

Presentation of 1992 Wilks Award to Malcolm S. Taylor

Dr. Malcolm S. Taylor of the Army Research Laboratories at Aberdeen Proving Ground Maryland was the recipient of the Eleventh U.S. Army Wilks Award for contributions to statistical methodologies in Army Research, Development and Testing. Dr. Taylor has a long record of technical involvement in Army Research, development and testing spanning the last 31 years. His contributions are recorded, in part, in some 52 publications, numerous technical presentations and service to the Army and statistical communities.

The award was presented by the immediate previous winner of the Award, Dr. James L. Thompson. The text of the presentation address follows:

The recipient of the 1992 Samuel S. Wilks Award is a distinguished member of the United States Army scientific community.

The position of the sciences in Western defense has a long history. In Classical Antiquity, we recall the significant work of Archimedes in the defense of Syracuse. In the Middle Ages, the use of Greek Fire kept Constantinople safe from Islamic capture for 500 years. More recently, we recall that it was the French National Assembly which, in 1795, created the Ecole Polytechnique as an institution where the sciences would be made a key ingredient of national defense. The Germans have long held military related science in high esteem, and spent the fifty years before World War I in building weaponry and logistics for fighting a two front war against numerically superior enemies. In the Anglo-Saxon democracies, the vital importance of defense related science took a longer time to be fully appreciated

(Eli Whitney, notwithstanding). During the Second World War, when interest in atomic weaponry began to develop, the British were deprived of the services of one of the pioneers of nuclear physics, H.G. Moseley, because he had perished on the Gallipoli front in 1915 as a 28 year old private soldier.

Certainly, at least since the time of Eisenhower, American political leaders have appreciated (more or less) the fact that if the bourgeois democracies were to cope with a threat from a seemingly implacable enemy, able to force hundreds of millions of subjects into a model for fighting total war, then it would be necessary to focus superior scientific expertise as a counterweight to the single minded fanaticism of the Soviet nomenklatura. The vast American scientific defense community built up during the intervening 40 years has proved its effectiveness time and again. Few will believe that the Soviet leaders resigned from the chess game because they were cowards, or because they thought their troops were not sufficiently numerous, or because they were concerned about the declining standard of living of the peoples of the Soviet Empire. They presented the West with a bloodless victory, because they saw that they were not able to match the scope or the effectiveness of the logistical and weapon superiority.

There were no Te Deums sung in Washington when the Soviet Empire fell, no ticker tape parades for the soldiers and scientists who had brought it down by their steely intelligence and resolve. Some have even conjectured that the collapse of the Soviet Empire, certainly among the most important positive events in World History, was due to some sort of historical inevitability. I do not believe that anyone in this room tonight has any illusions of that sort. Tonight, any member of the American defense scientific community has the right to congratulate himself as

being a part of the most singularly successful profession in the Nation. And from the thousands of representatives of that community, we are presenting tonight the Wilks Award to one of its most distinguished members, Dr. Malcolm S. Taylor.

Malcolm Taylor has served at the Ballistics Research Laboratory at Aberdeen since 1961. Inasmuch as a major part of his work has always been to help real military people with real problems which they really want to have solved, he has constantly and effectively employed a widely ranging arsenal of mathematical specialties to assist his clients. His published research has ranged from computer science to experimental design to extreme value theory to nonparametric testing to resampling theory to survival theory to fuzzy set theory to non-Newtonian flow to nonlinear programming to linear models to information theory to vulnerability theory to artificial intelligence to control theory. Over the years, Malcolm Taylor has worn many hats, worked effectively on many problems, always in the best traditions of American Defense Science.

Our honoree tonight took his doctorate in mathematical statistics at the University of Delaware in 1970, where he currently holds the rank of Adjunct Professor of Mathematical Sciences. He has served as President of the Chesapeake Chapter of the American Statistical Association as well as Council Representative of that Chapter. He has chaired the Army Studies Peer Review Panel. He has been a member of the Army Mathematics Steering Committee since 1980. He is an elected member of Sigma Xi, a Fellow of the Royal Statistical Society and a Fellow of the American Statistical Association. Ladies and Gentlemen, I am happy to present to you the Recipient of the 1992 Wilks Award, Malcolm S. Taylor.

Prof. Robert E. Bechhofer Cornell University	Twenty-seventh (1981)
Prof. Bernard Harris University of Wisconsin	Twenty-eighth (1982)
Prof. Herbert A. David Iowa State University	Twenty-ninth (1983)
Prof. Nozer D. Singpurwalla George Washington University	Thirtieth (1984)
Prof. Emanuel Parzen Texas A&M University	Thirty-first (1985)
Dr. Francis G. Dressel U.S. Army Research Office	Thirty-second (1986)
Prof. J. Stuart Hunter Princeton University	Thirty-third (1987)
Dr. Marion R. Bryson CDEC	Thirty-fourth (1988)
Prof. Boyd Harshbarger Virginia Polytechnic Institute	Thirty-fifth (1989)
No Recipient	Thirty-sixth (1990)
Prof. James R. Thompson Rice University	Thirty-seventh (1991)
Dr. Malcolm S. Taylor U.S. Army BRL	Thirty-eighth (1992)