



e-DEFENCE ELECTRONICS NEWSLETTER

The e-NEWSLETTER OF THE DEFENCE ELECTRONICS HISTORY SOCIETY

INDEX

NUMBERS 1 – 80

Index references are to the single-column version of **eDEN** and take the form of the **eDEN** issue number followed by the page number on which the article starts.

£5 Prize Competition: What and Where? <i>Dr Mike Diprose</i>	74/97
£5 Competition Answer What and Where? <i>Dr Mike Diprose</i>	75/98
1,25cm H2K RT-63/APS <i>Tatjana Joëlle van Vark</i>	53/125
5 Group RAF Signals and Radar History	29/4
200-Mc/s Radar Interrogator-Beacon Systems <i>Keith Wood</i>	72/72
2015 Restoration Award: Electronics Restoration Trust, for GEE Mk I	41/3
2016 Restoration Award – <i>Tatjana Joëlle van Vark, Vulcan Radar NBS-H2S Mk 9</i>	49/1
- Interview with <i>Tatjana Joëlle van Vark- H2S Mk 9/NBS; ‘Miniature H2S’</i>	50/74
2017 Christmas Quiz - Answers	66/8
2019 Long-term Preservation Conference <i>Dr Mike Diprose</i>	67/6, 68/5
‘A’ Scan to PPI in the RCAF <i>The late F/Lt Gil Edgerton & F/Lt James Leach RCAF</i>	49/44
“A Machine Has Flown” – The First Drone? <i>Greg Howard</i>	54/13
‘A Voice and Nothing More: 22 Sqn & radio telephony <i>WFJ Harvey</i>	59/26, 60/7, 61/23
‘A Voice ..’ II: Telephone Wireless Aircraft Mk II: Set, Receiving (1918)	62/19
‘A Voice and Nothing More’: <i>WFJ Harvey</i>	63/7
‘A Voice and Nothing More’: <i>WFJ Harvey</i>	64/20
‘A Voice and Nothing More’: <i>WFJ Harvey</i>	65/21
AA Equipment during World War II <i>the late WO1 Jim Humphreys</i>	30/25
Abbreviations: CEC <i>John ‘Jacey’ Wise</i>	48/31
ACE HIGH	8/7
ACE HIGH: the NATO tropospheric link, Feldberg to Dosso dei Galli <i>Hans Jucker</i>	9/5
ACE HIGH: the NATO tropospheric link. <i>Richard Stoodley</i>	10/5
Acord Valves <i>Rod Burman</i>	37/13
Admiralty P24 Receiver <i>Andy Young/ Clive Kidd/ Lt Cdr. Brian Witts MBE</i>	75/90
Admiralty Type 74X Mystery <i>S/Ldr Mike Dean MBE</i>	43/11, 45/8
AI and H2S: Professor Dee’s reminiscences	53/87
AI SS – <i>Mike Dean</i>	4/14
Airborne Detection of Submarines	69/70

Aircraft Wireless: Sterling Transmitter & Clapper Break <i>Jeff Jefford & Mike Dean</i>	61/6
Air Controlled Interception - 1 The First Experiments <i>R Hodges/ M Dean</i>	32/11
Air Interception Radar Explained, WW2 Allied <i>Air Publication 1093D</i>	71/7
Air Raid Warning System <i>G B W Harrison</i>	35/11
Airborne Alternators, Introduction of <i>E G 'Taffy' Bowen</i>	57/28
Airborne Radar and the Army <i>R Hanbury Brown</i>	73/29
Aircraft Procurement under Labour 1964-70: Some Myths <i>Richard Moore</i>	64/103
Airfield Radar <i>John Wise MBE</i>	23/5
Airseeker, The: New RAF intelligence aircraft arrives	39/49
American-British Laboratory, The <i>OSRD History ed C.G. Suits</i>	79/53
American Perspective, The -1: High Altitude Bombing over Land <i>Henry Guerlac</i>	53/101
American Perspective, The -2: K-Band 1-centimetre R&D <i>Henry Guerlac</i>	53/114
American Perspective, The -3: BBRL & Operational Experience <i>Henry Guerlac</i>	53/130
AMES 1 Chain Home: Photographic Record of Ground Radar– <i>Air Pub 2276B</i>	51/7x
AMES 6 Mk III Light Warning <i>Air Publication 2276B</i>	59/119
AMES 9 MRU <i>Air Publication 2276B</i>	59/125
AMES 12 The British Freya & Much More? <i>Mike Dean</i>	80/16
AMES 15 convoy vehicles and equipment <i>Air Publication 2276B</i>	58/59
AMES 26 feedback <i>John Wise</i>	32/43
AMES 26, Researching the <i>Mike Dean</i>	33/15
AMES 9442 <i>Tom Hatcher, Oboe Radar Operator</i>	76/35
<i>Ambush</i> H.M. Submarine	3/21
Analogue V-Bomber Synthetic Trainer Relic Looking for a New Home:	4/21
Answer to Christmas Puzzle “I saw three ships come sailing in ...”	30/4
Answering a Quiz <i>David Fordham</i>	57/30
Answers – AI 17 Manufacturer; R 1619 manufacturer: US AN/APR-2 and APR-3	48/6
Answers – AI 17 Manufacturer, “Yellow Lemon” – and more!	49/5
APN-1 Radio Altimeter: Tale of Two Antennas: <i>Brian Hawes/Dr Liz Bruton</i>	74/72
Appeal for Information – Roderick Denman <i>John Liffen, Science Museum</i>	43/11
Arado 234 jet - and its trailers <i>RAF Evidence in Camera</i>	35/26
Armistice 100	76/75
Army Surplus, 1918 <i>Horace White/ Hughes Bolckow, via Walter Blanchard</i>	77/111
Arnhem Visit 2013 <i>Tony Helm</i>	10/3
Arthur Bauer Museum Open Day – Report and Pictures	41/81
ASRE Equipment	1/4, 2/4, 3/3
ASRE Extension, Tantallon – <i>G.A. Exeter</i>	10/4
Astronomer Royal Sir Martin Ryle’s Radar Days <i>via Alison Bird</i>	43/24
ASV: The Detection of Surface Vessels by Airborne Radar <i>Prof R.A. Smith, R Hanbury Brown, A.J. Mould, A.G. Ward and B.A. Walker.</i>	67/112
ASV: the Schnorkel Problem <i>TRE/ DCD Review</i>	73/109
ASV I and II Introductory Displays <i>Mike Dean</i>	67/94
ASV II at the Science Museum <i>Prof Simon Watts</i>	69/63
ASV Mk 19A and Mk 19B radars, The, <i>Prof Simon Watts</i>	67/153
ASWE The Building of Norman Vidler	45/23, 47/8, 48/31, 49/54
ATC Radars Again! <i>MBE</i>	25/42
Autakym, The, <i>Clive Kidd, HMS Collingwood Museum</i>	62/30
‘Autobombics’, Identifying <i>David Robertson</i>	46/48
Autonomous Warrior 2018 <i>Dstl</i>	79/83
Autumn Symposium 2015 in Pictures <i>Dick Green</i>	28/3
Awards and Honours	
DEHS	2/3
Prof Hugh Griffiths Honoured	8/3
MESE Presentation 2012	4/4

