Dragon User articles

- [1] Graham Cunningham. "Editorial". In: *Dragon User* (May 1983), p. 3. Introduction to the first issue of Dragon User.
- [2] "Letters". In: *Dragon User* (May 1983), p. 5.

 Advice on buying a cassette recorder and on saving programs (don't blame it all on the Dragon).
- [3] "News". In: *Dragon User* (May 1983), pp. 7–9.

 The Dragon is to get more memory and two new companions one to battle with the BBC B, the other with the IBM PC. W H Smiths won't stock Dragons; new Dragon Data factory in Port Talbot; Dragon Data's expansion plans; Trojan light pen; Assemblers from Dragon Data, Compusense and J Morrison (Micros); Dragon 32 to be launched in the US; Decode from Compusense for Tandy tapes; New titles from Salamander Software; Tandy denies claims they are planning legal action.
- [4] Dave Windle. "Two-man band in full flow". In: *Dragon User* (May 1983), p. 11.

 Dave Windle gives a personal account of the pleasures and problems of setting up a users' group (Dragon Independent Owners Association).
- [5] John Scriven. "Software round-up". In: Dragon User (May 1983), pp. 12–14, 16.

 Fighting Samurai and spaceships, manipulating databases and synthesising speech John Scriven finds software that will push the Dragon to its limits once arcade games have lost their thrill. Software reviews: Golf, Games Compendium (Salamander Software); Forbidden City (Apex Trading); Personal Banking System (Hilton Computer Services); Samurai Warrior (MC Lothlorien); Games Pack II (Gem Software); Cassette II (Video Productions); Planet Invasion, Alcatraz II, Ultimate Adventure, Donkey King (Microdeal); Meteoroids, Cosmic Invaders, Starship Chameleon, Cave Hunter, Berserk, Ghost Attack, Special Selection 1 [Dragon Selection 1], Graphics Animator, Personal Finance, Special Selection 2 [Dragon Selection 2], Computavoice, Quest, Madness and the Minotaur (Dragon Data).
- [6] Boris Allan. "And in the red corner, we have the Dragon". In: *Dragon User* (May 1983), pp. 18–21. For some people there is always that nagging doubt. Did I buy the right machine? Or, as is more often the case, was I given the right machine? Boris Allan reviews popular home computers.
- [7] Graham Taylor. "Microdeal fills the software gap". In: *Dragon User* (May 1983), p. 23. Software Editor, Graham Taylor, talks to John Syme of Microdeal, one of the first firms to develop a full range for the Dragon 32.
- [8] David Windle. "Landing on the lunar hover pad". In: *Dragon User* (May 1983), pp. 26–27, 29. David Windle introduces a new game for the Dragon 32 which uses the high level graphics commands to draw the lunar landscape. BASIC type-in game, "Moonbase Alpha".
- [9] David Lawrence. "Getting the most out of graphics". In: *Dragon User* (May 1983), pp. 30–31, 33. David Lawrence introduces two of the most underused commands in Dragon Basic, GET and PUT, and shows how the manual got it wrong.
- [10] David Lawrence. "Getting to grips with handling file procedures". In: Dragon User (May 1983), pp. 34–35.
 David Lawrence introduces some advantages and pitfalls of learning to use the Dragon's data files.
- [11] Keith Brain. "Dragon's printing pleasures". In: *Dragon User* (May 1983), pp. 36–37. Making the most of your Dragon printer from using the control codes to making a high resolution copy of the screen [Seikosha GP-100A].
- [12] D. Owen. "Hex". In: *Dragon User* (May 1983), pp. 39–41.BASIC type-in game.
- [13] M. Twigger. "Basis of a text editor". In: *Dragon User* (May 1983), p. 41. BASIC type-in snippet showing tape file reading.
- [14] Brian Watson. "Pacman". In: *Dragon User* (May 1983), pp. 43, 45. BASIC type-in game.
- [15] Clive Roberts. "Character generator". In: *Dragon User* (May 1983), p. 45. BASIC type-in utility.
- [16] W. Slater. "Drawing". In: *Dragon User* (May 1983), p. 45. Short BASIC type-in graphical demo.

- [17] J. Trill. "Dragonet". In: *Dragon User* (May 1983), p. 46. BASIC type-in graphical demo.
- [18] Carl Davies. "Noughts and crosses". In: *Dragon User* (May 1983), p. 47. BASIC type-in game.
- [19] Cathy Hyde. "Dragon Answers". In: *Dragon User* (May 1983), p. 49.

 Increasing speed, muddled joysticks, using restore, finding out about SAM your questions answered.
- [20] "Win a printer". In: *Dragon User* (May 1983), p. 50.

 Competition: How many terms need to be added for the total to exceed each integer up to 10?
- [21] "Letters". In: *Dragon User* (June 1983), p. 5.
 Copyright, printer and loading advice plus a new chart of the Top 10 Dragon packages.
- [22] "News". In: Dragon User (June 1983), pp. 7–9.

