

Book Reviews

Richelson, Jeffrey T. *The Wizards of Langley: Inside the CIA's Directorate of Science and Technology*. Boulder, CO: Westview, 2001.

Jeffrey Richelson has captured the untold story of a little-known side of modern intelligence gathering. Ian Fleming's James Bond has done a disservice to full understanding of the trade of foreign intelligence gathering by creating a popular genre quite removed from today's reality. The modern world of intelligence practitioners is more apt to be made up of scientists, technicians, IT specialists, and just plain old-fashioned bureaucrats than tuxedo-clad, debonair gentlemen asking for martinis - shaken not stirred, please. One distinct group among today's intelligence collectors is the engineers and scientists who employ knowledge and skills in the pursuit of intelligence. This is their story.

Richelson describes how science and technology are harnessed to capture information about America's adversaries. His account runs the gamut of the CIA's employment of technology to gain access to intelligence not otherwise available. It is the tale of applying science to espionage. It begins with the creation in 1949 of the CIA's Scientific Intelligence Committee and continues until today's Directorate of Science and Technology. At times it is the story of office intrigue and a lot of bureaucratic infighting, partly arising from lack of knowledge about the full potential of applying scientific rigour to espionage, as well as the more mundane reason of seeking to gain control over a lot of research dollars.

Richelson tells the story through chapters generally organized around each of the heads of the CIA's office of wizardry. This approach works well and captures a remarkable tale of overcoming seemingly insurmountable obstacles by employing the best brains in the nation, applying scientific knowledge, and using a great deal of money. The results are phenomenal. Spy planes produced in a short time and coming in under budget, and construction of a huge ocean-going crane capable of lifting an entire modern Soviet submarine. Some of the other ideas did not always work out, such as equipping carrier-pigeons with spy cameras.

Other initiatives captured advanced image-processing techniques, used in intelligence analysis, and applied them to mammography, and the fight against breast cancer. Lithium batteries for pacemakers were developed for the intelligence trade. Richelson describes how a large group of exceptionally talented people who brought their knowledge and skills to bear in America's spy wars. When today, satellite photographs assist the international community to identify those areas of Africa which will soon suffer from life-threatening droughts it is because of the advances which were made in the name of intelligence gathering and financed by America's eternal quest for information.

Scientific intelligence has made a remarkable contribution to US (and Western) intelligence capabilities over its half century of existence. Collection systems have been enhanced and analytical activities have been made easier. The advances made possible by the people engaged in scientific intelligence collection have contributed to an almost incomprehensible increase in the volume of intelligence available for analysis. These same people were then tasked to devise novel ways of crunching that same information so that it may be made useful to the intelligence analysts.

Hidden between the lines of this informative book is the question of whether the great scientific intelligence gains of the past half century can be replicated in the future. Richelson seems to suggest that a unique environment existed in the second half of the twentieth century when great minds such as that of Edwin Land of Polaroid fame, could be brought into the intelligence community to devise novel solutions to complex problems. Today, the situation is possibly different. Richelson points out that the features which made the CIA office of wizardry unique by uniting brains, complex tasks, a sense of adventure, and large amounts of money, may no longer exist. Private sector technology is much more competitive and advanced today than at the dawn of scientific intelligence. In today's environment, the Directorate of Science and Technology is no longer driving the agenda, in Richelson's view. There has been a decline over the past several decades of exceptional innovations fostered by the American intelligence community - unless, of course, if they simply are not telling anyone!

This is a scholarly book. Richelson writes in a dry style geared to capturing as much information as possible. Sometimes the details are overwhelming and might have been balanced by an anecdote or two. But like all Richelson's books, this is the penultimate description of its subject.

Kurt F. Jensen is a PhD candidate in modern diplomatic history at Carleton University, Ottawa, where his thesis will look at the early history of Canadian foreign intelligence collection efforts. He is employed by the Department of Foreign Affairs and International Trade, and has served in a number of assignments abroad.