UK "Crows"	14/9
BAE C130J upgrade	43/40
BAE/ Dassault collaborate on Unmanned Combat Air System	29/45
BAE Systems: Global Combat Ship – Australia/ Type 26 Frigates	73/98
Baillie Beams <i>S/Ldr Mike Dean MBE</i>	44/22
Baillie Beams <i>S/Ldr Mike Dean MBE</i>	61/70
Bainbridge-Bell, L H <i>via Prof Hugh Griffiths</i>	54/38
Baird and the 'Noctovisor' <i>Empire News 1943 via Mike Dean</i>	54/100
Balloons, Drifters and Inter-Ship Transceiver TR 1150 <i>Air Publication</i>	51/50
Balme, Lt Cdr David – Obituary	43/8
Bawdsey, Progress at	52/18
Bawdsey Radar Trust Awarded £1.4 Million Grant	43/7
Bawdsey Radar YouTube; units for Tatjana Joëlle van Vark's H2S/NBS rebuild	54/20
Bawdsey Research and 228 Squadron <i>via Peter Jennings</i>	45/48
Bawdsey Restoration Gains TWO Awards!	78/11
Bawdsey – the new displays	64/10
<i>Beetle and Banquet: 1940 anti-invasion communications and plans</i>	41/51
<i>Beetle: the R1080 receiver revealed!</i>	42/32
Before Exocet	10/11, 11/5, 12/8
Before Dawn: Air Defence and Telecommunications in World War I	13/12
Before Dawn: Air Defence and Telecommunications In World War I Pt II	14/10
Beneath the Radar: Alan Roberts M.C. <i>David Lomas via Graham Fraser</i>	76/56
Bending the Beams: the GPO Dollis Hill Contribution <i>Professor J H Merriman</i>	51/56
Birth of Atomic Time <i>Ray Essen</i>	36/3, 37/40
Bletchley Park, Women at	3/24
Bletchley Park 2013 – DEHS Summer Visit; Presentation to Margaret Sale	12/3
BLUE DANUBE	1/5
Blue Danube: Radio Report	17/40
Blumlein, colleagues and crew of Halifax V9977, Alan Dower	50/5
Bofors, Kerrison, 584 and V-1 <i>Dennis Barber, Major Philip Ross, Brian Mendes</i>	41/69
Bomber Command Security Set: T1154/ R1082 <i>Ray Coley G3IFF</i>	74/69
BOOK REVIEWS	
<i>Battle of Heligoland Bight, The 1939</i>	2/23
<i>Bletchley Park War Diaries</i>	2/23
<i>Blue on Blue</i> <i>Brian Cull with Bruce Lander</i>	8/23
<i>The Bombing War: Europe 1939-1945</i> <i>Richard Overy</i>	17/31
<i>Churchill's Bomb</i> <i>Graham Farmelo</i>	17/30
<i>Decoding Organisations</i> <i>Christopher Grey</i>	1/16
<i>Einstein's Mistakes</i> <i>Hans C. Ohanian</i> <i>Review Fred Starr, Newcomen Soc:</i>	7/25
<i>Fighter Command Losses Volume 3</i>	4/23
<i>Four Geniuses of the Battle of Britain, David Coles / Peter Sherrard</i>	11/22
<i>Greenie, The</i> <i>Patrick A. Moore</i>	1/14
<i>Imaging and Imagining the Fetus, Malcolm Nicolson & John E.E. Fleming</i>	11/22
<i>Lenkkorper u Zielweisungsgerate der Deutschen Luftwaffe W-D. Schroer</i>	12/27
<i>SIGINT: Secret History of the Signals Intelligence 1914-45</i> <i>Peter Matthews</i>	17/31
<i>Three Dimensions of John Logie Baird, The</i> <i>Dr Douglas Brown</i>	1/16
<i>Turing and his Contemporaries</i>	2/23
<i>The Prof, Churchill and Science at War</i> <i>Russell Burns</i>	18/3
<i>Mediterranean Air War Shores & Massimello</i> <i>Review S/L Mike Dean MBE</i>	25/43
<i>'Main' Receiver</i> <i>Wolfgang-D Schroer</i>	25/44
<i>Story of Army Radar</i> <i>David Wilcox</i>	25/45
<i>Before I forget</i> <i>George Phelps</i>	26/26

<i>Follow My Dreams</i> Arthur Llewelyn & Miranda Andrews	29/41
<i>Observers and Navigators 2nd edition</i> Jeff Jefford	29/41
<i>Birth of Atomic Time</i> Ray Essen	39/53
<i>The Secret War</i> Max Hastings	40/42
<i>Intercept</i> Gordon Corera	40/43
<i>The Mediterranean Air War Vol 3</i> Chris Shores Review S/L Mike Dean	52/78
<i>Radar Men: A P Rowe and John Strath in War and Peace</i> Don Sinnott Review Prof Hugh Griffiths	53/67
<i>Black Box Canberras: British Test and Trials Canberras 1951 – 1994</i> Dave Forster Review S/Ldr Mike Dean MBE	53/68
<i>Churchill's Last Wartime Secret: Adrian Searle</i> Phil Judkins	53/69
<i>'His Own Executioner: The Life of Nigel Balchin'</i> Malcolm Baird	62/69
<i>'A Most Enigmatic War'</i> James Goodchild Phil Judkins	67/84
<i>'You're One of Us Now' (EKCO, Malmesbury)</i> Bill Reed Phil Judkins	67/86
<i>Fly-by-Wire Jaguar</i>	74/95
<i>Boozer</i> Ernie Putley	38/27
<i>Boozer or Not?</i> John Kaesehagen	39/41
- Response Mike Dean	40/32
- Follow-up	41/32
Bowman Maintenance Contract	14/8
Brakemine <i>Wikipedia</i>	46/27
Brakemine Story, The <i>WO 2 N K Brown, REME</i>	46/28
Bram Grisnigt, Dutch agent <i>via Robert Soek</i>	76/7
Bram and Ann Grisnigt <i>Robert Soek</i>	80/2
Brass Bedsteads and Dog Biscuits <i>Clive Kidd, HMS Collingwood</i>	45/30
Brett-Knowles, Richard	33/42
British Army Notes on Jamming and Anti-Jamming	66/124
British Army orders more Israeli Radios <i>Rupert Pengelly</i>	59/93
British Army Radio and Radar on display, 1967 <i>via Bill Penley, CB, CBE</i>	34/28
British Army RDF Committee	54/62
British Army Technical Notes on Jamming and Interference	66/131
British Knowledge of German Military Wireless 1917 - I	25/5
British Knowledge of German Military Wireless 1917 - II	26/5
British Searchlight Radar and Jamming	66/119
British Telecomms History WW1 <i>Kapil Subramanian/ Graeme Gooday</i>	62/115,63/150
Brown, A Story of John	8/20
Brown's Relays; amplify without valves!	18/11
Bruneval Raid 1942 Charles Cox MM RAF <i>with thanks to Mike Dean</i>	68/21
Bruton, Dr Liz, appointed Jodrell Bank Heritage Officer	44/7
Burns Lecture 2013	5/3, 6/3, 7/2
Burns Lecturer 2014: Professor Hugh Griffiths	18/4, 19/3, 20/3, 22/3
Burns Lecture 2015	31/3, 32/3, 34/3
Burns Lecture, 2018 Prof Simon Watts	70/71
Burns Lecture Day 2019, Jonathan Ayles	80/3
Buying Books	2/23
Can You Help? 1 Ardente Radar Group; 2 Possible Hydrophones <i>Clive Kidd</i>	76/5
Can You Help? Naval Indicator Unit <i>Vin Robinson</i>	77/5
Can You Help? Naval Ind. Unit <i>Vin Robinson Jerry Proc/ Clive Kidd/ Peter Mills</i>	78/66
Can you Help please? WW2 undulator and amplifier <i>Clive Kidd</i>	68/16
Can You Help please – UK Forward Looking Radar <i>Gordon Slater</i>	80/15
Canadian Marconi trans/receiver; video oscillator - <i>Ian Brown</i>	5/4
Canadian Radar on Display	3/19
Canadian Radar GL3C	8/18

Canadian GL3C vans <i>Brian Mendes</i>	32/5
Canadian GL3C to AN/TPS 1 <i>Brian Mendes</i>	34/28
Carriers and AEW	7/23
'Castles in the Sky', Watson Watt TV programme 4 September 2014	26/3, 27/3, 28/5
Catalina aerial array – and then some!	10/24
Celebrating Lives of Achievement: Dr Bill Penley <i>Jonathan Penley</i>	57/15
Celebrating Lives of Achievement: Colin Latham Interview <i>John Bryant</i>	57/19
Centimetre AI, The Development of <i>Dr W S Burcham</i>	50/34
Chain Home: What <i>did</i> Chain Home cost?	3/12
Chain Home Aerials: A Tangled Web	41/15
Chain Home Aerials: <i>letter from Fred Starr, Newcomen Society</i>	42/5
Chain Home Aerial Models <i>John Liffen, Science Museum</i>	43/39
Chain Home Radar: A Personal Reminiscence <i>M B Scanlan</i>	70/38
Chain Home Transmitters, The <i>Dr J M Dodds OBE and J H Ludlow</i>	74/101
Chain Home Transmitters: The Shop-floor View <i>Jim Brown</i>	74/116
Chain Home - rotating receiver aerial towers? <i>Nordlohnel Kaesehagen/ Dean</i>	58/26
Channel Dash, The – Missed Opportunities? <i>S/Ldr Mike Dean MBE</i>	48/10
Channel Dash - <i>Letter to the Editor Michael Ellis</i>	79/7
Channel Islands Communications and the War <i>W R Tyson</i>	34/7
Chasing Japanese Type A Radar <i>S/Ldr Mike Dean MBE</i>	70/35
CHL, GCI and Mobile Base (MB) Ground Radar Transmitters <i>R V Whelpton</i>	74/142
Civilian Technical Corps, The (CTC) <i>Ian Brown</i>	45/18
Cockburn, Sir Robert - Answers! <i>James Cockburn</i>	72/5
Cockburn, Sir Robert – Visit to Schleswig-Holstein <i>100 Group Report</i>	73/6
Cockcroft, John – The Quiet Man, At War <i>Dr Phil Judkins</i>	27/9
Cold War Aerials – Cobra Mist <i>Neil Bennett</i>	41/73
Cold War Aerials – Cobra Mist <i>Brian Austen</i>	42/50
Cold War Dish aerials – Malvern and China <i>S/Ldr. Mike Dean MBE</i>	41/75
Cold War Aerials – Malvern's Dish <i>Hugh Williams</i>	42/51
Cold War Radar	7/3
Cold War Salvage Operation <i>Tony Helm</i>	13/4
Collisions with Balloon Cables <i>Peter Garwood</i>	51/18
Consol <i>John E Clegg</i>	55/36
Contract for new Royal Navy Ships	21/42
Cossor: Half a Century of Progress Cossor Ltd	56/26
Cooke-Yarborough, Ted, Monica and the Stirling engine	8/4
<i>Cougar</i> Naval Exercise	3/22
Crashed before Take-off: the Anglo-French AFVG <i>Andrew James/Phil Judkins</i>	64/84
Cryptos Essay Prize New Armouries and New Enemies: Dr Charlie Hall	57/6
CV Acronym, That <i>John Kaesehagen</i>	51/7
CV Acronym, That <i>Clive Kidd, HMS Collingwood</i>	52/19
CV Valve Committee, The UK's	49/64
CV Valves Again, Those! <i>Clive Kidd HMS Collingwood</i>	56/59
CV Valves: Letter to the Editor: <i>John Kaesehagen</i>	57/4
D-Day Signals Planning	80/106
D-Day Communications: Signal Venture: <i>Brigadier J Harris CBE</i>	80/107
Dark Arts, Light Aircraft – Autogyros in the Battle of Britain	1/11
Dark Haven: Bringing Lost Aircraft Home <i>S/Ldr. Mike Dean MBE</i>	41/50
'Darky' System, The, <i>Sandra, Granite and Occult - Derek Wood, Phil Racher</i>	42/34
Dassault Aviation – a Postscript	18/11
Daventry Demonstration; the Heyford Aerial? <i>Prof Brian Austin</i>	43/38, 44/40
Daventry 'Experiment' The – Original Material <i>Prof. Brian Austin</i>	41/40
Daventry 'Experiment' The – Further Questions <i>James Halley MBE</i>	42/25
'DC to Light'; Silhouette. 1930s British night air defence	2/13

