

SALE OF BACK ISSUES OF SIGNAL

Back issues of Signal are available to fully paid-up VMARS MEMBERS ONLY at £7 per issue + £3 for postage for a single issue. Postage will be at cost for multiple issues. Signal is available in hardcopy only. Similarly, we can provide hardcopies of individual issues of the VMARS Newsletter; back issues are not held so reprints would need to be made and will be charged at cost +postage. Any Member wishing to purchase back issues should contact the VMARS Membership Secretary in the first instance using this email address memsec (at) vmars.org.uk ; For corrections or feedback, please use this email address webeditor (at) vmars.org.uk

LIST OF THE CONTENTS OF ISSUES 1-77 OF SIGNAL

ISSUE 1: October 2006

- A modern rebuild of an HRO
- GEE – A radio navigation aid
- Notes on the WS38
- Little Dora and her offspring
- Building a replica Paraset
- A note on R210 vibrators
- New for old – a restorer's dilemma
- The explanation
- A newcomer's arrival into valve & vintage
- The Admiralty Pattern AP1802A transmitter

ISSUE 2: January 2007

- Garden party surprise – another B2 spiset
- “AM” – Ancient and Modern?
- AVO 8 batteries
- Build a QRO transmitter. Part I: The RF deck
- “Tricks of the Trade”
- Calculating meter shunts
- WS24 reconstruction project
- An introduction to Clansman
- The T1509 transmitter
- Silica transmitting valves
- How far can we push that crystal?
- On him may depend the aircraft's safety
- Letters: HRO 15 m bandspread coilpack

ISSUE 3: April 2007

- An irresistible urge
- The development of the ER-95* military transmitter
- Build a QRO Transmitter. Part II: The modulator and power supply
- Rejuvenating a Type 43 Acos microphone
- Tiger, tiger glowing bright
- “Tricks of the Trade”
- The future of the past or some thoughts on 2057
- High quality modulation monitor
- Add an RF ammeter to the TT21 TX
- The tiny TX with the big voice
- Enigma
- Letters: Colpitts oscillators, equipment survival

ISSUE 4: July 2007

- Editorial: Fixing things
- SDR - Steve Designed Radio – A QRP transceiver for 2007
- The Marconi/GEC RC.410/R receiver
- Wireless and Radar in the Royal Artillery 1956–63
- Build a QRO transmitter. Part 3: The final-final
- The Pearce Simpson Bimini 550 AM radio telephone
- Repairing Cossor valved oscilloscopes
- A high-power modulator for the LG300
- A test of the Shirley aerial
- Recreating decals and labels for vintage equipment

ISSUE 5: October 2007

- Notes the WS38: Part 2
- The WS68P at large
- Experimenting with a Franklin VFO
- “Tricks of the Trade”
- Letters: Audio phase-shifter in an AM transmitter

- Editorial: Elegant simplicity, but is it working as well as it should?
- Rebuilding the BC-348
- The TRC 522
- The National HRO receiver
- “Tricks of the Trade”
- The Cedar AT5: Tales and tweaks
- The Royal Air Force R1155 radio receiver
- How good is the match?
- Jingle Bells
- Band spreading the HRO on 30 metres

ISSUE 6: January 2008

- Editorial: A work of art
- A history of amateur radio in the UK from 1939 to 1955
- A practical look at Arnhem communications
- “Tricks of the Trade”
- The military CT443 power meter
- Introducing...the NETOMETER
- Struggles with the 813 valve at the EEV Company
- Build a QRO transmitter. Part 4: Postscript
- Ajax A25 Restoration
- Vibrator replacement for the R209 receiver
- Another look at crystal current in crystal oscillators
- Vector Network Analysers – receiver/antenna matching

ISSUE 7: April 2008

- The Secret Intelligence Service Mk.33 transmitter
- Electronic replacement vibrators for military radios
- British military communications during the Falklands War
- Adding LSB to the Clansman UK/VRC321 HF transceivers
- Low-cost linear
- A new regulated power supply for the PRC-6 and similar radios
- Amateur radio history
- A DIY 4-metre beam
- “Tricks of the Trade”

ISSUE 8: July 2008

- Allo, Allo.....(The Jupiter ER 504)
- A history of amateur radio in the UK. Chapter 2: 1948–55
- An international erection
- The T1154 and post-War use
- “Tricks of the Trade”

- Decals (waterslide wet transfers)
- The T1154 on Top Band
- Restoring RF ammeters, Part 1: The 5G RF ammeter
- Build a QRO transmitter: The circuit diagram

ISSUE 9: October 2008

- Editorial: The greatest patented invention ever
- The Hallicrafters HT-4 (BC-610) transmitter in war and peace Part 1 – “Voice of Victory”
- Siemens Plessey Vixen system receivers
- Modifications to the Plessey PVS38XX receivers
- A history of amateur radio in the UK from 1939 to 1955. Chapter 3: 1947
- A 6AM6/807 transmitter for 80 metres
- An unusual balanced ATU for a doublet on 80 m
- “Tricks of the Trade”
- Build a stabilised PSU
- Repairing the Marconi TF2002B signal generator
- Letters: Amateur operation during WWII?