 All the latest developments including a report from the Midland Computer Fair. Tape copying and inlays from Direct Media Facilities; Dragon 32 to 64 upgrade from Dragon Data; Sound Extension Module from JCB Microsystems; Micronet 800 interfaces; Disk drives from Dragon Data, Microprocessor Engineering (MEL) and Premier Microsystems; Cotswold Computers Modem; Donkey King withdrawn; Peaksoft's Champions predicts Burton Albion win; Club news.
- [23] John Scriven. "Alien go home". In: *Dragon User* (June 1983), pp. 12–14.
 Software reviews: Alien Blitz, Space Mission, Monster Mine, Sultan's Maze (Gem Software); Missile Defender (Tiger Software); Defense, Phantom Slayer (Microdeal); Arcade Action (Apex Trading); Grand Prix (Salamander Software); Gamestape 1 (B & H Software); St George and the Dragon (Computer Rentals).
- [24] Clive Gifford. "Jockeying to be first in the joystick race". In: *Dragon User* (June 1983), pp. 17, 19. If your joysticks are worn out, or were never up to much in the first place, you now have a wide selection to choose from Clive Gifford looks at the range.
- [25] Graham Cunningham. "Boots provides a firm footing for Dragon's future". In: Dragon User (June 1983), pp. 20–21.
 Graham Cunningham talks to Anton Boyes of Boots the chemist, whose move into home computers has contributed to the Dragon's success.
- [26] Andrew Black. "Your chance to program and repel the aliens". In: *Dragon User* (June 1983), pp. 22–24. Save the earth from the alien invaders with Andrew Black's Dragon version of Missile Command. BASIC type-in game.
- [27] Keith Brain and Steven Brain. "Delights of the open road". In: *Dragon User* (June 1983), pp. 27–28. As a taster to their new book, 'Dragon Games Master', Keith and Steven Brain explain how to construct a simple game which will test your skills as a player. BASIC type-in game.
- [28] Pam D'Arcy. "Let Topsy take the strain from machine coding". In: Dragon User (June 1983), pp. 31, 33, 35.
 Pam D'Arcy introduces Topsy, which promises an easier method of entering machine code. BASIC type-in.
- [29] George Saint. "Same chips, but a different cup of Coco". In: *Dragon User* (June 1983), pp. 36–37. George Saint compares Tandy's Colour Computer with the Dragon by looking inside both machines.
- [30] Tony Smith. "Duck Shoot". In: *Dragon User* (June 1983), p. 39. BASIC type-in game.
- [31] J. Hilton. "Quilt". In: *Dragon User* (June 1983), p. 40. Small BASIC type-in using SET().
- [32] Paul Yeandle. "Brainbox". In: *Dragon User* (June 1983), pp. 40, 42, 44. BASIC type-in game.
- [33] Ian Nicholson. "Machine clock". In: *Dragon User* (June 1983), pp. 44–45. Machine code type-in clock program.
- [34] Keith Hunniford. "Millipede". In: *Dragon User* (June 1983), p. 45. BASIC type-in game.

- [35] Roger Walton. "Musical Dragon". In: *Dragon User* (June 1983), p. 47. Short BASIC type-in to record and play back musical notes.
- [36] F. G. Holliman. "Sine waves". In: *Dragon User* (June 1983), p. 47. BASIC type-in to show sine wave addition.
- [37] Cathy Hyde. "Dragon Answers". In: *Dragon User* (June 1983), p. 49. Error codes, interfaces, machine coding, Dragon Club - your questions answered this month.
- [38] Gordon Lee. "Digging down to the roots". In: *Dragon User* (June 1983), p. 50. Win Premier Microsystems' Delta disk system. Competition: However, with the cards that I have dealt, I find that I end up with six counters. If the lowest card is the spade what cards are on the table?
- [39] "Letters". In: *Dragon User* (July 1983), p. 5.

 Advice on the Dragon's cassette operating system, graphics and generating characters, plus our blunders corrected.
- [40] "News". In: Dragon User (July 1983), pp. 7–9.

 All the latest hardware and software developments, including Dragon price cuts and US moves. MST Consultants disk-based business software; 32K upgrade from Microcare; still waiting for OS-9; Micro Robots from Powertran Electronics; Utilities from Compusense and Windrush Micro Systems; Griffin and George to sell educational Dragon 32s; Elkan release reference book; Adventure games from Salamander Software; Dragon Tamer from Mr Micro for self-centring joysticks.
- [41] "Dragon clan gathering". In: *Dragon User* (July 1983), p. 10.

 A croupier at an Edinburgh Casino (David Anderson) is the driving force behind the Scottish Dragon Club.
- [42] John Scriven. "Software showdown". In: *Dragon User* (July 1983), pp. 12–14.

 Our man at the tv tests his mental powers on some brain-teasing games. He's recovering now. Software reviews: Escape (Microdeal); Deadwood (A & F Software); Strategic Command (Romik Software); Golf (Computer Rentals); Flag, Rail Runner (Dragon Data); Vulcan Noughts and Crosses, Dragontrek (Salamander Software); Eduquiz I, Eduquiz II, Golf (Gem Software); Fun & Games (Shards Software); Tyrant of Athens (MC Lothlorien).
- [43] Stephen Adams. "Picking a printer". In: *Dragon User* (July 1983), pp. 17, 19, 21. Looking for a printer for your Dragon Stephen Adams gives you a helping hand by examining six of the best.
- [44] Graham Cunningham. "Dragon's giant strides". In: *Dragon User* (July 1983), pp. 22–23.

 Tony Clarke talks to Graham Cunningham about Dragon Data's future as the company prepares to attack new markets at home and abroad.
- [45] Damian Clancy. "Blitz a landing space at speed". In: *Dragon User* (July 1983), pp. 25, 27. Clear the skyscrapers until you have space to land, using Dragon Blitz from Damian Clancy. Machine code type-in game.
- [46] Philip Brooks. "Play golf". In: *Dragon User* (July 1983), pp. 29, 31, 33.

 Learn how to make the most of the Dragon's graphics commands by playing Philip Brooks' game of golf. BASIC type-in game.
- [47] Keith Brain and Steven Brain. "Finding out about Forth". In: *Dragon User* (July 1983), pp. 35, 37. Fed up with Basic try Forth, if you can cope with the stacking system. Keith and Steven Brain look at the language and the packages.
- [48] Ian Nicholson. "Getting to grips with Dragon input and output". In: Dragon User (July 1983), pp. 38–39.
 Ian Nicholson guides you through the Dragon's input/output memory among the most important on the map.
- [49] W. J. Greenall. "Lines". In: *Dragon User* (July 1983), p. 41. Two small BASIC type-in programs using the LINE command.
- [50] C. Stone. "Scoring". In: Dragon User (July 1983), pp. 41–42.BASIC type-in to draw a score to the hi-res screen.
- [51] Alison Dowey. "Space Race". In: *Dragon User* (July 1983), pp. 42–43. BASIC type-in Invaders-type game.

