

Introduction. Data comms. Fundamentals - Audio Shift Keying
 Apr-00 High speed data on microwaves. ALE, Slow data on LF. Fundamentals - FSK
 Jun-00 Transceiver control. Fundamentals - FSK continued, the Shannon limit.
 Aug-00 Bandplans and frequencies. Datamode contesting. DSP on Amsat Phase 3D. Fundamentals - error detection
 Oct-00 Latest trends in datacomms. Audio connection problems. Fundamentals - error correction
 Dec-00 High Speed packet. Ultra simple datacomms experiments. Fundamentals - error detection and correction
 Feb-01 The VE2IQ 'Coherent' BPSK mode
 Apr-01 Microwaves and EME data comms ideas. Spectrum analysis software. Fundamentals - BPSK
 Jun-01 BARTG, Wolf BPSK at LF. HF Email. Fundamentals - BPSK demodulation
 Aug-01 Replacement for the 56002EVM. The T7F UHF data transceiver. Fundamentals - clock recovery
 Oct-01 'Listening in', T7F update. BARTG update. Multiple Data Modes compared. Windows rogramming
 Dec-01 Microwave data link update. Fundamentals - waveform shaping and bandwidth control.
 Feb-02 WSJT Package. DAT20 HF Data Transceiver. Fundamentals - signals in noise.
 Apr-02 Wireless LANs and amateur radio. LF Data comms update. JASON.
 Jun-02 Band planning for datacomms. Packet radio in the south. The DSTAR system
 Aug-02 Packet Radio. Digital voice at Dayton
 Oct-02 The 5MHz experiment. Data on topband. Fundamentals - designing a data mode from scratch
 Dec-02 Flexnet packet radio software. MIL-STD 110A Keep your Older Computers
 Feb-03 HF Band planning. More on topband data. Automatic PC time setting. Fundamentals - continued
 Apr-03 Tx watchdog timer. Fundamentals - MS mode continued
 Jun-03 Multiple soundcards. Multiple serial ports. Reverse beacon with digitisation
 Aug-03 G3RUH's Forward Error Correction note.
 Oct-03 PSK Reporting. GPS locked signalling
 Dec-03 PC Interference. Clock recovery basics.
 Feb-04 Five year anniversary - Data Column Feedback
 Apr-04 BARTG. MixW USB transceiver interface. Digital selective calling. Digital voice
 Jun-04 Windows XP. MultiPSK. Modern modem chips
 Aug-04 RTTY Beacon keyer. RTTY software. More on PC operating systems
 Oct-04 ON4KST / microwave chat. WLANs in contests
 Dec-04 Some corrections. Globalnet. Rejuvenating the packet network
 Feb-05 LF data modes update. Datamodes and DxPeditions. PIC programming
 Apr-05 Fourpak packet update. WSJT update - JT modes. PICs and WSJT coding.
 Jun-05 WSJT - the JT65 mode. PC command prompt and redirection
 Aug-05 New Wolf GUI. The Numerically Controlled oscillator
 Oct-05 Software Defined Radio basics. Doing it in a PIC
 Dec-05 Katrina and ALE. Chip64. Olivia multi FSK waveform
 Feb-06 MM wave exchanger. Signal averaging. Timing issues
 Apr-06 Soundcard Programming and DSP
 Jun-06 Soundcard Calibration. Pseudo Noise / PR sequences
 Aug-06 Remote Control
 Oct-06 USB Serial Port replacement, 2.4GHz Digital Voice, ALE On The Air Week
 Dec-06 Two Modern Datamodes - OFDM and MSK
 Feb-07 Interfacing a PC Keyboard, BBC Basic for Windows, PSK31 generation in a PIC/DDS
 Apr-07 Bluetooth Remote Control, IP Over Avian Carrier, IQ Waveform generation, Signal Decoding challenge
 Jun-07 QPSK Modulation and Coding - decoding challenge solution.
