

**Catalogue T, for box-files T1 – T5.**

**Scope:** Electronic circuit design for radar and associated guided weapons developments at the Telecommunications Research Establishment, with the main focus being the work of H G Carpenter at TRE from 1941 – 1948. More generally, the topics included cover the period 1935 – 1993.

**Background.**

These items were donated by H G (Harry) Carpenter (1920 – 2010), who was an electronic engineer at the Telecommunications Research Establishment (TRE) from September 1941 until December 1948. He joined TRE when it was based at Swanage. Soon after, TRE was moved to the safer location of Malvern. At TRE Harry worked on H2S ground-scanning radar, Mark VIII 10cm Airborne Interception radar, Village Inn gunsight, Liquid Lunch IFF and the Airborne Gun-laying Turret (AGLT) developments. Remaining at TRE after the cessation of hostilities, for the next three years Harry worked on the *Long Shot* beam-riding guided missile project. He then left TRE and joined the Borehamwood Research Laboratories of Elliott Brothers (London) Ltd. in January 1949 to work on the Elliott 152 real-time fire-control digital computer.

<b>Cat. No.</b>	<b>Date</b>	<b>Description</b>	<b>Comment</b>
T1	1940 - 1944	Radar Film 1.	The following seven VHS video-cassette tapes were issued by Douglas Fisher in approx. 1993, based on original WWII films. The first one is called <i>Weren't those Great Days!</i> Colour, 44 minutes. (A compilation of original training films and other material from 1940 – 1944, to illustrate TRE's wartime radar research).
T1	1935 - 1945	Radar Film 2.	<i>The Watson-Watt centenary.</i> 35 minutes. (This is a video version of a lecture by Professor R Hanbury Brown, delivered at the IEE on 22/2/1993).
T1	1935 - 1945	Radar Film 3.	<i>RDF to Radar.</i> A 41-minute film made during 1945/46; covers early research from 1935 at Orford Ness to Bawdsey, Swanage and Malvern.
T1	1942	Radar Film 4.	<i>AI Mark VIII</i> , 33 minutes. An explanatory film made in 1942.
T1	1944	Radar Film 5.	<i>Monica Mark IIIC/D</i> , 8 minutes. A colour training film made in 1944 of a metric tail- warning radar device originally designed for use in WWII bombers.
T1	1944	Radar Film 6.	<i>AGLT</i> , 24 minutes. A colour training film made in 1944 of Airborne Gun laying in Turrets.
T1	1944	Radar Film 7.	<i>Village Inn</i> : colour training film, 1944, 12.5 minutes. ( <i>Village Inn</i> was a centimetric radar device, fitted to the rear gun turrets of WWII bombers. Similar to AGLT).
T2	1935 - 1943	The British Radar Story, 1935-43.	This, and the next two items, are historical illustrated glossy A4 brochures. This one is 10 pages; an IEE Archives exhibition.

			Undated.
T2	1945 on	RSRE.	32 page booklet, produced in 1982.
T2	various	Admiralty Research Laboratory (ARL).	Booklet of approx. 40 pages, many illustrations. Undated but probably produced between 1966 and 1974.
T2	1936 - 1976	<i>Aircraft for Airborne Radar Development.</i> W H Sleigh, RSRE, Issue A, June 1986. Copyright HMSO	Spiral-bound special report. Approx. 150 A4 pages, many illustrations. Covers the period approx. 1936 to 1976. Includes, as special Annex 4, a detailed report of the fatal crash of a Halifax with experimental H2S radar on board, on 7 <sup>th</sup> June 1942, in which Alan Blumlein was killed. Inserted in this report are two hand-written letters and a newspaper article relevant to the crash.
T3	c. 1942 - 1944	Services Valve Handbook, serial number 594	Contains many CV data sheets dating from 1942 onwards. Approx. quarto size, light blue cover.
T3	1952 - 1953	Thermionic valve characteristics.	14 separate sets of valve characteristics, each one in the form of a booklet measuring approx. 8" x 6.5". Also, 3 quarto sets of valve-characteristics, dating from 1952 and 1953.
T3	1934 - 1944	Two RCA Tube Handbooks.	Two black stiff-bound handbooks, each entitled <i>RCA Tube Handbook – all types</i> . Volume-numbers on covers now illegible. The valve data-sheets inside each volume are each dated and span the period approx. 1934 – 1944. Each volume measures approx.. 7" x 5" and is about 2" thick. Pencilled inside each one is the name of the original owner, A L Hodgkin – later Sir Alan Hodgkin OM, KBE, PRS.
T4	1943 - 1945	HGC's Laboratory notebook 1	This, and the next item, are two of H G Carpenter's laboratory notebooks, each approx. quarto size, stiff covers. Each contains hand-written notes, circuit diagrams and waveform diagrams. This one is SO Book 501: pencilled title on the cover: "1943 – 45".
T4	c. 1947	HGC's Laboratory notebook 2	This is SO Book 135: pencilled title on the cover: "1947 etc."
T4	1940 - 1945	<i>Atomic Energy: a general account of the development of methods of using atomic energy for military purposes under the auspices of the United States Government, 1940 – 1945.</i>	This is an official war history, published in the USA by the Government Printing Office and reprinted in the UK by HMSO, 1945. 144 pages. Approx.. 9.5" x 6".
T4	1940 - 1945	<i>Radar – a report on science at war.</i>	This is another official war history, published in the USA by the Government printing office and reprinted in the UK by HMSO, 1945. 50 pages. Approx. 9.5" x 6".
T5	1984 - 1993	Correspondence related to the history	Covers the period approx. 1984 – 1993 and deals with:

		of TRE.	<p>(a) Douglas Fisher and the production of video-cassette tapes based on original WWII films;</p> <p>(b) W H Sleigh and the production of the special report <i>Aircraft for Airborne Radar Development</i> – (see also above);</p> <p>(c) the project to install a memorial to WWII air crew and radar scientists at Goodrich Castle near Ross-on-Wye (close to where the Halifax with Alan Blumlein crashed in June 1942);</p> <p>(d) IEE History of Radar meeting, June 1985;</p> <p>(e) TRE Anniversary reunion, Sept. 1985.</p>
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