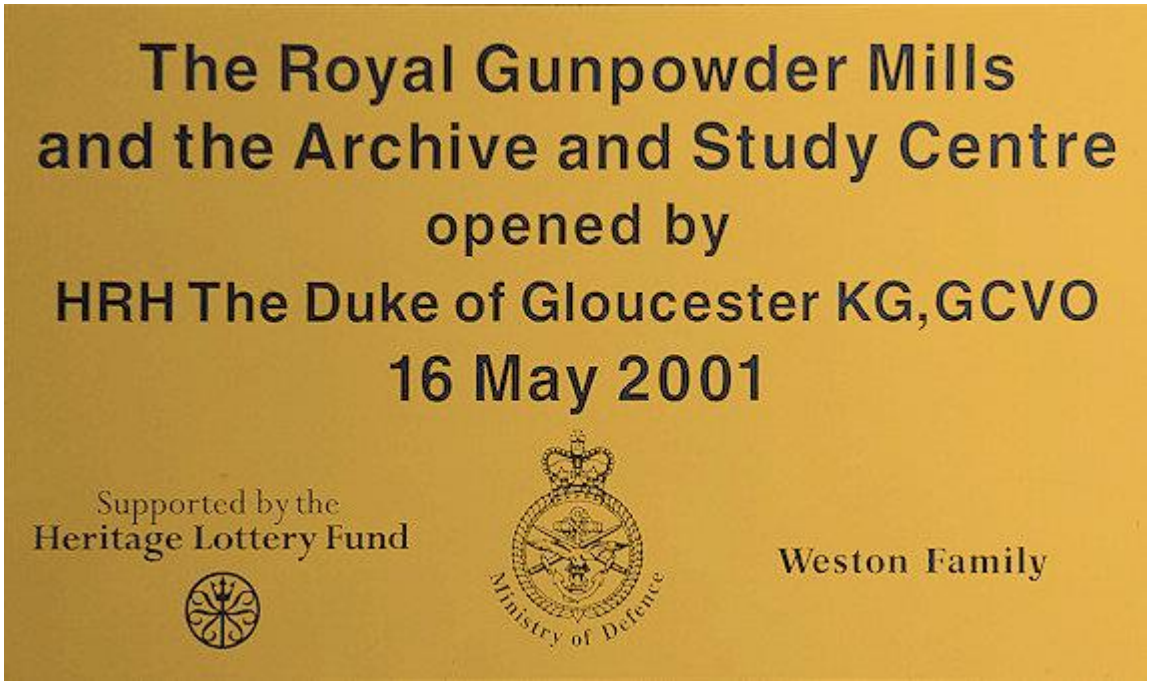
The Archive: Digitisation Project 2004 to 2022

By: Ian Campbell MacFarlane, July 2026
Volunteer Digital Archivist, Ex-IT Manager

This is a remembrance of my time working at the Royal Gunpowder Mills (RGM), and an opportunity to express my thanks to all the people who were involved with bringing the Digital Archive into being.

I never met Malcolm McLaren, but we all owe him much gratitude for preserving all the records and artefacts that are known as the Waltham Abbey Special Collection (WASC), which now form the basis of the RGM Digital Archive and the artefacts on display in the Exhibition.

The RGM Archive and Study Centre was officially opened by the Duke of Gloucester on 16 May 2001. The Archive and Study Centre are now located in Walton House (A200). This is the brass plaque that was presented at the opening.



I began my employment at RGM in summer 2004 as a telephone receptionist in the Lodge (A221). I did not excel at that job, but by the summer of 2005, I was promoted to IT manager. During that time, I became aware of the RGM Archive and Study Centre in the Lodge Library, tended by the current curators, Les Tucker and Richard Thomas, who had been working on the Archive since 1995. They were digitally re-indexing the Archive from typewritten records into spreadsheets on their laptop computers. They were also adding new documents and artefacts to the collection as they became available. I suggested that we also digitally scan documents and photos as an internal resource and with an eye to eventually publishing the Archive on the internet. That vision was accomplished beginning in 2022, when the RGM Digital Archive database went live on the internet.