Decca Navigation <i>Wireless World March 1946</i>	56/19
Decca Navigator <i>Walter Blanchard PPRIN</i>	41/70
Decca Navigator Stations <i>M G Scroggie Wireless World August 1946</i>	56/22
Defence Electronics – Antarctica <i>Dr Phil Judkins</i>	56/13
Defending the Garden of England <i>David Robertson</i>	64/13
DEHS Accounts 2013	23/31, 24/36
DEHS Accounts 2016 <i>with many thanks to Dick Green</i>	56/64, 57/51, 58/43
DEHS Accounts 2017	67/87, 68/89, 69/57
DEHS 2017 Accounts; 2018 AGM Agenda	70/65
DEHS 2018 Accounts: 2019 AGM Agenda 2 May, STEAM, Swindon	80/4
DENCO, Denis Heightman and the RAF <i>via Bill Liles</i>	44/53
Desperately Seeking Felkin	17/29
Desperately Seeking Felkin - <i>Richard Bateson's information</i>	22/7
Development of Centimetre AI The <i>Dr W S Burcham</i>	50/34
Development of the E.1189 Eight-Cavity Magnetron at GEC <i>Emilio Ciardiello</i>	80/8
Did Bomber Harris Know? Aircraft Radio UK, 1938 <i>D Hay Surgonier</i>	60/28
Dippy, R J, 1945 Interview <i>Scott and Jay</i>	38/4
Dongles! <i>J C 'Jacey' Wise MBE</i>	30/19
Doppler Scanning Guidance System <i>C W Earp, F G Overbury, P Southcott/ STL</i>	62/73
Dorte, Group Captain, Radar Association	4/4
DSEi 2015 <i>J C 'Jacey' Wise MBE</i>	40/41
Dutch Flying Car at Farnborough The <i>via Robert Soek</i>	74/89
Dynatron Radio Ltd War Production <i>via Tony Waller, Mike Dean</i>	34/14
Eagle <i>via S/Ldr Mike Dean MBE</i>	55/25
'Eagle' AN/APQ-7; images from the manual	53/112
'Eagle' AN/APQ-7 Scanner <i>via Aryeh Ben-Ami</i>	55/22
Early Centimetric Ground Radars – A Personal Reminiscence <i>M B Scanlan</i>	70/97
Early GEE airborne equipment: Indicator 60 progress <i>Tony Waller</i>	68/141
Early German & American ASV radar Tx tech Hohentwiel & ASB Hans H Jucker	68/95
Early Meteor Radio Astronomy at Jodrell Bank and Canterbury <i>Grahame Fraser</i>	55/5
Early US Airborne Radio Aeronautics Magazine <i>via Martin Bolton</i>	65/13
Echo Boxes <i>CIC Magazine February 1945</i>	54/54
ECM or Y Intercept – I: The Post Mortem Exercise, and After	16/7
ECM or Y Intercept – II: Martini, Kamhuber and Schmid	17/9
Eighth Dwarf, The: HMS Dwarf and the German wireless station, Dyala, 1914	41/12
Ekco 'Cloud and Clonk' E190 Radar <i>Jeff Jefford</i>	74/80
Ekco Weather Radar ARI 23083 <i>George Chatwin/Wings Museum</i>	39/22
Electronics Restoration Trust	15/3
- Win DEHS Restoration Award 2015 for GEE Mk I	37/4, 40/3
- GEE Mk I progress statement <i>Tony Waller</i>	38/3
Elektra/ Sonne	7/3
EMI Image Converter Manufacturing <i>Virtual Valve Museum</i>	76/62
English Heritage Lists WW1 Intercept Station <i>via Jonathan Aylen</i>	62/16
Epilogue	3/3
Errata: eDEN 60 pp108/9 <i>with thanks to Peter Jennings</i>	61/5
EUREKA Mk II	49/12
Events of February 1942: Gubbins and Bruneval <i>Mike Dean</i>	78/54
<i>Evidence in Camera</i> , RAF targets: Eindhoven, Berlin, Beaumesnil, Nauen	35/40
EW Specialist Next Chief of UK Defence Staff: ACM Sir Stu Peach	44/9
Examining the Early Days of Long Range ASV in Coastal Command <i>Mike Dean</i>	67/98
Falklands Sketchbook <i>Lee Sullivan/ BAe Dynamics</i>	69/94

Ferranti Silverknowes Laboratories	33/34
Ferrets: A Brief Introduction to Ferrets in <i>eDEN</i> Mike Dean	74/6
Ferrets I: Work of the Ferrets RADAR 04 <i>via Mike Dean</i>	74/8
Ferrets: 1: The search for Jap Radar. <i>RADAR 04 via Mike Dean MBE</i>	75/5
Ferrets: 2: RAF Ferret Operations in South-East Asia <i>Mike Dean MBE</i>	75/9
Ferrets: 3: The Halifax aircraft Ferret Installations of 1341 Flight <i>Mike Dean</i>	75/21
FH4 D/F set – Appeal for Help ‘Jacey’ Wise	51/68
FH4 H/F D/F, TBS, Wireless Set 27/67 Appeals answered	52/5
FH4 Huff Duff for Xmas! ‘Jacey’ Wise, Karel Hagemans, Arthur Bauer, Mike Dean	53/10
FH4 Outfit - A Short History <i>John ‘Jacey’ Wise</i>	53/11
FH4 Outfit: HF Direction Finding in the Royal Navy <i>J C ‘Jacey’ Wise</i>	41/63
Fifty Years of the Cavity Magnetron 1940-1990 Profs W Burcham & R Shearman	76/42
Filberts Anyone?	26/24
Film review: ‘ <i>The Imitation Game</i> ’ – ‘ <i>Castles in the Air</i> ’ on Steroids?	29/3
First Drone? <i>Mike Baker, Steve Mills and Dr Dave Sloggett</i>	53/9
First Navy Wildcat Makes Maiden Flight	7/24
First Radar Death, The: Hunter Gray	44/18
First Step, The? GPO Report 223 Interference from Aeroplanes	32/32
Fishpond <i>H G Hinckley</i>	50/104
Flying Magnet, The (DWI Wellingtons) ‘ <i>Parade</i> ’ <i>via Barry Wilbraham</i>	39/46
FM CW Radar <i>John ‘Jacey’ Wise MBE</i>	14/9, 20/19
Focke-Wolf Condor at War <i>J Richard Smith</i>	74/58
Forman, Jan: One of Baird’s Bright Boys <i>Malcolm Baird</i>	51/14
Forthcoming Book	3/20
Forthcoming Vikings	4/22
French Submarine <i>Saphir</i> and USS <i>Theodore Roosevelt</i>	33/43
Frequency Hopping with George and Hedy <i>Dr Mike Diprose</i>	63/11
Friends of the National Archives <i>Dr Tony Wakeford</i>	44/15
Front Line <i>F/Lt Vicky Neighbour</i>	11/16
Fullerphone, The <i>Major A C Fuller</i>	28/7
<i>Funkabwehr</i> , The	48/55
Futures 1: After We’re Gone <i>via John Kaesehagen</i>	66/24
Futures 2: The Hewlett Packard Archive <i>via John Kaesehagen</i>	66/27
Futures 3: The Very Long Term – a Conference? <i>via Mike Diprose</i>	66/31
GEC’s ‘War Record’ Brochure- Christmas Quiz 2016	53/20
GEC 25cm AI radar. Whatever happened to the?	54/32
GEC Intercept Receiver Flights <i>thanks to Chris Cooper</i>	54/28
GEE and GEE-H: Marks and Dates	43/29
GEE and the Electronics Restoration Trust: Name the Bob Dippy Team!	16/5
GEE Answers – and Puzzles!	17/3
GEE Mk I, Progress with <i>Tony Waller and Richard Hankins, ERT</i>	53/8
GEE Track Siting Guide <i>Cossor via Mike Dean</i>	69/27
GEE, TRE and Centimetric Research: the Lovell letter	53/84
GEE – Did Detonators Work?	43/30, 44/35
GEE – Yet More Puzzles!	18/6
‘George’ for OBOE <i>Mike Dean</i>	60/131
German Army "Speech-On-Light" Signalling Apparatus <i>Gifford Hull/ Kidd</i>	74/64
German Army Wireless Equipment <i>Walter Farrar B Sc</i>	68/35
German Death Ray – Fact or Fiction? <i>Mike Dean</i>	72/8
German Drone Explosive Motor Boats – 1917! <i>Jonathan Ruffle & Mike Dean</i>	59/5
German Radar Chain Opposite Chain Home <i>Yves Blanchard</i>	69/46
German Weather Forecasting for the Channel Dash <i>Dr Walther Stöbe</i>	64/37