ISSUE 10: January 2009

- Editorial: Investigating how things were
- A history of Amateur Radio in the UK: Chapter 4: 1948–55
- A D/F Loop for the R1155
- A homebrew D/F cross-pointer meter for the R1155
- A test-rig for measuring the dynamic range of 80 metre receivers
- Book Review: ‘The Secret War Factory’ by Charles Exton
- Soft-starting
- Arnhem – some further thoughts
- “Tricks of the Trade”
- Letters: Adding LSB to the RT-321 – a postscript
- Letters: T1154 and Xtal front-ends: Which PA tube to use
- Letters: Comments on “Tricks of the Trade”
- Letters: Comments on TOTT and receiver dynamic range

ISSUE 11: April 2009

- Editorial: Ten years of progress
- The RAF receiver R1475
- Donald MacKay (1870–1958)
- The Uni-Timer construction project
- “Tricks of the Trade”
- Operation of VFOs and the Wofferton Drive League
- The Marconi HS27, HS28 and NT201 transmitters
- An introduction to Clansman. Part 2
- Digging for Victory – (and profit)
- PICs are vintage – honest
- A frequency-changing project
- An active loop aerial for 80 m

ISSUE 12: July 2009

- Editorial: What you read is what you write
- Introduction to Clansman: Part 3
- Modifying the Clansman RT321 for easier use
- Chinese Type 339 HF receiver
- “Tricks of the Trade”: Aspidistra and OSE5
- A low level oscillator for 80 m
- A ‘classical’ 6-metre converter
- The UK/PRC 349
- The half-wave filter
- PICs are vintage: further scribbling

- Some post-War HF manpacks for long range patrols
- Image rejection circuits

ISSUE 13: October 2009

- Editorial: A rewarding experience
- The Hallicrafters HT4 (BC610). Part 2
- Making thermocouples for aerial ammeters
- Arnhem 2009
- Multi-Rock. A novel transmitter signal source
- The single sideband C11 – MEL L556
- “Tricks of the Trade”
- Racal MS869 sequence unit
- A tale of two TT21s

ISSUE 14: February 2010

- Editorial: Just because you are a VMARS member
- The Redifon GR479 HF SSB radio station
- RF power relationships in WWII low power HF manpacks
- “Tricks of the Trade”
- An alternative to the Smith Chart
- A control-grid modulated transmitter for 80 m
- Clapp, Colpitts, Seiler or Vackar. What’s the difference?
- The Clansman Intelligent Battery Management System
- Netometer II – time for the needle
- 600 V HT at 250 mA
- Tricks of the Trade

ISSUE 15: May 2010

- Editorial: A blend of old and new
- The rebuild of a Gee navigation system
- The Gee Whiz – a Gee ground station simulator
- Telephone handsets for VHF/FM military man pack radios
- “Tricks of the Trade”
- A 10 MHz IF crystal filter for AM
- Repairing IF transformers
- Grid and other modulation schemes
- Donald MacKay (1870–1958)
- RAT5 – a superhet receiver for 80 m or 160 m AM
- The Reception Set R103
- A 300 W, 50 ohm, dummy load
- Letters: Signal Issue 14 Editorial
- Letters: Comments on article by Dave Porter G4OYX “600 V HT at 250 mA”
- Letters: Control panel transformers: adding a heater winding
- Letters: The German Radios at Bletchley Park, with reference to the Back Page of Signal

ISSUE 16: August 2010

- Editorial: Into our fifth year
- Further reflections on Arnhem
- The Telefunken E52 communications receiver
- A ‘suitcase’ transmitter-receiver
- The LTV G133F receiver
- WS No. 68 P modulation
- The Clansman PRC320 LSB modification
- FAT-MAX – an analogue speech processor
- Pi-tank outputs and safety
- “Tricks of the Trade”
- Letters: Safety of PA Output Stages
- Letters: 600 V HT at 250 mA

ISSUE 17: November 2010

- Editorial: Season's Greetings
- Further reflections on Arnhem. Part 2
- A 40 m CW bandspread coil for the HRO
- Datacomms in the field over Clansman radio systems
- A Clansman computer interface
- "Tricks of the Trade"
- Broad spectrum radio
- The Saturday Net: how it all started
- Using 75 ohm test equipment in 50 ohm transmission lines
- The Racal TRA967
- Practical tips
- Building an ultra low-power Acorn valve transmitter
- A 'budget' version of the 10 MHz IF crystal filter for AM
- Letters: G3MCK on pi-networks and safety
- Letters: Tricks of the Trade
- Letters: The Dave Porter debate - some final remarks
- Letters: Testing capacitors

