleading warnings are also provided for consumer products in which, even if the warnings are fully complied with, the hazard is still present and will result in a predictable risk of permanent or fatal injury. The public is given no clue that this is the case, and many permanent disabling injuries and fatalities have resulted. This is a clear violation of well-established safety practices. None of this could happen if those involved, from both the manufacturing and the governmental safety agency aspect, had followed the Engineering Code of Ethics.

Evidently, it is becoming easier and cheaper to roll back or eliminate safety regulations than to actually follow state-of-the-art improvements in science, technology, and knowledge by corresponding safety and performance improvements in products. This is facilitated by suppressing publication of scientific research that exposes flaws in existing designs, which explains the motivation for collusion and other unethical practices in the peer-review process, as well as theft of scientific records.

Theft of Scientific Records, Breach of Confidentiality, Violation of Peer Review