- [52] Paul Hill. "Brick Out". In: *Dragon User* (July 1983), pp. 43–44. BASIC type-in game.
- [53] Peter Barry. "Loading hex". In: *Dragon User* (July 1983), p. 44.
 Short BASIC type-in to enter machine-code programs. Includes an OLD program to restore accidentally NEWed BASIC.
- [54] P. Williams. "Labelling". In: *Dragon User* (July 1983), p. 47. BASIC type-in, "Leaflet", centres entered lines of text and sends them to a printer.
- [55] Nicholas Appleyard. "Reaction". In: Dragon User (July 1983), p. 47. BASIC type-in tests your reaction time.
- [56] Cathy Hyde. "Dragon Answers". In: *Dragon User* (July 1983), p. 49. Bugs, graphics, saving with hex, memory maps Cathy Hyde solves your problems.
- [57] Gordon Lee. "Put robot power on your Dragon". In: *Dragon User* (July 1983), p. 50. Solve the puzzle to win a robot. Competition: As Alan knew my address he was able to solve the problem instantly. Can you?
- [58] "Letters". In: *Dragon User* (Aug. 1983), p. 5.

 Advice on machine code loading, syntax errors, wrap-around and disabling the BREAK key plus bad news on copyright.
- [59] "News". In: *Dragon User* (Aug. 1983), pp. 7–8, 10.

 The latest developments in hardware and software, including Dragon gets Mumps, goes to the US and shows up at Earls Court. New RS232 interface and PROM programmer from PNP Communications; yachts and horses; Premier Microsystems' sprite board; Midasonic joysticks.
- [60] "Holiday haven spreads its net". In: *Dragon User* (Aug. 1983), p. 13.

 This month we head west to Wareham in Dorset, home of the Dragon 32 Users' Club.
- [61] John Scriven. "And this review be your guide". In: *Dragon User* (Aug. 1983), pp. 15–16, 18.

 John Scriven hits the adventure trail with some stops along the way for arcade games. Software reviews: Madness and the Minotaur, Quest, Calixto Island, Black Sanctum, El Diablero, Dragon Mountain, Cyrus Chess (Dragon Data); Williamsburg Adventure, Mansion Adventure, Jerusalem Adventure, Android Attack, Backgammon (Microdeal); Ring of Darkness (Wintersoft); Bonka (J Morrison); Franklin's Tomb (Salamander Software); Drone (Cable Software).
- [62] Clive Gifford. "Shining a light on your Dragon". In: *Dragon User* (Aug. 1983), pp. 20–21. Clive Gifford looks at the light pens for the Dragon. Reviews of hardware from Microdeal, Trojan Products and Accord Data.
- [63] Graham Cunningham. "Compusense flexes its Dragon skills". In: *Dragon User* (Aug. 1983), pp. 23, 25. The Opyrchal brothers fell for the 6809 Graham Cunningham talks to them about their admiration for the chip at the heart of the Dragon 32.
- [64] R. Chybalski. "Solve the riddle of the rings". In: *Dragon User* (Aug. 1983), pp. 26–27. A change of pace from blitzing and space games we invite you to solve the riddle of the rings. BASIC type-in game.
- [65] Margaret Norman. "Putting a spring into movement". In: *Dragon User* (Aug. 1983), pp. 29–30. If you've ever wanted to know how to make objects move on the screen, we tell you and then incorporate the routines into an exciting game. Includes BASIC type-in game, "Chase".
- [66] Rodney Jones. "Finding out what Dragon memory has in store". In: Dragon User (Aug. 1983), pp. 32–33, 35.
 An introduction to how the Dragon stores data in its memory read on if you want to learn about machine coding. Including BASIC type-in memory dump utility.
- [67] George Saint. "Speeding up on double the memory". In: Dragon User (Aug. 1983), p. 37.
 A look at how the Dragon's speed can be increased and by how much with a glimpse at double the memory.
- [68] A. J. Pimperton. "Converting". In: *Dragon User* (Aug. 1983), p. 39. BASIC type-in to print a decimal-hex-binary conversion table.
- [69] George Smith. "Nail and thread". In: Dragon User (Aug. 1983), p. 39. Small BASIC type-in graphical demo.

- [70] D. A. Wright. "Joy of music". In: *Dragon User* (Aug. 1983), p. 41. Small BASIC type-in to play music notes with the joystick.
- [71] D. J. Sill. "Colour mix". In: *Dragon User* (Aug. 1983), p. 41. BASIC type-in to mix colours on screen.
- [72] P. Hill. "Brain teaser". In: *Dragon User* (Aug. 1983), pp. 41–42. BASIC type-in game.
- [73] Brian Cadge. "Dice game". In: *Dragon User* (Aug. 1983), pp. 42–43, 45. BASIC type-in game.
- [74] Michael Holland. "Calendar". In: *Dragon User* (Aug. 1983), pp. 45, 47. BASIC type-in to generate monthly calendars.
- [75] Mark Attwood. "Demo". In: Dragon User (Aug. 1983), p. 47. Small BASIC type-in graphical demo.
- [76] Cathy Hyde. "Dragon Answers". In: *Dragon User* (Aug. 1983), p. 49. Cathy gets a proposal but decides to stick to answering technical questions.
- [77] Gordon Lee. "Competition Corner". In: *Dragon User* (Aug. 1983), p. 50.
 Win a colour monitor donated by Statacom and Portatel. Competition: Can you find the three bases, apart from base 10, in which this number would represent a perfect square? Of course, there may be an infinite number of them, but what are the smallest?
- [78] "Letters". In: *Dragon User* (Sept. 1983), p. 5.
 Using the USR command, more on input/output, advice on saving and loading, a graphics tip, Microline favoured and a plea for the handicapped.
- [79] "News". In: *Dragon User* (Sept. 1983), pp. 7, 9, 11.

 The range of peripherals and software for the Dragon is increasing rapidly we bring you the latest details on new products as they become available. RTTY program; Tandy converter; Atari and Melbourne house support the Dragon; the Halsel Retailer by Halsel Retail Systems; Elkan Electronics' Quickshot joystick; Datapen.
- [80] "Dragon Data offers a forum for users". In: *Dragon User* (Sept. 1983), p. 13.

 Dragon Data's own club is featured this month... or a look at the important difference between Stop Press and Scot Press.
- [81] John Scriven. "A look at the serious side of the Dragon". In: *Dragon User* (Sept. 1983), pp. 15–17. John Scriven gets down to some serious business on the Dragon looking at software for business uses, graphic design and program development he returns to the lighter side next month. Software reviews: Telewriter (Microdeal); Textstar (Personal Software Services); Editor (Microplot); Word Processor (Juniper Computing); Hi-res (Compusense); Artist's Designers (Wintersoft); Dasm/Demon (Compusense); Mace (Windrush Micro Systems).
- [82] Craig Hanna. "Dragon 64 gets set for the US". In: *Dragon User* (Sept. 1983), pp. 19, 21.