ISSUE 18: February 2011

- Editorial: A VMARS Handbook?
- Elements of the Soviet mobile radio station R161A-2M
- WS 46 aerial matching and RF power
- An unusual WWII HF pack set
- Spread spectrum
- Practical tips
- Logarithmic amplifiers
- An AM ladder filter for an IF of 450 kHz
- Racal ComSec MA4450 Tactical Data Entry Device (TDED)
- Circuit diagram of the RBZ receiver
- Letters to the Editor

ISSUE 19: May 2011

- A quick look at the Russian R311 field receiver
- "Tricks of the Trade"
- Make your own IF transformers
- Valve IF amplifiers
- The BC611 Handie Talkie
- Air navigation during World War II
- Practical tips
- Clansman PRC320 LSB modification revisited

ISSUE 20: August 2011

- The 3-phase supply and active aerial in the R161
- TV or Radio
- The faithful relic
- Back in the USSR courtesy of the Wehrmacht
- The BC-312 receiver
- The Clansman UK/PRC350
- RT320 EMERS, manuals and mods
- The Wonder Pit story
- "Tricks of the Trade"
- Portable power for the TCS
- Letters: The R311 Receiver
- Letters: Comment on letter from Gerald Stancey
- Letters: The M0DAF active loop aerial
- Letters: Follow up to 'TV on Radio'

ISSUE 21: November 2011

- Further reflections on Arnhem. Part 3
- How wide is your signal?
- UK/RT320 SSB filter bandwidths

- The Marconi CP-34 transceiver
- The BC-223 transmitter
- "Tricks of the Trade"
- Letters to the Editor

ISSUE 22: February 2012

- Common aerial working with B40s
- An 80-metre bandspread coil for the HRO
- "Tricks of the Trade"
- Practical tips
- Clansman VRC32 lower side band
- The WS38 transceiver
- The Collins 618T airborne transmitter-receiver
- Valve RF amplifiers and mixers
- An electromechanical T/R sequencer
- Letters to the Editor

ISSUE 23: May 2012

- The Collins 618T HF airborne transmitter-receiver
- Stable regenerative receiver using the 6V6
- Radiovision and the Commander
- Valve oscillators
- "Tricks of the Trade"
- AWA C17020 Amenities receiver
- How to make white decals
- After Enigma: the move to electronic cyphers

ISSUE 24: August 2012

- Interrogator Type 242
- AM and CW valve signal detectors
- 618T signal fadeout on 9th May 2012
- "Tricks of the Trade"
- Matched PA valves
- Practical tips
- The hedgehog
- The Collins 618T. Part 3
- Watching AM

ISSUE 25: November 2012

- Wireless Set No. 1
- Defence HF communications in the 1960's
- A bench power supply for manpack radios
- Inductors or coils
- "Tricks of the Trade"
- The Collins 618T airborne HF TX-RX. Part 4
- Book Reviews

ISSUE 26: February 2013

- A series modulator for AM
- The ultimate regenerative receiver by NR5Q
- Superheterodyne receiver ganging and tracking
- The Collins 618T. Part 5
- Jamie Dodger calling Speedbird
- The AN/GRA-71 Burst Coder
- Unwanted emissions in the spurious domain
- "Tricks of the Trade"
- A Racal Syncal 30 modification

ISSUE 27: May 2013

- 60 metres from the M54
- Police radio communications pre- and post-WARC
- An experimental straight receiver for 80 metres
- Casting small components
- "Tricks of the Trade"

- The Collins 618T airborne HF TX-RX. Part 6
- Book Reviews: Wireless for the Warrior: Compendium 6—Notes on Equipment, Volume IV
- Book Reviews: The History of British Army Signals in the Second World War

ISSUE 28: August 2013

- Admiralty Pattern Indicator Frequency Drift
- Wireless Set No. 128 backpack transceiver
- Designing valve circuits
- Web-streamed SDR receivers at GB2RHQ
- Clansman battery disassembly revisited
- Voltage control in Larkspur vehicle installations
- Police radio communications pre- and post-WARC
- “Tricks of the Trade”

ISSUE 29: November 2013

- A speech conditioner for AM
- About.....Turn!
- Using a short vertical antenna at HF
- An audio white-noise generator
- A humdinger of a smell
- “Tricks of the Trade”
- The ‘Windom-style’ DX-100U mod. transformer
- Woden modulation transformer connections
- Refurbishing batteries
- The ionisation tester-restoration and use

