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Technical Data, Minimum Component - Ultra-Simple IC Oscillator (Math WA2NDM),	CQ 1995,	Mar pg 104
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Technical Data, More Amplifiers and a Brief Primer on dBm,(Math WA2NDM),	CQ 1999,	Jan pg.57
Technical Data, More Notes on Radiating RF Signals, Ingram (K4TWJ),	CQ 2004,	Jul., p. 64
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Technical Data, New 3.3 Volt Power Supply Standard (Math WA2NDM),	CQ 1995,	Sept pg 82
Technical Data, New AMTOR Mode! (Henry K9GWT),	CQ 1989,	Nov pg 36
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Technical Data, New Product Potpourri, (Math WA2NDM),	CQ 2001,	Sept. pg. 43
Technical Data, New Software "Circuit Design" Program (Math WA2NDM),	CQ 1995,	Apr pg 44
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Technical Data, Notes On Prevention & Cure of Stray RF In The Amateur Station (Schultz W4FA),	CQ 1981,	Mar pg 44
Technical Data, Novel VHF Power Amplifier (Orr W6SAI),	CQ 1994,	Jul pg 84
Technical Data, On Forbush Decreases and 160-Meter Propagation, Brown (NM7M),	CQ 2010,	Jun, p. 20
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Technical Data, Operational Amplifiers Revisited, Math (WA2NDM),	CQ 2002,	Sep pg. 44
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Technical Data, Pi-Network (Fuller W4EDM),	CQ 1980,	Jul pg 40
Technical Data, Polarization Modulation (Smith),	CQ 1982,	Apr pg 60
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Technical Data, Power Line Noise, Its Causes and Cures, Ingram (KA4TWJ),	CQ 2003,	Jan., p.. 80
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Technical Data, Power Supply "Crowbar" Protection Circuit (Math WA2NDM),	CQ 1994,	Jun pg 110
Technical Data, Practical Ideas On SSB Modulation Monitoring - Part I (Schultz W4FA),	CQ 1982,	Oct pg 36
Technical Data, Practical Ideas On SSB Modulation Monitoring - Part II (Schultz W4FA),	CQ 1982,	Dec pg 26
Technical Data, Predicting Ducting-Assisted Propagation on 160 Meters, Brown (NM7M),	CQ 2009,	Jan, p. 46
Technical Data, Primer on Digital Signal Interfaces, (Math WA2NDM),	CQ 1998,	Mar. pg. 46
Technical Data, Primer On Liquid Crystal Displays (LCD's) (Martin),	CQ 1983,	Apr pg 15
Technical Data, Primer on Optical Communications - Part I (Math WA2NDM),	CQ 1997,	Jan pg 54
Technical Data, Primer on Optical Communications - Part II (Math WA2NDM),	CQ 1997,	Jan pg 44
Technical Data, Primer on Optical Communications - Part III (Math WA2NDM),	CQ 1997,	Mar pg 102
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Technical Data, Primer on Optical Communications - Part V (Math WA2NDM),	CQ 1997,	May pg 38
Technical Data, Quest For Beautiful Sounding Audio & 3-5000Z Notes (Ingram K4TWJ),	CQ 1991,	Nov pg 88
Technical Data, Quick and Easy RF Amplifiers, (Math, WA2NDM),	CQ 2000,	Feb pg. 72
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Technical Data, Radio Arcala, OH8X: More Than A Super Contest Station, Wood (VE1QD),	CQ 2011,	Nov., p. 13
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Technical Data, RFI - A Case History & Some Observations (Math WA2NDM),	CQ 1997,	Dec pg 38
Technical Data, RFI & EMI, Further Ideas Regarding, (Thurber W8FX),	CQ 1998,	Jan. pg. 40
Technical Data, RFI and Computers in the Shack (Lamb N7ML),	CQ 1987,	Nov pg 66
Technical Data, RFI and The Novice Some Basic Information: Part I (McCoy W1ICP),	CQ 1988,	Apr pg 38
Technical Data, RFI and The Novice Some Basic Information: Part II (Conc.) (McCoy W1ICP),	CQ 1988,	May pg 20
Technical Data, RFI Problems & Solid-State RTTY Terminals (Henry & Bartlett),	CQ 1981,	Dec pg 36
Technical Data, Role of galactic cosmic rays in 160-meter propagation, A theory on the, Brown (NM7M) and Luetzelschwab (K9LA),	CQ 2008,	Nov., p. 13
Technical Data, RS232 Interface (Math WA2NDM),	CQ 1985,	Apr pg 116
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