Centrifugation and the Manhattan Project

CAMERON REED, Alma College — A study of U. S. Army Manhattan Engineer District documents reveals that consideration of centrifugation as a means of uranium enrichment during World War II was considerably more extensive than is commonly appreciated. By the time the centrifuge project was abandoned in early 1944 a full-scale prototype unit had been fabricated and tested at near-production speeds, enrichments of close to theoretically-expected levels had been demonstrated with pilot-plant units, and plans for production plants had been developed. This paper will review the history of this little-known aspect of the Project and examine the circumstances of how it came to be discontinued.