 A report from America on the launch of the Dragon 64, including an interview with senior Tano management at their New Orleans headquarters.
- [83] Simon D. Wood. "Blast aliens with Warp". In: *Dragon User* (Sept. 1983), pp. 22–23. Shoot down the aliens to win a medal by playing Simon Wood's Warp a hi-res space game. BASIC type-in.
- [84] Keith Brain and Steven Brain. "Wake up your Dragon using animation". In: Dragon User (Sept. 1983), pp. 25–27.
 Keith and Steven Brain introduce animation and just fail to win the Olympics in this extract from their latest book, "Advanced sound and graphics".
- [85] Robin Teikman. "Don't be afraid of disassembly". In: Dragon User (Sept. 1983), pp. 29, 31.
 An introduction to the advantages of disassembly complete with a comprehensive listing. BASIC type-in disassembler.
- [86] Leslie Miles. "Add a new dimension to your Dragon". In: *Dragon User* (Sept. 1983), pp. 33, 35, 37. Build an interface and link your Dragon to the world outside diagrams and all details are included.
- [87] R. Steel. "Sketching". In: Dragon User (Sept. 1983), p. 39.
 Small BASIC type-in to draw on the screen with a joystick.

- [88] Iolo ap Gwynn. "Squash". In: *Dragon User* (Sept. 1983), pp. 39–40. BASIC type-in game.
- [89] I. Saunders. "Pontoon". In: *Dragon User* (Sept. 1983), pp. 41, 43. BASIC type-in game.
- [90] David Horton. "Yahtzee". In: Dragon User (Sept. 1983), pp. 43–45. BASIC type-in game.
- [91] Cathy Hyde. "Dragon Answers". In: *Dragon User* (Sept. 1983), p. 47.

 This month Cathy offers advice on the Dragon's speed-up POKE, changing crystals and auto-running.
- [92] Gordon Lee. "Win a Supertalker on a roll of the dice!" In: *Dragon User* (Sept. 1983), p. 50. Your chance to win a speech synthesis package from DRG Business Machines and Cotswold Computers. Competition: What were the values that I had thrown with the three dice?
- [93] "News". In: Dragon User (Oct. 1983), pp. 5–6, 8.

 The latest details on new products for use with the Dragon, including educational software, speech software and the latest entry in the disk drive race. Dragon Data cash injection; Software for JCB Microsystems' Speech Synthesis Module; Cumana disk drives; Forth on disk from M and J Software; Eurosoft and Diand Software launched; Berkshire Computer Specialists catalogue Dragon suppliers; Education software from Ampalsoft and Dragon Data.
- [94] John Scriven. "Quality rises in the games market". In: Dragon User (Oct. 1983), pp. 11, 13, 15.

 Aliens, insects, vultures and a karate expert an intrepid John Scriven tackles them all to bring you this month's software review. Software reviews: Katerpillar Attack, Storm, Racer Ball, Scarfman, Dragon Invaders, Cosmic Zap, Space War, Flipper (Microdeal); Attack (Personal Software Services); Ninja Warrior (Programmer's Guild); Vultures (J Morrison); Deaths Head Hole, Lionheart (Peaksoft); Sound Extension Module (JCB Microsystems).
- [95] Brian Lloyd. "How to become a Dragon-tamer". In: *Dragon User* (Oct. 1983), pp. 19, 21. Brian Lloyd tells all about some of the useful commands available to help you tame your Dragon.
- [96] Craig Hanna. "Now meet 'Son of The King'". In: *Dragon User* (Oct. 1983), p. 23.

 An exclusive interview with a top US designer of software from our man in America, Craig Hanna. Interview with B. J. Chambless.
- [97] G. Singh. "Bust-out!" In: Dragon User (Oct. 1983), pp. 24–25.
 G. Singh challenges you to test your aim and reflexes and breach the wall. BASIC type-in game.
- [98] R. Chybalski. "Computer Connect 4 matching wits with your Dragon". In: *Dragon User* (Oct. 1983), pp. 27, 29.
 R Chybalski shows you how to build a game of strategy and challenges you to beat the Dragon at Connect 4. BASIC type-in game.
- [99] Michael Whetstone. "Hunt those bugs and kill them!" In: *Dragon User* (Oct. 1983), pp. 31, 33–34. Michael Whetstone shows you how to locate the Dragon's hidden bugs and remove them.
- [100] Dennis Riley. "Place your Dragon in charge". In: *Dragon User* (Oct. 1983), pp. 37, 39.

 Dennis Riley shows how to put a standard cassette recorder under the control of your Dragon 32.
- [101] K. Garwell. "Instr". In: *Dragon User* (Oct. 1983), p. 41. BASIC example of using INSTR() with ON GOTO.
- [102] Simon Locke. "Speed POKE". In: *Dragon User* (Oct. 1983), pp. 41, 43.

 BASIC program to search for use of the speed poke and print the appropriate lines.
- [103] Paul Yeandle. "String manipulation". In: $Dragon\ User$ (Oct. 1983), p. 43. BASIC example of using MID\$().
- [104] Alison Dowey. "Munchy". In: *Dragon User* (Oct. 1983), pp. 43, 45, 47. BASIC type-in game.
- [105] G. D. Snooks. "Keybeep". In: Dragon User (Oct. 1983), p. 47.
 Machine code type-in to add a keybeep. Elaborated upon in November 1984.
- [106] Mike Hibbett. "Learn Morse Code". In: *Dragon User* (Oct. 1983), pp. 47–48. BASIC type-in, "Morse Tutor", to practice Morse Code.

- [107] Michael Jennings. "The puzzle maker". In: *Dragon User* (Oct. 1983), pp. 48, 51. BASIC type-in wordsearch puzzle generator.
- [108] J. Whitmore. "Slow down your listing speed". In: *Dragon User* (Oct. 1983), p. 51. Short machine code type-in, "Varilist", to control LIST speed with a joystick.
- [109] "Letters". In: *Dragon User* (Oct. 1983), p. 53.