German Y Service, The: the Bletchley Park British assessment in 1944	52/29
GL3C Radar Power Tubes <i>Brian Mendes</i>	42/50
Godlingstone Hill: Foundation of a Myth?	4/6
GPO Engineering Dept's contribution to RAF Radar development <i>RG Martin</i>	75/44
Graf Spee: Salvaged from the Trap of Montevideo <i>D J B Smith/ Michael Ellis</i>	77/9
Graf Spee's radar <i>Letter to the Editor Michael Ellis</i>	79/7
Graf Zeppelin ELINT flight; - <i>Roger Voles</i>	5/5, 6/5, 7/7
Granny, Uncle and Aunt <i>Richard Barratt</i>	2/7
Griffiths, Professor Hugh honoured with OBE	79/5
Guided Missile, The First? <i>2/Lt J R C Petersen, REME</i>	46/34
Guided Missile Telemetry Systems <i>Kenneth W Gatland FRAS</i>	46/41
Guided Missile Telemetry Systems <i>John Kaesehagen</i>	47/30
Guided Weapon Work at TRE/RRE, Memories of <i>Dr W H Penley CB CBE</i>	46/8
H2S and ASV American <i>B J O'Kane PhD, B Eng, AMIEE.</i>	49/31
H2S and ASV, Introducing: <i>Air Publication 1093D</i>	50/6
H2S and the Navigator <i>F/Lt E L Killip AFC</i>	50/123
H2S, Early: The American Experience <i>Dr Mike Diprose: US publications on H2X</i>	50/109
H2S Historical Note on <i>A C B Lovell PhD</i>	48/23
H2S in the Canberra – Appeal for Input <i>Tony Wilson/Gordon Slater, BAE</i>	51/9
H2S Marks The “Rough Guide” to <i>Air Publication 1093C</i>	50/79
H2S Mks I-III: Fundamentals of H2S <i>Dr F C Thompson</i>	50/82
H2S Mks IV – VI: The New H2S's <i>J Smith B Sc</i>	50/138
H2S Mks VII – VIII: Radar Sighted Navigation & Bombing Devices <i>G Bradfield</i>	50/141
H2S Mk 9 in Canberra?	50/170
H2S Mk 9/NBS restoration; ‘Miniature H2S’ Interview <i>Tatjana Joelle van Vark</i>	50/74
H2S Trainer <i>Geoff Dummer</i>	29/20
H2S Trainer: The Design of Radar Trainers <i>Geoffrey W A Dummer</i>	50/49
Halifax V9977, The Crash of (Prototype H2S Radar) <i>W H Sleigh</i>	78/90
‘Hand and Thunderbolt’ Badge, The <i>Jeff Jefford</i>	60/24
‘Hand and Lightning Bolt’ The and Sterling <i>Ken Brooks</i>	62/29
Harris and Radar Aids <i>Sir Arthur Travers Harris</i>	60/90
Hawkcraig Experiments, The <i>Brian Head</i>	29/29
Hill 880 <i>USAAF RADAR Magazine via Mike Dean</i>	60/136
Histelcon 2019 <i>Professor Tony Davies</i>	80/6
History in the Writing: <i>Sir Robert Cockburn</i>	71/84
History in the Writing: <i>Keith Wood</i>	72/71
History of R.F.C. Wireless from Outbreak of WW1 <i>Majors Orme and Prince</i>	24/3
History of Wireless Communication, A <i>W A S Butement</i>	78/32
Hodgson, Jacky, Retirement of, Head of Sheffield Uni Special Collections	79/6
How Japan Lost a Scientific War <i>S Watanabe</i>	67/75
How Many Types of Window?	66/146
How Syria is becoming a Testbed for EW Weapons <i>Prof David Stupples</i>	41/78
Hulsmeyer Plaque at Cologne/Koln <i>via Prof. Hugh Griffiths</i>	66/13
Hunstanton Coast Defence /Chain Home Low (CHL)	7/11
Hunt for ROTET, The – a Newcomen/ DEHS Mystery	18/7
ICUE 2015	28/33, 30/37
IFF Development, Key Dates in Early <i>BRP (=Parry?)</i>	72/96
IFF and Radar Beacons <i>Air Publication AP1093D</i>	72/100
Industry's Contribution to Radar <i>Sir Stafford Cripps, 1945 via Clive Kidd</i>	74/75
Infra-Red Image-Converter Tube <i>TH Pratt, ARL Teddington</i>	75/41
Intercept	33/4

Invading with radar <i>via S/Ldr Mike Dean MBE</i>	31/16
Intercept, D/F and the Air Defence of Britain 1914-18	17/23
Intercept, Cruise Missiles, Rockets and Superguns – First Time Round!	19/4
Interwar Airborne Transmitters and Receivers - Marconi	40/10
Interwar Airborne Transmitters and Receivers – STC	41/34
Interwar Project - Help Wanted! Wavemeter W 63.	63/119
‘Invisible’ Illumination: A U-Boat and the Manchester Ship Canal <i>Mike Dean</i>	78/18
Iranian Radars <i>J C ‘Jacey’ Wise</i>	40/40
ITT and German WW2 Navigation <i>CIOS</i>	39/25
ITT Paris, Visit to, 16.1.1940 <i>L H Bainbridge Bell via Lt Cdr Clive Kidd</i>	80/87
<i>Jagdschloss-Kreuzeck</i> System Discovery <i>Arthur O Bauer</i>	23/6, 24/23
Japanese Wartime Military Electronic and Communications BIOS Report 623	67/70
Japanese World War 2 Electronics <i>BIOS Report</i>	47/37
Jitter & Stagger <i>John ‘Jacey’ Wise MBE</i>	20/18
“Jogging along to Salisbury” <i>David Robertson and Phil Racher</i>	60/6
‘Just Want the Facts, Ma’am’ – Tracing Naval Relatives	1/6
‘Just Want the Facts, Ma’am’ – Tracing Army Relatives	2/8
 Korean War – Special Event Station	 13/25
 Lancaster, The, and its Avionics <i>Phil Racher</i>	 42/40
Laser Cannon, Royal Navy announces on HM Ships	39/51
Leeds Conference on Telecommunications in World War I	11/19, 12/22
Leeds University Post-Doctoral Fellow in Telecommunications History	35/3, 37/3
Least Expected GEE Mk I, The <i>via S/Ldr Mike Dean MBE</i>	32/9
Letter to the Editor: Recent US Navy Collisions <i>Tony Devereux</i>	63/5
Letter to the Editor: Recent US Navy Collisions <i>John ‘Jacey’ Wise</i>	64/19
Life and Times of an RVT 150 <i>Lt Col N E Johnson-Ferguson BA TD</i>	56/92
Listening Devices and Additional Instruments <i>Prof Dr C von Hofe & Dr H Raabe</i>	70/6
LOP/GAP, RTV 1/1e, and Woomera <i>Hugh Williams, Clive Kidd</i>	43/40
Loran, The Resurrection of, <i>Reuters</i>	62/65
Lovell, Interview with Bernard	53/96
LRASV: First Installation in a Catalina Flying Boat <i>Prof. Simon Watts</i>	77/31
LUCERO	47/23
 Malvern Radar and Technology History Society MRATHS	 35/50
<i>MAGNET</i> : Magazine Article Review	5/25, 6/ 21, 7/23, 20/16, 36/13
Magwatch: <i>RB</i> on AN/ARC-3 and Geoff Arnold obituary; <i>Flypast</i> Cold War issue	47/50
Magnetophon, The German <i>R A Power</i>	55/40
Magnetron Debate: <i>Waddell/ Brown, Tube Collectors Association</i>	35/14
Magslips, Selsyns and Servos <i>Brig. Douch</i>	37/19
- Further Thoughts <i>Brian Mendes</i>	39/22
Making the Connection <i>S/Ldr Mike Dean MBE</i>	52/24
MANDREL Mk II Jammer <i>Air Publication</i>	51/72
Maralinga	36/12
Marconator, The <i>J H Moon</i>	57/38
Marconi Interwar Infra-red Communication System <i>Marconi Review</i>	47/34
Marconi’s Beam Wireless Station at Dorchester <i>Paul Hawkins</i>	43/13, 44/27
Marconi’s ‘E-R’: H N C Ellis-Robinson: Obituary	44/49
Marine Loudspeaking Gear: the Ardente Loudhailer <i>P Hickson</i>	58/39
Master of Scientists Prof Philip Dee <i>Prof Samuel Curran</i>	31/14
The Mechanical Design of German Army Wireless Components <i>D Gifford Hull</i>	68/38
Merryweather Telescopic Towers <i>Mike Dean</i>	9/4

