Meeting: 1003, Atlanta, Georgia, MAA CP T1, MAA Session on Mathematics Experiences in Business, Industry, and Government

1003-T1-905 **Abbe H. Herzig*** (aherzig@albany.edu), University at Albany, ED 109, 1400 Washington Avenue, Albany, NY 12222. The Statistics Behind the Scenes: Statistics in Consumer Reports.

Consumer Reports is one of the largest-circulation magazines in the U.S. It reports on consumer products and services, based on extensive research from a staff of engineers, scientists, survey researchers, statisticians, and journalists. I will talk about some of the statistical challenges I faced as a statistician in the product-testing division of Consumer Reports. The statisticians at CU work as internal consultants to the scientists and engineers who conduct the product tests, as well as to the writers and editors who prepare the test results for publication in the magazine. Each product category tested for Consumer Reports presents a unique set of statistical requirements, involving a broad range of statistical design, data analysis, and presentation tools. I will talk about some specific examples of product tests, including nutrition of breakfast cereals (cluster analysis), auto frequency-of-repair (survey methods), food sensory (incomplete block designs and linear models), and lawn sprinklers (exploratory data analysis and statistical graphics). Hopefully, this presentation will offer a picture of statistical work as a creative, interactive process that requires a broad range of skills for collecting, understanding, interpreting and presenting data. (Received September 30, 2004)