 An easier way to merge programs; putting graphics on tape; in defence of the Z80; stripes on the Dragon; ASC function.
- [110] Cathy Hyde. "Dragon Answers". In: *Dragon User* (Oct. 1983), p. 55. Cathy Hyde answers readers' queries about the Dragon.
- [111] Gordon Lee. "Link your Dragon to the outside world". In: *Dragon User* (Oct. 1983), p. 58.

 Your chance to win an RS232 interface plus modem from Cotswold Computers and CP Engineering.

 Competition: Noting that mere reversals, reflections or rotations of the same grid do not count, how many different solutions can you find?
- [112] "Letters". In: *Dragon User* (Nov. 1983), p. 4.
 Making more of your Dragon's memory; input/output; the TRACE facility; DREAM difficulties; useful memory locations; screen clearance; program correction.
- [113] "News". In: *Dragon User* (Nov. 1983), pp. 7, 8, 10.

 The latest details on new products for use with the Dragon. Dragon 64 to enter shops; Viewdata interface from Microcomputer Resources; Games for Christmas; Wyvern expansion box from Wessex Microcomputers and Compusense; Flex from Microcare; Dungeon sells software; Brian Moore heads Dragon Data; Virgin tours software around UK.
- [114] "Dragon spreads its wings wide". In: *Dragon User* (Nov. 1983), p. 13.

 A look at just how far overseas the network of Dragon users has spread.
- [115] John Scriven. "Winter brings a whole new world of games". In: *Dragon User* (Nov. 1983), pp. 15, 17–18. Software reviews: Space Shuttle (Microdeal); Maths Games, Spelling, Plant Ecology, Adventure Plus, Spider, Cribbage (Premier Microsystems); The Composer (Microdeal); Gridrunner (Salamander Software); Frogger, Golf, Morocco Grand Prix, Cuthbert Goes Walkabout (Microdeal); Dragon 1 (Dream Software); Pacdroids, Protector (Programmers' Guild).
- [116] Keith Brain and Steven Brain. "Disk drives: how they measure up". In: Dragon User (Nov. 1983), pp. 21, 23, 25.
 Keith and Steven Brain take a closer look at disk drives from Dragon Data and Cumana for your Dragon 32.
- [117] Craig Hanna. "A US showcase for the Dragon". In: *Dragon User* (Nov. 1983), p. 29. Our man in the US, Craig Hanna, previews Colour Expo '83 at which the Dragon/Tano will be one of the main exhibitors.
- [118] R. Westwood. "Take aim it's open season on ducks!" In: *Dragon User* (Nov. 1983), pp. 31, 33. BASIC type-in game, "Duckshoot".
- [119] Boris Allan. "Invite a Dragon to your party". In: *Dragon User* (Nov. 1983), p. 37. BASIC type-in utility, "Party Music Controller".
- [120] Tim Copsey. "String power at your fingertips". In: *Dragon User* (Nov. 1983), pp. 38, 41.

 Tim Copsey helps to unravel some of the knots in string manipulation. BASIC type-in game, "Companagrams".
- [121] Alan Evans. "Fight the Empire!" In: *Dragon User* (Nov. 1983), pp. 45–46, 49, 51.

 Alan Evans' Battle for Jirdha pits you alone against the combined strength of the Empire. You are the planet Jirdha's only hope. May the Force be with you... BASIC type-in game.
- [122] Dr Mark Varney. "Interfacing: the basic technique". In: *Dragon User* (Nov. 1983), pp. 52–53. Dr Mark Varney explains the theory behind designing your own interface.
- [123] Trevor King. "Chaser". In: *Dragon User* (Nov. 1983), pp. 54–55. BASIC type-in game for two players.
- [124] M. Saunders. "Maths test". In: *Dragon User* (Nov. 1983), pp. 55, 57, 59. BASIC type-in mental arithmetic test.

- [125] Murray McGowan. "Light cycles". In: *Dragon User* (Nov. 1983), pp. 59–60. BASIC type-in game for two players.
- [126] Kevin Murray. "Music composer". In: *Dragon User* (Nov. 1983), pp. 60–61. BASIC type-in.
- [127] Jason Arnopp. "Barbcobsnow". In: *Dragon User* (Nov. 1983), p. 61. Small BASIC type-in graphical demo.
- [128] Brian Cadge. "Dragon Answers". In: *Dragon User* (Nov. 1983), p. 63.

 Brian Cadge takes over the reins as our resident Dragon expert and answers readers' inquiries about their machines.
- [129] Gordon Lee. "A perfect prize". In: *Dragon User* (Nov. 1983), p. 66.

 Competition: The number 120 is the smallest tri-perfect. What is the next highest tri-perfect?
- [130] "Letters". In: *Dragon User* (Dec. 1983), p. 4.
 Dragon's random function; program improvements; 65495,0 success; program error; a manual criticism; useful memory locations; stopping a listing.
- [131] "News". In: *Dragon User* (Dec. 1983), pp. 7, 9, 11.

 The latest details on new products for use with your Dragon computer. Adventures from Channel 8 Software, Richard Shepherd, Phoenix; Dragon controls mortise cutter; Centipede from Atari; Business software from Dungeon; Adventures from Shards Software; Screen dump software; Dragon's Eye and Tail from Elkan; One year of independence for Dragon Data; Spectrum Voice Pak.
- [132] "The Dragon family grows". In: *Dragon User* (Dec. 1983), p. 13.