ISSUE 30: February 2014

- Built a replica Paraset and been disappointed?
- Using the BC221 as signal generator
- The lifting link, Faraday screen, etc.
- RF chokes
- “Tricks of the Trade”
- A shocking story
- Valve and semiconductor passwords
- The WR1/P amenities radio
- The Australian Wireless Set 108
- Repairing the Systron Donner 1720
- Screening

ISSUE 31: May 2014

- Metropolitan Police wireless prior to 1930
- A valve-buffer amplifier to drive an 813 from DDS
- “Tricks of the Trade”
- The WS B70: a potted history. Part 1
- The PRC-64A HF transmitter-receiver
- Using vintage equipment on the 5 MHz band
- Valve testing
- An improved ADSL filter
- Letters: Ray Robinson. The WR1/P amenities radio
- Letters: Re: Peter E Chadwick G3RZP. Screening

ISSUE 32: August 2014

- Transmitter W/T No. 1 and related transmitters
- Transmitter and receiver tuning: wavemeters
- The D111 Telephone
- The Zimmermann Telegram
- Canadian Army wireless in WWI
- The ‘Round’ valve
- “Tricks of the Trade”
- Heart transplant for a dying RV2P800 valve
- Bandspreading
- A static ‘crash’ reducer

- Extract from WWI Battle Orders

ISSUE 33: November 2014

- “How to make a wireless telegraph”
- Increased selectivity for a vintage receiver
- The WS B70: A potted history. Part 2
- Vintage satellites
- “Tricks of the Trade”
- Ham audio processing in a nutshell – basics
- 50 A PSU plug
- Repairing a badly damaged variometer
- AGC or AVC?
- Making a BA1509 battery for a PRC-64
- Shall I risk it?

ISSUE 34: February 2015

- 1944 RAF aircraft MF/HF wireless operations
- Good quality TCS mod without a mod
- A 30 dB coupler
- Power and SWR measurement
- Build a low-pass filter
- Operation Overlord
- WAS Butement (1904–1990)
- Shall I risk it? Important safety information
- Modifications to an HRO-5T for CW operation
- “Tricks of the Trade”
- New life for a Heathkit C-3U R/C Bridge

ISSUE 35: May 2015

- ‘Conditions’ during the eclipse
- The VMARS solar eclipse experiments
- An experimental ATU. Part 1
- The G8TMV CTCSS encoder board
- The I-177 valve tester
- A 1921-style superhet
- “Tricks of the Trade”
- Decoupling
- Instant HT on and off the M54
- A well-behaved and efficient end-fed multi-band aerial
- Accuracy in published work
- Modulating the Wireless Set No. 10
- A one-valve double-reflex superhet receiver

ISSUE 36: August 2015

- A non-standard B2 ‘spy set’
- Variable inductors
- The Harris RF-2301 tactical radio and RF-RF-2360 PSU
- Aerial antics
- Further comments on the BC-611 Handie Talkie
- “Tricks of the Trade”
- MCR1 Receiver (Type 36/1)
- Book Reviews: British Army Communications in the Second World War by Simon Godfrey in the Birmingham War Studies series
- Book Reviews: The Secret Listeners by Sinclair McKay
- Book Reviews: Shortwave Receivers Past & Present by Fred Osterman

ISSUE 37: November 2015

- Saved from the skip: a wartime RCA AR88 receiver rescued
- The Bomber Command Signals Security Set
- Distributed amplifiers
- The Schaub Lorenz Music Centre 5001 model

- A simple antenna changeover and keying system
- BC-611 inverter
- Cold War 'Y' Station, Berlin, Teufelsberg, 1969–72
- Improving Clansman VCR321 performance on AM
- Tricks of the Trade
- A vintage medium-wave regenerative receiver
- Some thoughts on the magnetic loop antenna
- An experimental remote ATU. Part 2

ISSUE 38: February 2016

- MAFTX-350A: a 3.5–50 MHz AM/CW transmitter
- Three slide rules for wireless (spark-gap) telegraphy
- Calibrating the BC221
- WS19 Mk111 H 028: a personal experience
- Standard Beam Approach receiver
- The 1936 Eddystone All World Two receiver
- "Tricks of the Trade"
- Conventional high-voltage power supplies
- Signal frequency filter for 3615 kHz
- A synchronous demodulator for AM

ISSUE 39: May 2016

- Restoration of a KW Vanguard
- Now, that's what you call a boatanchor!
- Follow-up to the 3615 kHz signal frequency filter
- The Volna-K receiver
- A green computer
- "Tricks of the Trade"
- T1154 power supplies and related issues
- A.F. Bulgin & Co., Ltd.
- Shaving off a few cents
- Another slide rule for wireless
- Corrigenda: the 1936 Eddystone All World Two Receiver

ISSUE 40: August 2016

- Crystal-Control for amateur transmitters
- "Tricks of the Trade"
- Shaving off even more Cents
- The CNC mill
- A solid-state 3615 kHz AM "tower"
- The Electrician Practical Wireless Slide Rule
- Atomic-referenced frequency calibrator
- The German HF community and amateur radio scene

