Bernard Guest Loach

1922 - 2002



Revised edition

Martin J Loach

December 2016

CONTENTS

Introduction

Chapter 1	In The Beginning
Chapter 2	TRE, Malvern 1943-45 –Radar
Chapter 3	TRE, Malvern 1945-50 – Accelerators
Chapter 4	Goodbye Malvern and The Lees
Chapter 5	AERE Harwell 1953
Chapter 6	The PLA years 1956 –1967
Chapter 7	The NIMROD years 1960 –1970
Chapter 8	The Post NIMROD years 1970 –1987

Contents of the archive

Appendix

Introduction to the Second Revision

This work is really just a manifestation of an opportunity. Because my father Bernard was a hoarder, and very economical with the production of waste, he kept so many records of his life. Many people arrive at their retirement discarding the chattels of a working life in order to relax and forget the day to day graft. But it was different with Bernard. He kept so much, especially of his working records and archives, that when he passed away so soon in 2002, he left a huge quantity of paperwork and artefacts. He was possibly well known at work for having an office with an awful lot of stuff in it, there used to be a certain amount of controversy over whether he could be allowed to keep the space to store it all. I always recall on my visits there as a child, seeing the artefacts from the TRE waveguide work which are now proudly displayed in my own home cabinet. He kept them in a glass case in his office, possibly the nearest those forward looking scientists ever got to see a museum for real. But as far as we can tell he succeeded in keeping what he wanted, and because of that, and only because of that, I am able to piece it all together to produce this work to tell the story of his working life. Recent enquiries have suggested that the archives we have kept may be rather more than the Rutherford Laboratory itself has kept. One day, perhaps, they will be grateful! I have already received enquiries from Director and staff at the Diamond project, about certain aspects of accelerator development as the result of the on-line version of the draft of this work, as it appears I had material even the National Archive does not have.

So this is an opportunity to do what is not often possible, - to gather information and piece together a life after death. I have concentrated on working life, as that is what most of the material covers, but I have inserted some of his background and domestic life so that it does not become too boring and without context. So what you will read will be a working life pieced together from paperwork and investigation. Little was actually gained by me from Bernard during his life, - he didn't talk a lot about it, and maybe he felt there were boundaries, after all he did have to sign the official secrets act right from the start during the war, and again several times afterwards. Having said that, I don't believe much of what he did in the later years at Rutherford was in any way classified, especially after the open collaboration in science between the EU and USA.

As a consequence, sometimes this may read rather boringly as a sequence of events or paperwork and meetings, as that is all I can often do, but it does tell a story and maybe others could fill in some gaps? The age of other people that worked with him must be growing alarmingly now (he would have been 94), but hopefully, enough are still with us to benefit from the memories here. Because I have to go by what I have and sometimes join up the dots to make a story, I may sometimes get things wrong. I can only ask that if you know otherwise, please let me know! Maybe there will be a third edition someday to pick up the pieces.

The archive from which I have worked must be around ¼ ton of paper work and artefacts. There is a listing in the appendix. This contains so much unusual ephemera, even some examples of the AERE news which was so useful for buying and selling, also many editions of the RAL Bulletin and the earlier Orbit magazines from number 1 in 1962.

Bernard was a scientist and physicist at work, but very much interested in the science of nature too when away from work. He was fascinated by space research and the moon missions. He recorded hundreds of hours of audio tape starting in 1948, covering many radio and TV programmes concerning his work and space research, even all the moon landings are recorded. Shame he had no video recorder until the 1980's, but that is another story. I will not dwell on the subject of the 1000 VHS tapes, but I will mention the 1000's of colour slides. He was a very keen photographer and we still have a very large collection to sort one day, even earlier colour and black and white negatives, some of which have already generated interested locally because of their value to local historians. There are also many hours of 8mm films and camcorder tapes. How many people have a full half hour on 8mm film covering the building of the Abingdon bypass?

Nuclear physics and accelerators seemed beyond me in the past, but all is much clearer as the result of doing this work. The one thing I regret is not having the opportunity to ask Bernard himself the answers to so many questions, but now it is too late. Somehow I don't think he would have been keen to go over it with me anyway, it was just the way he was.

In this edition all chapters have been revised with new information, and the final two chapters concerning Nimrod and the later computer dominated final years of his career are entirely new. Vast amounts of further information keep coming to light. Much paperwork and more artefacts have been added to the archive. Recent interest in Radar and the war has resulted in a general upsurge of interest. Many more books have been published in the last decade to the extent one can no longer keep up a representative library. Not least there was an excellent exhibition held in 2012 at Malvern to celebrate the 70th anniversary of TRE Malvern years. Hugh Williams was I believe instrumental in much of that work and I wish to thank him for his assistance and also for helping me with my enquiries. QinetiQ is the organisation currently residing at the RRDE site at Malvern for whom Hugh is in now in charge of TRE archives. Finally I have to thank Alan Shaw, for many email exchanges with reminiscences and memories of TRE where he worked alongside my father for many years. Alan must be one of the few remaining veterans from whom we can still learn so much.

-----0000000000000