 The British Dragon network grows! This month we discover and take a brief look at seven more clubs for Dragon users.
- [133] John Scriven. "Price tags mar the good games". In: *Dragon User* (Dec. 1983), pp. 14, 16, 19–20. Software reviews: Doodle Bug, Storm Arrows, Shark Treasure, Circus Adventure, School Maze, Number Puzzler, Number Gulper, Hide and Seek, Timscript (Dragon Data); Tele-tutor, Crazy Painter, Cuthbert in the Jungle, Cuthbert Goes Digging, Intergalactic Force, Keys of the Wizard (Microdeal); Maths Trek (Dungeon Software); I Ching (Virgin Games).
- [134] Keith Brain and Steven Brain. "The 64: how it rates". In: *Dragon User* (Dec. 1983), pp. 22, 25. Keith and Steven Brain benchtest the Dragon 64.
- [135] Jim Dawson. "It's time to have words with your Dragon 32". In: Dragon User (Dec. 1983), pp. 28, 30, 33.
 Tired of games? Want to give your micro a serious job? Jim Dawson shows how by turning your Dragon into a word processor.
- [136] Graham Cunningham. "New man in the driver's seat". In: *Dragon User* (Dec. 1983), pp. 34, 36. Graham Cunningham talks to Dragon's new managing director, Brian Moore.
- [137] Pam D'Arcy. "Set up your own chain reaction". In: *Dragon User* (Dec. 1983), pp. 41–42, 44, 46. Pam D'Arcy introduces Chains, a word game to beat the graphics blues. BASIC type-in game.
- [138] Bruce Devlin. "Beginner's guide to cracking machine code". In: Dragon User (Dec. 1983), pp. 49, 51–52,
 55.
 Bruce Devlin provides an introduction to 6809 machine code programming.
- James Greenall. "The Dragon and Seikosha a print partnership". In: Dragon User (Dec. 1983), pp. 56–57.
 James Greenall goes into print on the Dragon 32 and the Seikosha GP-100A.
- [140] Luke Adams. "Happy birthday". In: *Dragon User* (Dec. 1983), p. 59. BASIC type-in. A music and graphics demonstration.
- [141] P. Williams. "World map". In: *Dragon User* (Dec. 1983), pp. 59, 61. BASIC type-in draws a map of the world.
- [142] A. M. Bowler. "Dodge". In: *Dragon User* (Dec. 1983), pp. 61, 63. BASIC type-in game.
- [143] David Newby. "Sky-diver". In: *Dragon User* (Dec. 1983), pp. 63, 65, 67.BASIC type-in game.

- [144] Richard Dodd. "How to draw a 3-D bar graph". In: *Dragon User* (Dec. 1983), pp. 67, 69. BASIC type-in program, "3-D Bar Graph".
- [145] A. Thompson. "Turbo". In: *Dragon User* (Dec. 1983), p. 69. BASIC type-in game.
- [146] Brian Cadge. "Dragon Answers". In: *Dragon User* (Dec. 1983), p. 73.

 Brian Cadge answers reader's inquiries about their machines including reading the keyboard in machine code and some joystick advice.
- [147] Gordon Lee. "Use your imagination and win a Dragon 64". In: *Dragon User* (Dec. 1983), p. 74. Competition: How many bicycles should he write down?
- [148] "Letters". In: *Dragon User* (Jan. 1984), p. 6. Club plea; Dragondos criticised and defended; a pause alternative; a harder version of pontoon.
- [149] "News". In: *Dragon User* (Jan. 1984), pp. 8, 13–14.

 All the latest on new software and hardware to use with your Dragon. Dragon Data offer part-exchange on Dragon 32s; Program Factory win right to distribute Ninja Warrior from Programmers' Guild; six puzzle games from Twig Systems Software and Dave Lee Travis; new software from Dragon Data; Microcare no longer offering Flex, but 68 Micro Group and Premier Microsystems take over; pseudosprites from Screenplay with The Animator; speech recognition from Orion Data.
- [150] John Scriven. "Desert Island Dragon delights". In: *Dragon User* (Jan. 1984), pp. 16, 18–19. Software reviews: Ninja Warrior (Programmers' Guild); Cuthbert in the Jungle (Microdeal); Vultures (J Morrison Micros); Space Shuttle, Phantom Slayer (Microdeal); Berserk (Dragon Data); Mace (Windrush Micro Systems); Cribbage (Premier Microsystems); Ring of Darkness (Wintersoft); Franklin's Tomb (Salamander Software).
- [151] Keith Brain and Steven Brain. "Added RAM power". In: *Dragon User* (Jan. 1984), pp. 20–21, 23. Keith and Steven Brain investigate the various upgrades offered for your 32.
- [152] Bruce Devlin. "A breakdown of machine code". In: *Dragon User* (Jan. 1984), pp. 25–26, 29. Bruce Devlin gives some hints on writing your own machine code programs.
- [153] Simon Powney. "A game to keep you on the ball". In: *Dragon User* (Jan. 1984), pp. 31, 33. Test your skill at controlling the bouncing ball in Simon Powney's Switch Back. BASIC type-in game.
- [154] Margaret Norman. "Add some polish to your program". In: Dragon User (Jan. 1984), pp. 35, 37, 39, 41, 43.
 How do you make your program stand out from the rest? Margaret Norman reveals the finer points of program presentation with 10-Pin Bowling. BASIC type-in game.
- [155] Iolo ap Gwynn. "Try the TV test". In: *Dragon User* (Jan. 1984), pp. 45, 47. Iolo ap Gwynn explains how to test a television's suitability for use with your Dragon.
- [156] K. Spinner. "Solit". In: *Dragon User* (Jan. 1984), pp. 49, 51–52, 54. BASIC type-in game.
- [157] A. Evans. "Waves". In: *Dragon User* (Jan. 1984), p. 54. BASIC type-in to draw sine and cosine waves.
- [158] A. Evans. "Screen print". In: *Dragon User* (Jan. 1984), pp. 54–55. BASIC type-in screen dump for Tandy DMP 100 printer.
- [159] C. Garrington. "Martian landings". In: *Dragon User* (Jan. 1984), pp. 55, 57, 59. BASIC type-in game.
- [160] D. Prins. "HCF/LCM". In: *Dragon User* (Jan. 1984), p. 59. BASIC type-in.
- [161] Brian Cadge. "Dragon Answers". In: *Dragon User* (Jan. 1984), p. 60.
 Brian Cadge answers reader's inquiries about their machines this month including advice on cassette recorders to work with the Dragon.
- [162] Gordon Lee. "A full library". In: *Dragon User* (Jan. 1984), p. 62.

 This month we give you the chance to win a whole library of software 70 titles in all from Dragon Data. Competition: What are the numbers?

- [163] "Letters". In: *Dragon User* (Feb. 1984), p. 5.
 Including this month a professional foul at chess, Telewriter improvements and additions to Connect 4.
- [164] "News". In: Dragon User (Feb. 1984), pp. 8, 11.