ISSUE 41: November 2016

- Amateur radio training in the 1960's
- Quartz crystals and oscillators
- Downward modulation in beam tetrode amplifiers
- A home-constructed mobile transmitter from the 1950's
- The WEEE Directive and disposal of old electronic equipment
- AIRMEC Type 871 signal generator
- "Tricks of the Trade"
- Labgear wideband coupler rebuild
- A 'panadaptor' for the B40

ISSUE 42: February 2017

- Dornier Do.17Z 5K + AR Bord Funk Gerät
- A simple Q-multiplier
- Radio Link Sound Ranging MkII
- "Tricks of the Trade"
- Testing power transformers
- MTR1 MkII transmitter-receiver
- Ground conductivity at Arnhem

ISSUE 43: May 2017

- MAFRX-35A: an all-valve 3.5 MHz receiver
- Solder
- Heater-cathode insulation and cathode-keyed PAs
- Wireless Set X20—the other 'beam' radio set
- "Tricks of the Trade"
- RACAL TRA967 VHF FM transceiver
- A compact PSU for a valved receiver
- The T1154 on the 5 MHz band—keeping the faith
- The GW3OQK balanced 'S-Match' tuner
- Book Review: The Real Dad's Army

ISSUE 44: August 2017

- 15th Motor Gun-Boat Flotilla, Coastal Forces
- Capacitors for transmitters
- A straightforward near-replica of a WS19 PSU
- "Tricks of the Trade"
- "Wireless" by Rudyard Kipling
- ARB receiver (CRV-46151)
- Tales of a National Service Signaller—Tent 46
- A semi-automatic Morse keyer
- Letters to the Editor

ISSUE 45: November 2017

- Mason A-3B Technical Surveillance Counter-Measures Receiver
- Grid bias for a PA stage
- Lewis Golden: Obituary
- The Racal MA4202 voice encoder
- Lampemètre Anlayeur MB
- "Tricks of the Trade"
- The μ -tracer: a versatile valve curve-tracer
- A QRO VFO-controlled transmitter for 80 m. Part 1
- Errata: Signal Issue 44, pages 13–17 and 29–35
- How to repair handles

ISSUE 46: February 2018

- The Wireless Operator
- Radio Link, Sound Ranging MKII: follow up
- The History of 648 kHz in the UK
- Rotary power supplies Type 32 and Type 34
- "Tricks of the Trade"
- Mains PSU and amplifiers for a T1154/R1155
- Standard connectors
- A compact mains PSU for the GRC-9

ISSUE 47: May 2018

- The original Paraset
- British Type A Mk.II/H 15a World War II spyset replica
- Sherlock Holmes investigates a PRC319 mission failure
- Antenna couplers/ATUs/transmatches
- "Tricks of the Trade"
- TCS transmitters and a 50 ohm load : a simple solution
- A compact mains PSU for the GRC-9

ISSUE 48: August 2018

- Battle of Britain Radio: the TR9
- The UF-1 VHF transceiver
- How accurate is your DFM?
- The ATB transmitter (type CRV-52233)
- Across the Channel on AM with 600 mW
- "Tricks of the Trade"
- How to refit a scrap PRC319 for QRP
- A TCS receiver repair

- Reviving ‘dead’ metal-can crystals
- Book Review: Arnhem - The Battle for the Bridges 1944

ISSUE 49: November 2018

- Follow-up to Arnhem: The Battle for the Bridges 1944
- Converting the Burndept BE527 AM transmitter from VHF to HF
- “Tricks of the Trade”
- The Command set
- Marconi Flexible Receiver
- 400 Hz inverters for air-borne radios. Part 1

ISSUE 50: February 2019

- Whaddon Mk V SIS ‘Spy Set’ replica
- A T1154 restored
- A small multi-band receiving loop and amplifier
- Dual diversity adaptor type RX3A as a crystal tester
- The WS48 on 3615 kHz
- “Tricks of the Trade”
- The RAF microphone
- The R1155 homebrew PSU & amplifier
- Step-start without a discreet timer
- Book Review: The History of the Rugby Radio Station

ISSUE 51: May 2019

- The Wadley masterpieces
- How to lace cable harnesses
- Sun, rain and radio: a personal reflection
- A 60-metre Codar clone
- Southwold’s secret Y-Station. Part 1
- Some dynamic microphones and their signatures
- Increased microphone gain for the WS19
- “Tricks of the Trade”
- Valve specifications and the cathode-keyed PA revisited
- An 80-metre CO/PA transmitter