MESE Presentation 2012	4/4
Mills, John Robert 1916 – 1988 <i>Nick and Philip Mills</i>	51/11
Mirrors <i>Dr Phil Judkins and Arthur Bauer/ Klatt-Ostro-Josephine project</i>	65/56
Missing Blumlein Archive <i>Roger Voles</i>	22/19
MLS: Back to the Future? <i>Brian Evans</i>	62/110
Mobile RDF Mast Development <i>S/Ldr. Mike Dean MBE</i>	41/42
Mobile RDF MB transmitter manufacture photo <i>S/Ldr. Mike Dean MBE</i>	42/31
MOD order for F-35B Lightning II	28/31
MRP-4 Miniature Radar Detector <i>Tony Helm</i>	14/4
Mysterious Radar Death, A: Samson or Samsen - or both?	44/21
Mystery Radio at the Science Museum <i>Gregory N Howard</i>	68/6
Nachtfee Seminar at Duivendrecht 2017 <i>Arthur Bauer</i>	65/5
Navajo Code Talkers, The <i>Gerald Knowles</i>	70/55
Naval Radio: Communications Equipment of British Warships <i>G M Bennett</i>	58/35
NBS/H2S 9A Rapid Processing Unit Appeal for Information:	9/24
New Year Fireworks: Flash Bang <i>S/Ldr Mike Dean MBE</i>	30/7
Newsam, Bernard: Internet Public'n of Diaries: Can you help? <i>Ben Newsam</i>	77/80
Newsam Bernard: Internet Public'n of Diaries: Can you help? <i>Ben Newsam</i>	78/84
Nixie Indicator, The <i>Jens Boos via John Kaesehagen</i>	74/81
Norfolk Island Effect, The, and the Whangaroa Report <i>Grahame Fraser</i>	63/54
Norwegian Frigate Disaster <i>Norwegian Accident Investigation & CNN</i>	79/77
OBOE: A Precision Ground-Controlled Blind-Bombing System <i>F E Jones</i>	60/102
OBOE and the Radar Gun Barrel <i>S/Ldr Mike Dean MBE</i>	47/24
OBOE, 'George' for Mike Dean	60/131
OBOE: The USAAF View <i>USAAF RADAR Magazine via Mike Dean</i>	60/129
Oboe's Missing Man: George Gavin Samson, Oboe scientist, 1907 – 41; Part I	60/140
Oboe's Missing Man: George 'Gav' Samson; Part 2 <i>Mike Dean/Grahame Fraser</i>	61/57
Oboe's Missing Man: George 'Gav' Samson; Part 3 <i>Mike Dean/Grahame Fraser</i>	62/62
Oboe's Missing Man: George 'Gav' Samson; Part 3 <i>Mike Dean/Grahame Fraser</i>	63/51
OBITUARIES	
Lennard Barber	10/23
William John Butcher 1935 - 2012	6/2
Edmund (Ted) Cooke-Yarborough 1918 - 2013	7/2
Professor Sir Bernard Lovell	2/2
Don Tomlin	18/5
Dr. Graham Winbolt 1933 - 2013	9/3
Major-General Eric Younson	14/3
John Beattie 1928 – 2014	25/3
Sir Arthur 'Bill' Bonsall <i>W/Cdr John Stubbington</i>	30/6
G/Capt. Eugene 'Tubby' Vielle	36/27
Roger Voles	36/27
Lt Cmdr. William 'Bill' Legg, R.N. <i>Lt Cmdr. Clive Kidd</i>	61/3
Charles 'Bill' Cox:	68/27
Philip Mayne Woodward 1919 – 2018	70/121
Talbot Green	74/5
Old and New Valves ' <i>Science at War</i> ' <i>J.G. Crowther and R Whiddington FRS</i>	69/35
Once Upon A Time: A Peep into the Past 1949 <i>Live Wire via Lt Cmdr. Clive Kidd</i>	69/11
Operation <i>Salaam</i> - from notes by <i>Arthur O. Bauer</i>	4/10
Operational Research ' <i>Science at War</i> ' <i>J.G. Crowther and R Whiddington FRS</i>	69/73

Operational Research and ASV Radar <i>C H Waddington</i>	70/82
ORANGE YEOMAN	1/4, 2/4, 3/3
Origins and Development of Radar: The French Contribution <i>Yves Blanchard</i>	67/42
Orford Ness <i>Alan Pennington and Dave Kenny via Walter Blanchard PPRIN</i>	55/19
Orfordness <i>L Spray/ AWRE News</i>	54/47
Orfordness 'Black Beacon' - <i>Paddy Heazell</i>	5/4, 6/5, 7/5
OTH, China and the South China Seas <i>John 'Jacey' Wise</i>	64/74
Oxford WW1 Conference January 2014: Papers, Abstracts	18/18, 19/17
Palmer, L.S. and the Training Aids Development Unit (1942-5) <i>Martin Bolton</i>	74/30
Park before the Park, The: Bletchley, World War 1 <i>John Gallehawk</i>	41/17
Passive Radar <i>J C 'Jacey' Wise</i>	37/39
Peep into the Future, A: 2017 Series on Ground Electronics Vehicles	54/20
Performance Spec for Receivers to Minimise Jamming Effects <i>S Jefferson</i>	66/111
Philip Mayne Woodward (1919 – 2018)	70/121
Perdio Radio: Some Recollections of its Early Days <i>Rod Burman</i>	63/75
Piccolo 32-tone Telegraph System, The <i>D. Bayley, C.Eng., & J. D. Ralphs, B.Sc.</i>	52/6
Pierre David's 'Electromagnetic Barrier' <i>Yves Blanchard</i>	68/61
Please Help – Hawker Siddeley Review; AI 17; R 1619	47/6
– AI 17 Manufacturer; R 1619 manufacturer: US AN/APR-2, APR-3	48/6
– AI 17 Manufacturer, "Yellow Lemon" – and more!	49/5
Polish AP5 'Pipsztock'	33/41
Post Office Cable Communications for the Invasion Armies <i>J Rhodes</i>	35/7
Post Office Equipment for Radar <i>P A Marchant, K M Heron</i>	34/10
Post Office Fighter Command Communications <i>A M Hanna</i>	36/15
Post Office: The Battle of the Atlantic <i>Aston, Bland, Perryman, Worthington</i>	36/23
Post Office: The Bomber Lines <i>A G Roberts</i>	36/19
Post-war AIO and Command Systems in the Royal Navy <i>Peter Marland</i>	59/52
Postwar Fire Control in the Royal Navy <i>Peter Marland</i>	63/88
Postwar Weapons in the Royal Navy <i>Peter Marland.</i>	66/51
Power and the Glory, The <i>Phil Judkins</i>	53/78
Powering Electronics 1 Luftwaffe 1940s 2 British Army 1960s	35/28
Precision Radar <i>W. Butement, B. Newsam and A. Oxford</i>	77/83
Preserving Defence Electronics <i>Pete Harry, Bloodhound Preservation Gp</i>	78/12
Preserving the Aviation Heritage Ironbridge 1989	76/11
Professor Arne Beurling, Sturgeon and Trasher <i>Drs P Waddell and D Brown</i>	15/19
Project LAST: Sea King AEW <i>Michael Yeates</i>	57/47
QinetiQ Open Day 2015 <i>Tony Waller</i>	37/6
R1100 Ben Nock Military Wireless Museum, Kidderminster	49/61
R1147 and a 'B' Mystery! <i>via Andy Young</i>	54/21
R1147: CW Radio Aids to Homing and BA of Naval Aircraft <i>Quinn & Holland</i>	55/55
R1294/ AB2 <i>Air Publication</i>	75/103
R1359/ ABR 3 <i>Air Publication</i>	75/122
R1619 <i>Air Publication Chris Cooper/Richard Hankins</i>	75/141
Radar Association	2/25, 3/3, 4/4
Radial Time Bases: How they were developed for radar <i>Dummer & Franklin</i>	77/45
Radio Aids to Navigation <i>Sir Edward Fennessy/ RIN</i>	76/24
Radio and Space Research at Slough 1920-81 <i>Gardiner, Lane, Rishbeth</i>	73/48
Radar and the Battle of the River Plate <i>Dr Ian K Walker</i>	30/20
Radar Battle of the Bay of Biscay, The <i>Dr Bernard Lovell PhD</i>	50/27
Radar Chatter <i>John 'Jacey' Wise MBE</i>	20/17
Radar ECCM in World War II <i>Stephen L Johnston</i>	66/100
Radar Echoes from Birds: AORG Report 257, 1945 <i>D. Lack AORG</i>	75/35