 All the latest software and hardware to use with your Dragon. New games from Shards; Cotswold Computers offers communications software; new adventures and turtle graphics from Salamander; more software from Microdeal; Stop Press newsletter becomes Dragon World; ITL considering interface for their Byte Drive 500 3" disk drive; Tandy printers; Phoenix Software among first to offer 64-only games with The Emperor Must Die.
- [165] Mike Harrison. "An educated look at software". In: *Dragon User* (Feb. 1984), pp. 13, 16–19. Software reviews: Talking Speller, Galactic Hangman, Silly Syntax, Alps, Melody Express (Eurosoft); Tiger IQ Test, Tiger Grand Prix (Tiger Software); Eduquiz 1 (Gem Software); Teach Type, Tick Tock, Baby Dragon (Gravesend Home Computers); Maths 1 (Ampalsoft); Sums 1, Sums 2 (Allyn Software); Circus Adventure, Hide and Seek (Dragon Data); Teletutor (Microdeal); Tables Tutor (Micro Debug Consultancy); Infant Pack, Alphabet, Junior Pack, Fun to Learn, Live and Learn (Shards Software).
- [166] Ged Mead. "Putting some snap into learning maths". In: *Dragon User* (Feb. 1984), pp. 21–23. If you want to try your hand at educational applications, but don't want to buy any software yet, this is the article for you. Ged Mead explains how to construct a simple maths game.
- [167] N. Browne. "Getting on the right track". In: *Dragon User* (Feb. 1984), pp. 25–26. BASIC type-in game, "Tracker".
- [168] Dave Windle. "Easy animation". In: *Dragon User* (Feb. 1984), p. 29.

 Dave Windle introduces the basics of animation for the Dragon and shows just how easy it can be.
- [169] Margaret Norman. "Getting down to small business". In: *Dragon User* (Feb. 1984), pp. 31, 33, 36. There's more to the micro than playing games Margaret Norman explains some of the methods and applications of data storage and manipulation.
- [170] Pam D'Arcy. "Recovering from i/o errors". In: *Dragon User* (Feb. 1984), pp. 37, 39, 41. Pam D'Arcy shows how to sort out your tapes with Tapescan.
- [171] A. G. Nanson. "The easy way to interfacing". In: *Dragon User* (Feb. 1984), pp. 43, 45–46, 49. Follow A G Nanson's instructions to build an analogue/digital interface next month we'll show you how to use the interface to turn your Dragon into a simple storage oscilloscope.
- [172] D. Newby. "Chess". In: *Dragon User* (Feb. 1984), pp. 51–53. BASIC type-in game.
- [173] Edwin Aird. "Circles". In: *Dragon User* (Feb. 1984), p. 53. Short BASIC type-in to draw random circles.
- [174] Simon Rundell. "Drag". In: *Dragon User* (Feb. 1984), pp. 53, 56–57. BASIC type-in game.
- [175] C. J. Evans. "Weaving". In: *Dragon User* (Feb. 1984), pp. 57–58. BASIC type-in to generate tapestry patterns.
- [176] John Tierney. "Store print utility". In: *Dragon User* (Feb. 1984), pp. 58–59. BASIC type-in utility to dump memory contents to screen or printer.
- [177] Kevin Murray. "Drawing". In: *Dragon User* (Feb. 1984), p. 59. BASIC type-in drawing program.
- [178] Brian Cadge. "Dragon Answers". In: *Dragon User* (Feb. 1984), p. 61.

 Help is at hand learn how to scroll the high resolution screen sideways, use the JOYSTK command properly, interface to the cassette socket and create delays with the TIMER function, along with advice on linking to the Sinclair printer.
- [179] Gordon Lee. "Adding sound and speech". In: *Dragon User* (Feb. 1984), p. 66.

 A double chance to win a double prize this month there's two sets of prizes to be won, each consisting of two different extension modules. The prizes, from JCB Microsystems, are its sound and speech extension modules, plus an arcade game and utilities program. Competition: Who made it, and what numbers did the others start the game with?

- [180] "Letters". In: *Dragon User* (Mar. 1984), p. 4.

 Including this month 3D arrays, more on disk drives, Pettigrew's Diary announcement, and hints on loading.
- [181] "News". In: *Dragon User* (Mar. 1984), pp. 9–11.

 A bumper bundle of releases from Premier plus the latest on the OS-9 and Flex operating systems. Andtek Data Design's component card enables 80 column display, serial, modem under Flex, OS-9 and Mumps; Inside the Dragon; Cambridge Microprocessor Systems make 6809 expansion for BBC B; OS-9 on sale; program aids from Premier; industrial aids from Peter Williams.
- [182] John Scriven. "On the run". In: *Dragon User* (Mar. 1984), pp. 12–17.

 Software reviews: Whirlybird Run (Dragon Data); White Crystal, Convoy Attack, Cyclops, Strategic Command, Romik Cube (Romik Software); UXB (Virgin Games); Treasure Tombe, Giant's Castle (Dungeon Software); Crusader, Maurice Minor (J Morrison Micros); Death Mines of Sirus (Phoenix Software); Searchword, Micropoly (Temptation Software); Up Periscope (Beyond); Empire, Pettigrew's Diary (Shards Software); Lost in Space (Salamander Software).
- [183] Bob Liddil. "Bob Liddil's Magic Software Machine". In: *Dragon User* (Mar. 1984), p. 19. Bob Liddil takes an idiosyncratic look at the new releases in the US in the first of his regular columns.
- [184] Michael Watts. "Printing power". In: *Dragon User* (Mar. 1984), pp. 20–25.

 Michael Watts looks at the possibilities and price of multi-colour printing in this hardware review.
- [185] Simon Rundell. "Time to try truck rides". In: *Dragon User* (Mar. 1984), pp. 26–27. BASIC type-in game, "Truck".
- [186] Jonathan Strauss. "Solve the cube". In: *Dragon User* (Mar. 1984), pp. 28–31. BASIC type-in game, "Cubic Quizes".
- [187] Pam D'Arcy. "OM doesn't live here any more". In: *Dragon User* (Mar. 1984), pp. 33–37. Managing memory use in BASIC.
- [188] A. G. Nanson. "Adding more scope". In: *Dragon User* (Mar. 1984), pp. 39–43. Turn your Dragon into a simple storage oscilloscope.
- [189] John Botibol. "The latest word on i/o routines". In: *Dragon User* (Mar. 1984), p. 45. John Botibol puts the record straight on the Dragon's input/output routines.
- [190] Iolo ap Gwynn. "Patterns". In: *Dragon User* (Mar. 1984), p. 47.