ISSUE 52: August 2019

- VMARS’ contribution to the D-Day 75th Anniversary
- Vintage satellites
- “Tricks of the Trade”
- Bendix RA-1B ‘super RX’
- The AN/ARC-60 (ARC Type-12)
- Southwold’s secret Y-Station. Part 2: Y-Service Overview
- Athlone calling
- Advance signal generator Model Q1

ISSUE 53: November 2019

- RN equipment nomenclature
- Mr Pepin of Marlborough
- The PYE 619 transmitter/receiver
- R1155N rebuild
- A 618T tidy up
- Southwold’s secret Y-Station. Part 3: East Coast Y-Stations
- The G3IKR Elizabethan transmitter
- “Tricks of the Trade”
- Ajax Leader

ISSUE 54: February 2020

- Southwold’s secret Y-Station. Part 4
- A portable field radio
- Tubes, transistors and takeovers
- An AM-level meter

- Clansman in the Falklands
- “Tricks of the Trade”
- SAMOS receiver Fu MB 4
- An iso-frequency converter for the BC669 transceiver
- Repairing Bowden cables

ISSUE 55: May 2020

- The humble transmission line: its properties and practical applications
- Denco coils for valve receivers
- My father Harold Chadwick G8ON
- A simple valve analyser for measuring mutual conductance
- A field study of the ‘Hallmark’ speech security device
- Radio transmitter T1223A
- The M0DAF ‘Corona’ 80-metre AM receiver
- Southwold’s secret ‘Y’-Station. Part 5: Watch hut interiors and equipment
- Tricks of the Trade
- Handy propagation monitor accessory
- The input capacitance of valve amplifiers
- The Enigma machine. A history and my story

ISSUE 56: August 2020

- LSB for the Clansman – digitally
- Cathode modulation of AM transmitters
- A novel AM transmitter using an ECL80-series valve
- Making replacement scales for moving-coil meters
- Spy messages 1950 to the present
- 4-400A linear amplifier
- The 394, 394A, 394F and 394G receiver family
- Southwold’s secret ‘Y’-Station. Part 6: References and Appendices
- Project Raven
- Tricks of the Trade
- ‘EF50’ one-valve AM transceiver for Top Band
- The Bendix RA-1B aircraft radio receiver
- The R.1224 receiver
- The G3VTD one-valve AM transmitter
- Spectre: spectral inversion for USB-only radios

ISSUE 57: November 2020

- SOE S-phone Ship
- A bit of nostalgia
- The G4EJM one-valver
- Build a rack-mount chassis
- A screen-modulated one-valve AM transmitter
- Tricks of the Trade
- Cathode modulator with current-controlled feedback
- RAF SYKO machine
- Developments in communications during the Great War
- Japanese surrender at Rabaul
- Rhode & Schwarz ESEF military VHF FM receiver
- Aumann coil winder
- Input circuits for the passive-grid amplifier
- Building an 80-metre bandspread coil for the HRO
- Wideband interference monitor
- WS52 (Canadian): Overcoming construction issues with a replica PSU

ISSUE 58: February 2021

- Internal Fire – Museum of Power
- Synchronous AM detector for improved shortwave reception

- The lucky accident, The BSA Net and West Africa
- A receive-converter for 10 metres
- Earth Induction Telegraphy
- The G6TVJ ‘one-valver’
- A case for a WS48
- Etching quartz crystals
- Tricks of the Trade
- A home-constructed DF loop for the R1155
- Screws, nuts and screw threads
- The development of medium-powered mobile HF equipment for the Army
- Restoration of a Wireless Set 48
- The sinking of the Flying Enterprise: an amateur radio adventure
- The G3RZP ‘one-valver’
- The rocking armature – an investigation

ISSUE 59: May 2021

- Swiss LF-HF receiver E44
- Restoration of a Power Supply Unit No. 5
- Re-stuffing ‘bathtub’ capacitors
- Troubleshooting Spectre
- A tale of two amateur radio pioneers
- The Royal Navy’s Type 5/6 Portable Set of 1914
- The smart bypass diode – a useful device with potential
- The reflex klystron
- Tricks of the Trade
- j-Demystified: why does $j=\sqrt{-1}$?
- Memories come in “three’s”
- An analysis of stripline directional couplers
- A gallery of Spectres
- The A.E.W.1 amenities receiver
- New life for an old valve-based receiver
- A 40-watt modulator with cathode-coupled driver
- Why was surplus WWII radio equipment dumped?