 Aug-07 Two or more soundcards. Virtual Audio Cable. PIC Bootstamp
 Oct-07 500kHz Data Experiments, Audio Tones without a PC, Simple FSK Demod, Soundcard Sampling Rates
 Dec-07 G3PLX Digital Voice Experiments, DFCWI, Soundcard Interfacing,
 Feb-08 USB Host Module, Datamode Performance Summary, SDR Transmit Software
 Apr-08 Keyboard Modes for LF, Audio Triggered Switch, Detecting Signals in Noise Part 1
 Jun-08 Detecting Signals in Noise Part 2, WSPR and JT65, Speech Coding Module
 Aug-08 Detecting Signals in Noise Part 3, WSPR QSO Mode, Illinois Digital Ham Group
 Oct-08 Datamode Software, Clicklock Phase Coherent reception, Problems with Digital Voice, Reader Feedback
 Dec-08 PSK Rumble Contest, BPSK and the Costas Loop, Mono Input and Audio Dongles
 Feb-09 Global ALE Marks a Record, SDR 'Back End' WSPR Updated
 Apr-09 Audio Phase Shifter, FLDIGI Software, WSPR Reporting database
 Jun-09 Choose the right Modulation. Forward Error Correction,
 Aug-09 Path Simulation, FEC Hamming and BCH codes
 Oct-09 Convolutional Coding
 Dec-09 Soundcard sampling rates, timing and calibration
 Feb-10 More on Block error correction, Feedback, New MultiPSK version
 Apr-10 ARPS Net, Novel DSP Transmitter architecture, some DSP maths
 Jun-10 ROS, Wideband data & Social issues, DDS Polar generation, COM port keying
 Aug-10 Shannon and communications fundamentals
 Oct-10 Feedback, Direct RTTY generation, NUEPSK Terminal
 Dec-10 More on the NUE Terminal, RTTY keyboard adapter, New modes and software
 Feb-11 ROS with I/Q out, Soundcard Tx/Rx Difference, SDR Transmitter, USB Codec
 Apr-11 Datamode Identification, Robust packet
 Jun-11 Data on Beacons, Whats new in the Digital World
 Aug-11 Data Comms vs. Internet radio, 30m band utilisation chart
 Oct-11 Pitfalls of Cheap USB adapters, another ROS update
 Dec-11 Spread Spectrum
 Feb-12 Combined with Design otes - Direct Frequency Converters
 Apr-12 OPERA, PSK2k, Topband Data Group
 Jun-12 Opera Innards, S/N vs Bit Error rate
 Aug-12 JT65C on GB3SCF, How Many bits in a QSO
 Oct-12 Raspberry Pi, JT65A on HF
 Nov-12 WSJT Update, Reader Experiences
 Dec-12 More Reader experiences, Dial Frequency and Beacon tones
 Feb-13 ISCAT Details
 Apr-13 475kHz data, JT8 & WSPR-X, Windows Audio Mixer
 Jun-13 Choose the correct Data Mode for the conditions, P14 Beacon datamode.
 Aug-13 SDR Dongles and Multiple Soundcards
 Oct-13 Wireless Lansd and Am Radio, UHF Links and Balloons
 Dec-13 Reader Feedback, Aircraft Scatter
 Feb-14 Datamodes using Aircraft Scatter, using Reverse SDRs
 Apr-14 New Opera Version, Intro to WSO
 Jun-14 Putty Serial interface software, Machine Generated Modes, Hamnet
 Aug-14 Opera Beacons, use of Spread Spectrum
 Oct-14 More on Spread Spectrum, Gold Codes
 Dec-14 Data on the Microwave bands, Fake USB RS232 chips
 Feb-15 Intelligent COM Port PTT, Opera update, Spread Spectrum on 146MHz
 Apr-15 Correlation and Convolution
 Jun-15 More on Correlation, Deep Search and callsign compression
 Aug-15 The P14 Beacon Mode, Opera and issues with some small personal beacons
 Oct-15 Using WSJT for customised data transmission
 Dec-15 GMSK Data Link, CMX589 GMSK Chip
 Feb-16 EbNaut at LF.
 Apr-16 WSJT-X, Wolf Revisited
 Jun-16 The Quadrature DDS and programming Negative Frequencies
 Aug-16 Broadband Hamnet
 Oct-16 QRA64 details, XR2211 Modem Chip
 Dec-16 Digimodes in perspective, Error Correction, Reed Solomon
 Feb-17 MSK144
 Apr-17 Evolution of Datamodes, DL0SHF Beacon, WSPR Club Demo
 Jun-17 Morse is not data! Millimetre band datamodes
 Aug-17 Russian RDRc data contests, JT9 Fast Modes