Radar in World War 2: the South African contribution <i>B A Austin</i>	33/21
Radar Navigation <i>R.A. Smith</i>	72/39
Radar News <i>John 'Jacey' Wise</i>	79/75
Radar Nomenclature <i>John 'Jacey' Wise MBE</i>	15/7
Radar Operator on an Ack-Ack Site <i>Rowena Argent</i>	29/39
Radar, the Army and D-Day <i>Prof J W S Pringle</i>	73/37
Radio Communication via the Moon <i>J V Evans</i>	63/66
Radio Finger-printing and TINA <i>Jerry Proc via Walter Blanchard</i>	63/39
Radio Progress in the 1920s <i>Keith Thrower</i>	63/120
Radio Progress in the 1930s <i>Keith Thrower</i>	64/117
Radio War, The <i>Air Vice Marshal E B Addison</i>	78/68
Radio War, The <i>Sir Robert Cockburn</i>	71/87
Radio War, Addendum to The <i>Sir Robert Cockburn</i>	71/106
RAF 100 <i>Dick Green</i>	27/27, 28/34
RAF Danby Beacon Chain Home <i>Ray Barker/Mike Dean/ Freddie Smith</i>	75/74
RAF Ground Electronics Vehicles – III: RVT 130/131	58/46
RAF Ground Electronics Vehicles – IV: Introduction	59/118
RAF Ground Radio and Radar Vehicles <i>Air Publication 2276J</i>	55/89
RAF Ground Radio and Radar Vehicles – II <i>Air Publication 2276J</i>	56/66
RAF Intercept Receivers	75/102
RAF Notes on Air Operating for Signals Aircrew 1944 <i>AM Pamphlet 180</i>	75/60
RAF Radio Mechanic Training <i>Colin Latham</i>	64/30
RAF Sopley: A Brief History 1941 – 45 <i>Pat Sparkes</i>	71/41
RAF Worth Matravers 1951: GEE Monitoring <i>Ellis Goodyear</i>	72/6
Rainbow Codes <i>Chris Gibson</i>	47/19
Ravenscar Illustrated <i>Brian Mulvana</i>	47/26
Ravenscar Radars: Bent Rigg Radar Station, Ravenscar, Stainton Dale, North Yorkshire <i>Shaun Richardson and Ed Dennison</i>	44/56
Ravenscar Radars <i>Brian Mulvana</i>	44/61
Ravenscar Revisited <i>Mike Dean</i>	38/22
RDF 1.5: letter from Fred Starr, Newcomen Society	43/10
RDF (Radar) Bird Watchers, The First <i>Mike Dean MBE</i>	75/40
Recent Developments: ATC: Syria: Armenia <i>John 'Jacey' Wise</i>	44/47
Recent Events: Iran, Ukraine <i>J C 'Jacey' Wise</i>	41/76
Recollections of GEE siting trials <i>Eric Amies via Mike Dean</i>	69/15
Recorder with Playback, Wire, No 1 The British Army <i>War Office 1947</i>	55/45
Red Cabbage	2/4
REME and Coast Artillery Radar <i>Capt. D M Pearson</i>	70/115
Restoring AI Mk IV, VIII, X and ASV II <i>Norman Groom</i>	70/73
Restoration of a Radar AA No3 Mk II, The <i>www.anti-aircraft.co.uk</i>	29/34
Reeves, Alec and the Birth of Blind Bombing <i>David Robertson</i>	42/6
Revolution in Timekeeping, <i>A L Essen</i>	71/74
R.M.1 Mobile Radar Receiver, Bawdsey, 1937 <i>John Liffen, Science Museum</i>	44/16
RSA Soviet Army Radio Display <i>Tony Helm</i>	13/3
RSS, PO Box 25	48/50
Robson, Dorothy	33/13
Rocket Detection CH Stations E & S Coasts 1943/1945 <i>Harvey Sterling</i>	44/41
Romantic Book Review: Mills & Boon and Hydrophones! <i>S/Ldr Mike Dean MBE</i>	28/28
Romney Marshes: from the defensive to the offensive <i>Mike Dean</i>	77/52
Roots of ADA <i>Peter Marland</i>	60/65
Rowe, A P, WW1 Service <i>via Prof Hugh Griffiths</i>	54/37
Royal Naval Radio Warfare 1900 – 1945 Part 1 <i>John 'Jacey' Wise</i>	58/5
Royal Naval Radio Warfare 1900 – 1945 Part 2 <i>John 'Jacey' Wise</i>	59/38
Royal Naval Radio Warfare 1900 – 1945 Part 3 <i>John 'Jacey' Wise</i>	60/48

Royal Naval Radio Warfare 1900 – 1945 Part 4 <i>John ‘Jacey’ Wise</i>	61/45
Royal Naval Radio Warfare 1900 – 1945 Part 5 <i>John ‘Jacey’ Wise</i>	62/42
Royal Naval Radio Warfare 1900 – 1945 Part 6 <i>John ‘Jacey’ Wise</i>	63/19
Royal Naval Radio Warfare 1900 – 1945 Part 7: D/F Systems <i>John Wise</i>	64/53
Royal Naval Radio Warfare 1900 – 1945 Part 8: <i>John Wise</i>	65/40
Royal Naval Radio Warfare 1900 – 1945 Part 9: <i>John Wise</i>	66/32
Royal Navy Electronic Warfare 1940 – 1990 <i>John ‘Jacey’ Wise</i>	68/47
Royal Navy Mobile Crystal Grinding & Servicing Unit <i>Clive Kidd,</i>	52/22
Royal Radar Establishment, The <i>J E N Hooper</i>	71/65
Royal Signals: Signals Experimental Group: Help Please	6/3
Russian Infiltration into GCI, Early? <i>David Robertson</i>	72/70
Safety in the Air: A User’s View of Radio Aids 1947 <i>John McGillivray</i>	57/34
Sarafand, An Invitation to <i>via Aryeh Ben-Ami</i>	54/53
Schnorkel <i>compiled by Mike Dean</i>	73/103
Schnorkel & Stealth: German Tech & Electronic Development <i>Axel Niestlé</i>	73/123
Schnorkel & Stealth In Context: The TRE Perspective <i>Prof Sir B Lovell</i>	73/139
Schornsteinfeger (Chimney Sweep) <i>Mike Dean MBE</i>	73/111
Scorpion MRV: Nexter, Renault, Thales contract	30/36
Scott-Taggart, John: 55 Years of Radio <i>John Scott-Taggart</i>	70/14
Scott-Taggart, John: Evacuating Radar from France, May, 1940	70/30
Search and Research: Cambridge Radio Astronomy <i>Prof Sir Martin Ryle</i>	45/32
Secret Communications Exhibition, Diemen, Reports	17/33,18/22
Secret Communications Report <i>Dr Mike Diprose</i>	54/5
Secret Communications January 2017: photo-report	56/6
Secret Man, The, Stanley Hey	65/78
Seehund Infra-red Telescope for Naval Signalling <i>via Mike Dean</i>	54/39
Seeking Ekco, and the Way Back Machine	22/9, 23/20
Seven Dwarfs, The: RAF E-3 Sentry AEW/ AWACS	41/9
SHF Intercept Targets <i>J C ‘Jacey’ Wise MBE</i>	29/28
Short-Wave Cathode-Ray Direction-Finding Receiver <i>RRS Staff</i>	59/29
Side-Channel Attacks; Protecting Defence Electronics <i>Michael Mehlberg</i>	66/77
Silloth Trainer - the first description <i>Martin Bolton/Gordon Iles</i>	39/3
Snow White: RAF Decimetric Multi-Channel Communications, 1947	41/4
Some Memories of a Radio / RDF Mech in WW2 <i>LAC Gallimore</i>	68/29
Some Thoughts on Combs <i>John Wise MBE</i>	23/3
South African Royal Trains’ Wireless <i>A.E. Chester / Clive Kidd</i>	74/18
Soviet Army Manpack Display – <i>Tony Helm</i>	12/6
Space and the TPS-77? <i>Shetland Times</i>	74/90
Speaking of Antennas: the radars of USS <i>Yorktown: S/Ldr Mike Dean MBE</i>	55/67
Specimen AORG Report on Jamming <i>Stanley Hey</i>	65/96
Spectrum Activity <i>John Wise MBE</i>	23/4
Spencer, Harold Cyril (Spenny) <i>Les Hayward</i>	51/10
Spencer, Harold Cyril (Spenny) <i>Brian Austin re Les Hayward in eDEN 51</i>	52/21
‘Spy Ring’, A Unique, and an Unusual Naturalisation in 1923. <i>Toby Ewin</i>	44/10
STC, the Allied Armies, and – Wire? <i>Douglas Reekie</i>	61/86
STC: The Army Visit	54/51
STC Valve Division and UK Naval Radar in WW2 <i>Douglas C Rogers</i>	31/30
Strumble Head and Garn Fawr Trials Sites	1/3, 2/4, 3/3
Strumble Head and the ‘3,6,9’ Experiments <i>Kevin Niblett and Mike Dean</i>	72/10
Strumble Head: Fitting the Jigsaw Together <i>M Dean, R Moore, N Godsell</i>	73/63