ISSUE 60: August 2021

- Daystrom Limited
- An original war-time Paraset and a forensic investigation
- Criggion Radio Station
- Inside Criggion
- Criggion Radio Station (odds and ends)
- Maxwell’s equations and their implications for amateur radio
- A state-of-the-art speech processor
- Tricks of the Trade
- An experimental HV PSU
- Wireless Set No. 62 transceiver
- The cathode follower
- The BC-357-B marker beacon receiver
- Solid-state rear-end for hybrid receivers

ISSUE 61: November 2021

- One hundred years of short waves across the Pond
- Simple mechanical repairs to valves
- Adding a digital frequency meter to a valve-based receiver
- The missed opportunities
- Cigarette-card TRF
- Echolink and military radio
- Wavemeter Class C
- The M1PVC TRF Receiver
- A very straight receiver
- The origin of jXL , jXc and inductance L in electrical

circuits

- An inverter PSU for the WS19
- Tricks of the Trade
- The G4OJY TRF receiver ‘challenge’
- A novel approach to IF ‘Q-multiplication’.
- The Optimod-AM 9100.
- A companion receiver to the G3RZP one-valver
- A trawler-band TRF receiver

ISSUE 62: February 2022

- Making replica control knobs (and other items)
- A remote-control high-power L-network AMU
- A T1154/R1155 power supply unit
- 80 Years of BBC and VoA HF transmission audio
- Using current sensors
- The CSF Type RS550 Stabilidyne receiver
- A tale of two triodes
- Transmission lines, antennas and the Smith Chart. Part 1
- AGC, detection and distortion
- Wavemeter Class C (Aust)
- Tricks of the Trade
- A Labgear LG50 transmitter rescued
- Corrigenda: “The Wadley masterpieces”
- Letter to the Editor Re: “The missed opportunities”

ISSUE 63: May 2022

- Alan Morriss G4GEN SK
- In defence of Bill and Bob
- The Wullenweber antenna
- Red Army GRU Colonel Ursula Maria Kuczynski
- The Comet 70 years on
- A modular CW/AM transmitter for the 80-metre band T-195/GRC-19 transmitter
- Valve characteristics
- Tricks of the Trade
- Low-voltage power supply and high-current dummy load
- Loudspeaker output for the R1155
- Transmission lines, antennas and the Smith Chart. Part 2
- A blank Smith Chart
- A new feeder for a 102-foot doublet on 80 m

ISSUE 64: August 2022

- A four-square phased vertical array for the 80-metre band
- The BAARE (British Arctic Air Routes Expedition)
- EMF and all that!
- The Harmonikker: effective and economical harmonic attenuator
- Agent Sonya’s wireless: fact, fiction, fantasy and fable
- Wireless through water at Fastnet Rock – 1895
- Mixers or Frequency Changers HM W/T Station, Mount Pearl, St. Johns, Newfoundland 1919-1929
- HM W/T Station, Mount Pearl, St John’s, Newfoundland 1919–1929: Investigation into equipment used
- Made in GDR: R5, the portable EKB HF receiver in its Czech variant
- Realistic DX160 receiver
- Tricks of the Trade
- Book Review: Charles Exton. *The Secret War Factory*

ISSUE 65: November 2022

- A high-power 813 AM transmitter based on the WS53
- An effective RF speech clipper
- New modulator circuit utilises 807s in Class-B with zero

- bias 807s in zero bias Class-B
- Tricks of the Trade
- Build a sliding-plate capacitor
- Resonant lines and matching applications. Part I
- Neutralisation
- The TRA3755 Racal HF transceiver

ISSUE 66: February 2023

- A positive-peak amplitude Modulator
- Reserve Telegraphist for HM Navy
- The trouble with QRM
- A quad-loop antenna for top band
- A balanced ATU with a “Mickey Match”
- Real ground and its effects on low horizontal HF antennas
- Crystal control for the ZC1
- Tricks of the Trade
- My small contribution to Hitlers downfall
- Borders radio pioneers and WWII
- Wireless Set Number 108 Mark I
- Practical solutions
- Resonant lines and matching applications. Part 2
- An AM transmitter for ten
- PRC319 operating peculiarities
- Letter to the Editor

ISSUE 67: May 2023

- The Labgear LG300 revisted
- Illuminating the Eddystone EC958
- Dragging a Geloso G209 amateur bands receiver into the 21st Century
- Conversion of the Clansman hand cranked generator to lithium ion charging
- Restoring transformers. Part 1. Principles.
- Double L-match unit for open-wire or ladder-line feeders
- Tricks of the Trade
- Build a 40dB RF line sampler MCR21: a volunteer’s account
- MCR1 spy set (Huntley & Palmers best!)
- R-392 receiver
- Historical note on H2S
- Addendum to “A positive peak AM modulator”

ISSUE 68: August 2023

- Restoring transformers. Part 2. Solutions
- Fundamentals of H2S
- Open Monument day, The Netherlands
- Morse code and Me
- Tricks of the Trade
- The case of three Orange pips
- Wireless Set No.48
- A return to the bread-board

ISSUE 69: November 2023

- Why do we do it
- Refurbishing the Racal RA17L N3991
- Synchrodyne receiver research
- A PLL synchronous AM demodulator for an IF of 100kHz
- A Mk II SIS “Spy Set replica
- The H2S aerial problem
- Cheshire battery charger (15v VDC, 300W)
- High speed Morse
- Restoring an ASV Mk II IND6 display indicator