The initiating story was me proposing to then manager Lynne Lennard in 2005 the project of digitising the Archive. She approved the project, so long as it didn't cost the RGM.

I Agreed!

In the beginning, 2004, the RGM had 4 or 5 donated computers and 3 or 4 scanners, so the project commenced cost free. Over the next 18 years, the Archive received donations of £7600. During that time only about £3000 was spent for equipment and supplies.

The next 18 years were punctuated by many ups and downs and interesting encounters with Friends, Volunteers and avid researchers, such as Michael Ondaatje who was researching his novel "Warlight". Les and Richard did the cataloguing on their own laptops and I would take a copy each week on a floppy drive and back it up to the RGM network. The first person to do scanning of photographs was Sandra Taylor, who had previous experience scanning photos for the local Waltham Abbey Historical Society Museum. Then followed several years with a number of Volunteers scanning photos and documents. Derek Armes and Sandra Taylor transcribed the 1787-1841 personnel records from the hand-written originals and authored 2 books based on the records - "The Workforce of the Royal Gunpowder Mills" and "Workforce Worthies of the Royal Gunpowder Mills". In the mid-2010s, Sarah Deane photographed all the A0 size maps and plans of the site. During the 2010s Michael Seymour and Ray Stelzner took over the document and photo scanning until everything was scanned, around 2019. During that time, I was converting all our databases to SQL format and programming a custom web application to display the Archive records online.

Books published by the Archive are:

- Richard Thomas - The Waterways of the Royal Gunpowder Mills
- Richard Thomas - The Explosions at the Royal Gunpowder Mills
- Peter Blake - Military Superintendents of the Royal Gunpowder Mills
- Derek Armes and Sandra Taylor - The Workforce of the Royal Gunpowder Mills
- Sandra Taylor and Derek Armes - Workforce Worthies of the Royal Gunpowder Mills
- Les Tucker - The Listed Buildings and Other Principal Structures at the Royal Gunpowder Mills
- Bryan Howard - Rocket Propellants at the Royal Gunpowder Mills
- John Jenkins - Railways of the Royal Gunpowder Mills
- Friends Society - Memories of Research at Royal Gunpowder Mills
- James Burgess - Episodes in the Life of a Government Scientist at Royal Gunpowder Mills

The Archive also published a series of historical reprints based on material from the Archive. Of particular note was the publishing of “A Treatise on Gunpowder” by Frederick Drayson, transcribed by the Friends Society from the original 1830 handwritten manuscript along with scans of Drayson's original building drawings.

Historical reprints published by the Archive are:

- Frederick Drayson - A Treatise on Gunpowder (1830)
- John Braddock - A Memoir on Gunpowder; in which are discussed the Principles both of its Manufacture and Proof (1832)
- Major Fraser Baddeley - Pamphlet on the Manufacture of Gunpowder (1857)
- Captain F. M. Smith - A Handbook of the Manufacture and Proof of Gunpowder as carried on at the Royal Gunpowder Factory (1870)
- W. Winters, F. R. Hist. Soc. - Centenary Memorial of the Royal Gunpowder Factory, Waltham Abbey (1887)
- Major-General W. H. Wardell - Handbook of Gunpowder and Guncotton (1888)
- Lieut.-Colonel Henry W. L. Hime - Gunpowder and Ammunition - Their Origin and Progress (1904)
- E. A. Brayley Hodgetts - The Rise and Progress of the British Explosives Industry (1909)

I officially retired from RGM in 2020 and subsequently have worked occasionally as an IT consultant. I continue as a volunteer in the role of Volunteer Digital Archivist.

Finally, in 2022, the Board of Trustees contracted me to publish the Archive online.

The online Archive contains approximately 84753 records in 20497 files, including: 2349 pdf files (66770 pages), 17917 image files, 120 audio files, 122 video files.



Here is the link to the Archive and Books: https://www.wargm.org/archive_viewer/

All remaining documents not included in the Archive after the closure of ERDE were either destroyed or deposited with The National Archives, Kew.
See here: https://www.wargm.org/WASC/Files/wasc_2171_04.pdf