Strumble Head: Fitting the Jigsaw Together: 10 Set REME <i>Eric Ramm</i>	74/35
Submarines, Schnorkels and Stealth	73/102
Summer Puzzle! C E Prince's Receiver - Find the Fault!	25/4
Summer Puzzle Solution! C E Prince's Receiver - Find the Fault.	26/4
Summer Visit 2015	31/3, 32/3, 33/3, 35/4
Sunday Soviet, TRE, with names put to faces!	8/25
Surprise: Decca Navigator <i>via Clive Kidd</i>	69/6
Surprise: Klein Heidelberg Photo <i>via Arthur O Bauer</i>	69/8
Surprise: Strumble Head - Centimetric Communications Trials <i>Kevin Niblett</i>	69/9
Survey of Japanese Radar <i>Roger I Wilkinson</i>	68/117
Swiss Bloodhound Museum <i>Jonathan Ayles</i>	2/5
Switchboard Identification Type B	9/25
T1199 'Squeaker' <i>Air Publication</i>	51/23
TAILPIECE	
Mitsubishi J8M1 <i>Shusui</i>	2/26
Nakajima G8N1 <i>Rita</i>	3/25
Professor Ian Donald	4/24, 7/29
Manufacturing a 9 Set adaptor	5/27
Tinsel/ <i>Rope/ Window</i>	6/22, 7/27
TRE Sunday Soviet, with names put to faces!	8/25
Switchboard Identification Type B	9/25
Catalina aerial array – and then some!	10/24
<i>Schräge Musik</i> – World War I!	11/24
Loot from Hamburg – and a comment on Allied Bombing.	12/28
Marine Hypsometer	13/27
HM Trawler <i>Viola III</i>	14/18
'Chinese Whispers', Worth Matravers and R J Dippy	15/29
The Baird Text-to-TV Converter	16/24
WW1 Pigeon Photo-reconnaissance	17/40
Ground-handling of pigeons	18/27
Captured German War Pigeons	19/30
War Art - Crows, and more!	20/25
War Art – Penkala	21/45
'Tubby' Vielle ' <i>Almost a Boffin</i> '	22/33
Tuba AN/MPQ-1	23/34
Submarines and Cavalry	24/40
Head-mounted Radar!	25/47
Transatlantic glider tow!	26/31
eDEN Fashion Pages - Sound locators back in fashion!	27/29
Bugler at the Gate – Antoon Verschoot	28/36
Christmas Puzzle "I saw three ships come sailing in ..."	29/49
Fleet Air Arm flies the Super Étendard from the <i>Charles de Gaulle</i>	30/39
MEW	31/40
Lock up your diathermy machines	32/48, 33/46
Sheerophone	33/46
Poetry Corner	34/46
Try your hand at photo-interpretation	35/51, 36/33
'DWI' Ju-52s	36/33
The Wife of Terentius Nero, and an unknown WAAF	37/44
Profumo and the Drone	38/40
Japanese WW2 'death ray' magnetron	39/59
'Dreadnought 2050' Holographic Operations Room	40/47
Danish 'Stay behind' set – appeal for information	41/86

1. LOP/GAP – or not? 2 Malta Sound Mirror	42/55
A Falklands Ending for a Type 42	43/50
ENIAC's Programmers	44/55
1 Car-mounted HF/DF 2 'Autobombics' 3 WW1 German destroyers V44/82	45/52
Air to Air Missiles – World War 1!	46/52
Floppy Disk and Nuclear Weapons	47/52
Fylingdales Golfballs	48/47
R1100 <i>Ben Nock Military Wireless Museum, Kidderminster</i>	49/61
Detecting H2S	50/73
England's last surface warship builder – Appledore, North Devon	51/71
Magnetrons increase your house value!	52/80
Gutta Percha <i>with thanks to Fred Starr</i>	53/76
BBC Home Service Programme on Radar <i>S/Ldr Mike Dean MBE</i>	53/201
The Trump family and British Radar <i>via Mike Dean</i>	55/86
Christmas 75 Years Ago! <i>via Mike Dean</i>	55/85
The Use of Cavalry in Modern Warfare	55/113
Call Back Yesterday – Scanner Type 83 <i>Arthur Sallis catalogue</i>	56/64
Answers to Technical Quiz Tech-Check 17!	56/95
Antarctic Mystery Receiver Identified! <i>Thanks to Ken Brooks</i>	57/53
Channel Dash 2017? <i>Thanks to Mike Dean and the Huffington Post</i>	58/45
76 Squadron Halifax cartoon <i>with thanks to Roger Skinner</i>	58/74
The visit of 'Bomber' Harris to the USA, 1938	59/96
Manuals and Reality - <i>War's Nomads</i> , AMES 606 in the Desert.	59/140
Caption Competition	60/89
The Art of Truleigh GEE	60/145
Tsushima Veteran - Japanese Battleship Mikasa	61/123
1939 Radar Interference, El D'aba, Egypt <i>Mike Dean</i>	61/85
NASA Computer in Basement <i>via John Kaesehagen</i>	62/71
Other landings – the RotajEEP and ConvAir 118	62/113
British Army Wireless Set No 6	62/129
Landing by Lasers <i>via Robert Soek</i>	63/86
HMS Devonshire and Norfolk	63/117
British Army Wireless Set No 5	63/163
Building your own Sound Locator!	64/81
British and German airborne radio, 1940	64/155
Where in the World?	65/76, 65/100
Saxa Vord returns!	66/97
Operation Glimmer – Obituary: Phil Brentnall, 218 Squadron	66/153
Flying Cars again! <i>Via Richard Soek</i>	67/89
HMS Spurius! 'Flight Deck' October 1944	67/172
1941 Painting of the Army AA Radar Earth Mat Paul Martin	68/90
A Japanese Type A Doppler on Kiska, Aleutian Islands? <i>Mike Dean</i>	68/144
'Ow Much? RAF Pay Grades during World War 2	69/58
Sparks!	69/93
Saxa Vord and TPS-77	70/66
Lancaster bomber reproduction by Norman Groom, Pitstone Museum	70/120
The Hitchhiker's Guide to the Army Wireless Set 36	71/83
ECM in the Boer War! <i>via Brian Austin</i>	71/144
Spaceport Shetland <i>Mike Dean</i>	72/150
Beatrice, Joan and Hedy <i>via Walter Blanchard</i>	73/100

Did the T1154 start life afloat? <i>Ray Coley G3IFF</i>	74/99
Chain Home, or not?	74/169
"Olga Pulloffski, The Beautiful Spy"	75/99
1474 flight, 3 December, 1942 <i>RV Jones</i>	75/173
Ships – but not at Sea!	76/73
Where did it all go? 1957 Woolwich surplus auction catalogue	76/144
A Brass EF50? <i>Andy Young</i>	77/130
'Trust Me, I'm an Engineer' <i>Veracity Index/ IET</i>	78/88
<i>Veracity Prof Simon Watts</i>	79/88
That's not supposed to happen!	79/137
Professor Willie 'Bill' Sucksmith and Magnetron Magnets	80/104
<i>Garn Fawr via Kevin Niblett</i>	80/150
Tale of the Tuba	24/30
Tale of the Tuba – the Resnatron <i>Dow and Welch</i>	25/17
Tallboy	3/24
Tangled Web, A: Chain Home Aerials	40/15
Tantallon – A.S.R.E. Extension <i>G.A. Exeter</i>	10/4
Tantallon – <i>Dr Ernest Putley</i>	11/3
Tantallon – Infra-Red Transmission Measurements <i>Mike Dean</i>	13/7
Target Reflectors	69/86
Target Ship HMS <i>Agamemnon</i> : Wireless Control details <i>Lt Cdr Clive Kidd</i>	80/60
Teledynamics <i>Peter Butcher</i>	60/5
Telecommunications in World War I, Leeds Conference on	11/19, 12/22
Terman's [Dr F] Visit to TRE: Jamming	66/107
Thales acquires Sysgo	5/23
Thales <i>Cougar</i> Team Radio	21/41
Thales Equipment Announcements: <i>Watchkeeper, Sonar 2050, Smart-S Mk2, Scout Mk 3, CAPTAS-II</i>	20/20
Colombian <i>Almirante Padilla</i> Frigates; Japanese <i>Bushmaster</i> vehicles	22/30
Helicopter Guided Weapons, <i>Hawkei</i> ground vehicle, secure comms	24/36
<i>Smart-L</i> in Netherlands, <i>Solas Lite</i> in Australia	34/41
<i>Merlin</i> Surveillance and US <i>Rifleman</i> Radio	35/44
Canadian light armoured vehicle reconnaissance surveillance system	36/29
NS100 passes acceptance test	39/50
Ballistic Missile Defence Testing and Integration Contract	42/53
German Navy's Tactical Trainer: Minehunter Upgrade In Estonia	44/50
French Frigate electronics; <i>Captas-4</i> sonar; <i>Pathmaster</i> mine CM; <i>NS-200</i> dual-axis multibeam radar; <i>AUSS</i> unmanned surface and subsurface system	52/72
Thales announce <i>SeeMapper</i>	28/31
Thales/ASV <i>Halcyon</i> Unmanned Minehunter	43/47
Thales: 4D AESA Radar; <i>Talios</i> Optronics pod	77/125
Thales: ABM Defence 2018: USAF/ILS: BAT-120 Laser-guided Munition Test	74/92
Thales: AN/PRC-148C Improved Multiband Inter-Intra Team Radio (IMBITR)	66/95
Thales: Australia's Future Sub; Sea Fire Digital Radar; Dutch <i>Bushmaster</i>	71/79
Thales: <i>Bushmaster</i> ; Rockets for Spain and Germany: Sonar for France's SSBN	68/85
Thales: Canadian Navy support long-term contract	62/68
Thales: CWI Transmitters; AJAX driver training simulators [UK MoD]	56/61
Thales: GM 200 MM/Compact 4D radar	80/102
Thales: HForce; Goalkeeper	69/54
Thales: Indonesia, Brazil and Kingklip Sonar	75/96
Thales: Laser-guided rockets on H145M helicopters	57/50
Thales: Naval Early Warning	55/83
Thales: Partner-C, Altessse-H, IFF, Optronics, Tiger and Crotale	76/65
Thales: Rocket launchers for MDD helicopters; MALE European Drone	70/61