- How to apply wrinkle paint
- Tricks of the Trade
- An acoustic audio filter for reception of Morse

ISSUE 70: February 2024

- Mk III “spy set”
- RCAF ATR5 transmitter-receiver
- An SSB transmitter for 40, 20 and 15 metres
- “Winter”
- Matching the Command Set to 50 ohms
- Behind the MASC. Part 1
- Reverse engineering an Army Larkspur-era BID150 DM box
- HMAS Diamantina
- Tricks of the Trade
- The PCR2 receiver
- Lithium-ion battery charging safety shutdown
- A portable loop antenna kit for 80m (and other bands)
- Inexpensive inverter power supply modules investigated
- Wireless Set number 11

Issue 71: May 2024

- Tricks of the Trade - High power HF baluns
- The KW Vespa transmitter
- Care and feeding of valve boat-anchors
- Why the variable-mu valve
- The D104 sound without a D104
- Whaddon Mk.VI SIS ‘spy set’
- Aerovox model 75
- MCR21 update
- An alternative to the Smith Chart and stub matching
- The new H2Ss. Part 1 . H2S Mark IV
- A-61-A Phantom Antenna

ISSUE 72: August 2024

- Panda Radio and a Panda PR-120-V transmitter refurbishment
- A novel solid-state HT stabiliser
- The Whaddon Mk.VII SIS ‘spy set’
- Whaddon Mk.VI SIS ‘spy set’: and update
- Behind the MASC. Part 2
- PRC-77 backpack radio
- Volksempfänger VE301: A preview
- Foreword to “*Questions of Development to Research*”
- Questions of Development to Research
- Transitron, Dynatron and Crystodon oscillators
- Tricks of the Trade
- The failed state of electronics
- The new H2Ss. Part 2. H2S Mk VI

ISSUE 73: November 2024

- The Volksempfänger or People’s Receiver
- The HE-40 and the Dynatron
- The Loftin-White audio amplifier
- The RF earth
- Tricks of the Trade
- The remote-control system of a German WWII aircraft
- The Spez. 455 b BS receiver
- An RF speech clipper using valves
- The Whaddon Mk.XV SIS ‘spy set’

ISSUE 74: February 2025

- The curious case of the failed Labgear LG300 transmitter

- SIS Mk.XXI ‘Spy Set’
- Radio compass experiences
- 1965: Communication round the World
- The Duxford Radio H2S Simulator
- The Rothman modulation system
- Negative-feedback modulation
- The care and feeding of doublet antennas
- Tricks of the Trade
- Renew or redraw meter scales
- An 80 and 110-volt 1600/400 Hz PSU
- Band-pass filter design. Part 1. From first principles
- Memories of an apprentice at Erie Electronics
- Radio Signals intelligence and its role in WWII

ISSUE 75: May 2025

- A solid-state vibrator replacement
- Band-pass filter design using the “q and k” method
- Band-pass filter design using Norton’s Transform
- SOE Type ‘A’ Mk.1 “spy set”
- Marconi and Douglas
- A wave-winder in Meccano
- Trimmer repair
- An external signal-level meter for valve-based receivers
- The Úvarp Føroya MF transmitter site – Tórshavn
- Admiral “Bubbles” Sir William James
- Tricks of the Trade
- Candles from Brazil
- British Army Larkspur radio ‘A’ harness for use with tanks/AFVs
- LM-13 heterodyne frequency meter
- Book Review: Candles from Brazil

ISSUE 76: August 2025

- Bandpass filter design: Improving the HF-side response
- Bandpass filter design: Bartletts Bisection Theorem
- Bandpass filter design: Losses in inductors
- SOE Type ‘B’ Mk.I spyset
- Fighting back against RF noise and interference
- A new shack
- Schonland’s other legacy
- Matching 50 ohms with the T1154
- Collins 618T3 restoration
- The NZ Marconi DFG24/2 WWII direction finder. Part 1
- Tricks of the Trade

ISSUE 77: November 2025

- Bandpass filter design: Impedance matching
- Bandpass filter design: Compensating for inductor losses
- Bandpass filter design: Filter measurements
- Royal Navy wireless stations in the UK 1904–1913
- The bandolier loop: an antenna for special applications
- Direct digital synthesis for crystal replacement
- Rudolf Formis: Germany’s first licenced radio amateur
- Polish BP-5 “spyset”
- The Quiet Centenary
- The NZ Marconi DFG24/2 WWII direction finder. Part 2
- The Clansman PRC320: Later versions of the Unit 5 power supply
- Tricks of the Trade
- British Army Larkspur era C41/R222 Radio Relay. Part 1