Thales: Salamandre, and IFF	54/57
Thales: Security Vehicles; Force Mult A/c; Smart-L; System 21; SAMDIS sonar.	65/71
Thales: Sensors for Dassault Rafale F4: Mexican Navy Ocean Patrol Vessel	79/85
Thales: SMART-L radar; QE Carriers; Telson Missile	64/78
Thales: SOTAS vehicle communication system sold to Denmark	58/42
Thales: Telson-22 rocket fit for the Mi-24 Helicopter	63/84
Thales: Tiger Helicopter Simulators; Antares - LP active Satcom Array	78/85
Thales: VBMR multirole armoured vehicle on display at Bastille Day, 2017	61/83
Thales/Ultra LOS High-capacity radio; Syracuse III satcom terminals	32/41
That's Not Supposed to Happen! HMS <i>Walrus</i>	73/142
'They Do Things Differently There'; QinetiQ, Dassault and procurement	17/6
This Month's Finds, Next Month's Articles: R1617; P24: Big Ben Indicator	74/91
Thunderstorm Location <i>Brian Audric</i>	51/47
Thunderstorm Location <i>Brian Austin re Brian Audric's article in eDEN 51</i>	52/21
Time after Time after Time (HMS <i>Centurion</i>) <i>A. Cecil Hampshire</i>	79/90
Top Marks: An Appeal for Information <i>David Robertson</i>	46/50
Torpedo Industry The British <i>Bernard H L Blake</i>	58/17
Tracing An Inter-war Aircraft	3/11
Tracing and Restoring an F-111 Cockpit <i>Robert Soek</i>	21/ 24
- F-111 Cockpit II: Cockpit to Simulator Conversion <i>Robert Soek</i>	22/9
Tracing First World War Service-people – Army officers	6/10
Tracing First World War Service-people – Army NCOs and Private Soldiers	7/11
Tracing WW1 Relatives – Royal Navy	8/8
Tracing WW1 Relatives – Royal Navy: WRNS (Wrens), and Y station, Stockton	9/13
Tracing WW1 Relatives: Nurses - and a WW2 radar career!	10/18
<i>Transmission Lines</i> 1995 – 2006 on CD	30/35
Trawling the Waves: Intercept and Intelligence in WW1	19/20
TRE Scientists: Between Government and Industry <i>Jon Agar/ Jeff Hughes</i>	75/49
Treatise on Valves <i>War Office December 1916</i>	76/76
TRE Training Simulators, More on the <i>A M Uttley via Martin Bolton</i>	51/62
Tunis German Search Receiver <i>RAF Coastal Command Review</i>	35/34
U-681, Sinking of, from both sides <i>RAF Coastal Command Review</i>	35/38
U-boat MF/DF in World War II <i>John 'Jacey' Wise</i>	80/101
UK assessments of German WW2 Airborne Radio <i>C J Edwards</i>	67/7
Ukrainian Radar: <i>Jacey' Wise</i>	51/68
Ultra TCS announces Orion X505 vehicle radio	39/52
USS Fitzgerald and the ACX Crystal: Merchant Navy Ass'n <i>Barry Wilbraham</i>	61/76
USS Missouri	63/87
US Navy Collisions <i>via Antony Devereux</i>	66/86
V-1 Delivered Propaganda Leaflet " <i>The Other Side</i> " - <i>Arthur Bauer</i>	12/17
V-1 Autopilot Guidance System <i>Heinrich Temmer</i>	31/4
Variable-Elevation Beam Aerial Systems for 1½ metres <i>G E Bacon</i>	77/69
Variometers and German Military Equipment <i>Pat Hawker G3VA</i>	68/44
Verdict: Watson Watt TV programme 'Castles in the Sky'	27/3, 28/5
VIE: Alan Blumlein and the Sound Locator <i>Dr Phil Judkins</i>	30/13
Visit to Science Museum Store, Blythe House <i>via Liz Bruton & John Liffen</i>	66/14
WAAF Radar Mechanics <i>Amy Bridson</i>	43/34, 44/35, 47/14
'Wartime News'	23/32
Was H2S ever fitted in the Canberra? <i>S/Ldr Mike Dean MBE</i>	53/178

Was Typex Compromised?	3/16
Watson Watt, Margaret	33/12
Watson Watt TV programme 'Castles in the Sky', 4 September 2014	26/3, 27/3, 28/5
What <i>did</i> Chain Home cost?	3/12
What's in a name? Chinese Military Radar <i>John 'Jacey' Wise</i>	80/95
What is Radar (Again)? 'Cathode Ray' (<i>M G Scroggie</i>)	29/22
When Telecom and ITT Were Young <i>Maurice Deloraine (and Xmas Quiz!)</i>	79/11
Which Microwave Landing System? <i>Mike Hirst/Flight International</i>	62/103
Who Knew? - I: Bawdsey, German and Italian Developments	20/4
Who Knew? – II: Window	20/9
Who Knew? – III: It was Xmas Day in the Moray Firth ...	20/12
Who Knew? Bawdsey II – US, German and Russian Developments	21/3
Who Knew? RAF Aircrew, Navigation and Bombing, mid-1939 – I	25/8
Who Knew? RAF Aircrew, Navigation and Bombing, mid-1939 – II	26/12
Who Knew? – Watson Watt and Forman	22/23, 23/21
Who Knows? – <i>Zeitdrucker 38</i>	20/13
Wikkenhauser, Gustav 1901 – 1974	29/25
Wingless Combat <i>Norman Hill</i>	79/49
Winterburn Dr John	53/77
Wireless in the Boer War <i>Brian Austin</i>	62/6
Wireless in the First World War <i>The late Dr Ernest Putley</i>	75/31
Wireless Telephony on Aeroplanes <i>C E Prince</i>	24/9
Woomera <i>John Kaesehagen</i>	36/6, 37/32, 38/9, 39/43,40/34, 41/71
Wootton Aerial Masts	1/3
Working on MoD Equipment - <i>Reginald Whitlock</i>	4/18, 5/19, 6/18, 7/20, 8/13, 9/22
World War I Belgian Infra-red Signalling System <i>Mike Dean</i>	21/19
World War I Buzzers, Sounders and Vibrators	40/9
- Response <i>Clive Kidd</i>	41/24
- Article <i>Clive Kidd</i>	42/25
W/T Receiver Model Td	16/19
W/T Transmitter Type 52	15/21
World War 1 Buzzers, Sounders and Vibrators	40/9
Woodbridge Ju88, The, <i>John Maeckle</i>	79/74
World War 2 YouTube films	8/23
WREN Courier, The Passing of the <i>via Clive Kidd, HMS Collingwood</i>	51/66
WW1 Tuner Circuits	68/17
WW2 Radar Films on DVD	3/23
Xmas Quiz: Where in the World? Answers	78/5
Xmas Quiz – continued! <i>Via David Robertson</i>	79/9
Xmas Quiz – continued! <i>Via David Robertson</i>	80/7
Zimmermann, Searching for, <i>Andreas Marklund</i>	37/9

DEHS PUBLICATIONS

Year	Title	Members	Non-Members
1995	The Origins and Development of Radar	Out of print at present	
1996	Topics in the History of Sonar	7.00	8.50
1997	The History of Navigation Aids	6.50	8.00
1998	History of IFF and DF	7.50	9.00
1999	History of Military Communications	£8.50	£10.00
2000	History of Guided Weapons	£6.50	£8.00
2001	Air Defence 1940–1990	£7.00	£8.50
2002	Naval Electronics	£6.50	£800
2003	Clandestine Radio Communications	£8.50	£10.00
2004	Battlefield Electronic Systems (Land, Sea and Air)	£6.50	£8.00
2005	Electronics that Revolutionized Warfare	£8.50	£10.00
2006	Airborne Electronics	£8.50	£10.00
2007	Government & Commercial Electronics R&D	£6.50	£8.00
2008	Applications of Defence R&D	£8.00	£9.50
2010	2010 International Conference on the origins and evolution of the cavity magnetron	£11.00	£12.50
2010	CD-ROM version of above	£5.00*	£6.00
2010	Key Components for EW. The Lessons for Today	£9.00	£10.50
2011	CD-ROM of HISTEST2011 proceedings	£5.00*	£6.00
2012	Communications: Clandestine & Tactical	£10.00	£12.00
2012	Communications: Strategic & General	£12.00	£14.00
2012	Intercept	7.00	£8.50
2014	Chess: Electronic Warfare & Bomber Offensive in Europe: an Attempt at Balance	£8.00	£9.50
	The Beginnings of British Radar, by Brian Callick	£7.00	£8.50
	Russell Burns' book 'The Prof, Churchill and Science at War'	£25.00**	25.00**

For all transactions add £2 for UK delivery, or 25% for overseas orders, to cover p&p.;
 * for CD-ROMS add £1 for p&p. Send cheques to Keith Thrower, 9 The Conifers,
 Emmer Green, Reading, RG4 8AQ. Email: kthrower@waitrose.com

**For the Burns book, please send £25, payable to the DEHS, to Simon Blumlein, 13
 Heathfield Road, Petersfield, Hants.