 BASIC type-in program to demonstrate some variations on PMODE and PCOPY.
- [191] Bob Palmber. "Spelling". In: *Dragon User* (Mar. 1984), pp. 47–52. BASIC type-in spelling program.
- [192] Andrew Thompson. "Roadride". In: *Dragon User* (Mar. 1984), pp. 52, 57. BASIC type-in game.
- [193] A. Bowden. "Datasave". In: *Dragon User* (Mar. 1984), pp. 59, 61. BASIC type-in data store and search utility.
- [194] Garry Saunders. "Breakthru". In: *Dragon User* (Mar. 1984), p. 61. BASIC type-in game, "Breakout".
- [195] Brian Cadge. "Dragon Answers". In: *Dragon User* (Mar. 1984), p. 65.

 Help is at hand on the string function, FOR NEXT foibles, cartridge addresses, compilers and secrecy.
- [196] Gordon Lee. "Bring sprites to your Dragon". In: *Dragon User* (Mar. 1984), p. 66.

 Premier gives you the chance to add sprite power to your Dragon if you can get lucky at roulette.

 Competition: Can you tell which number (or numbers) of chips you should choose to achieve 100 in the fewest possible moves?
- [197] "Letters". In: *Dragon User* (Apr. 1984), p. 4.
 Including this month information on scrolling the screen sideways, tips on cassette recorders and printers, and a stalemate solution from Oasis.
- [198] "News". In: *Dragon User* (Apr. 1984), pp. 8, 12.

- Featuring the latest from the LET 84 trade show, recent developments on the air waves and an update on new products for your Dragon. GEC to sell Dragons; 3½" drives from Premier; Micronet telesoftware for the Dragon; news from Leisure Electronic Trader show including Salamander, Shards and Sulis; interface board from Electroanalytical Technology; Wareham club moves to Bournemouth; Radio 4's Chip Shop to broadcast Dragon-compatible Basicode 2; Compusense and Premier sell Flex for rival disk systems, meanwhile Dragon Data market OS-9.
- [199] John Scriven. "Software scrutiny". In: *Dragon User* (Apr. 1984), pp. 15–16, 18–19. Software reviews: Air Traffic Control, Danger Ranger, Devil Assault, Space Fighter, Space Raiders (Microdeal); Leggit (Imagine Software); Eight Ball, Pinball (Microdeal); Fishy Business (Salamander Software); Glaxxons, Dragon Hawk, Skramble (Microdeal); Photo-Finish, Ossie (Peaksoft); Kriegspiel (Beyond); Transylvanian Tower (Richard Shepherd); Puzzler (Shards Software).
- [200] Bob Liddil. "Bob Liddil's Magic Software Machine". In: *Dragon User* (Apr. 1984), p. 21. Bob Liddil's back again with the second saga of the magic software machine (Sea Dragon).
- [201] Keith Brain and Steven Brain. "Plugging into Prestel". In: *Dragon User* (Apr. 1984), pp. 23–24. More than a quarter of a million pages of useful information can be accessed using your Dragon.
- [202] Stuart Sampson. "Learning to love machine coding". In: *Dragon User* (Apr. 1984), pp. 25, 27, 29. Coming down from high-level languages Stuart Sampson gives an insight into the machine coding world...
- [203] Stuart Sampson. "The mutterings of your Dragon". In: *Dragon User* (Apr. 1984), pp. 26–27. ...and teaches you how to understand Dragon talk.
- [204] Keith Brain and Steven Brain. "Moving up with OS-9". In: *Dragon User* (Apr. 1984), pp. 31, 33–34. Keith and Steven Brain reveal the ins and outs of OS-9.
- [205] Peter Whittaker. "Learning to experiment". In: *Dragon User* (Apr. 1984), pp. 37–38. Light pen hardware project.
- [206] Ian Balshaw and Julian Chapman. "Mash". In: *Dragon User* (Apr. 1984), pp. 39, 41–42. BASIC type-in game, revisited in July 1984.
- [207] Fraser Chadburn. "Motor Cross". In: *Dragon User* (Apr. 1984), pp. 42, 45–46. BASIC type-in game.
- [208] Brian Bond and Martin Bond. "Composer". In: *Dragon User* (Apr. 1984), pp. 46, 49. BASIC type-in musical keyboard.
- [209] Brian Cadge. "Dragon Answers". In: *Dragon User* (Apr. 1984), p. 51. Brian Cadge takes you out of the maze and solves your problems.
- [210] Gordon Lee. "Win a printer from DRG". In: *Dragon User* (Apr. 1984), p. 54.

 Don't be an April fool, use your wit and win a Seikosha printer from DRG Business Systems. Competition: What is the smallest number of small cubes that I could possibly have, and state also the number and sizes of the original large cubes?
- [211] "Letters". In: *Dragon User* (May 1984), p. 4.
 Information on interfacing and confidential LISTing, advice on obtaining back copies of Dragon User, plus our blunders corrected.
- [212] "News". In: Dragon User (May 1984), pp. 9–10.

 The latest hardware and software developments, including both educational and adventure oriented games. Educational titles from Dragon Data and Garland Computing; S-22 Toolkit from Ashby Computer Centre; Ikon Computer Products Ultra Drive; New and updated games from Dragon Data and Lothlorien; Super Dragon Writer 2 on cartridge from Dragon Data; Grosvenor Software offer Basicode 2 converter; Mode 5 from Softek allows text and graphics mix; Dragon Network System from Lazersoft; new 12" monitor from Philips.
- [213] Rupert Steel. "The ranging role of the ACC". In: *Dragon User* (May 1984), p. 12. An introduction to the ACC (Association of Computer Clubs) by its chairman.
- [214] John Scriven. "Daunting software scenarios". In: Dragon User (May 1984), pp. 16–19.

- Software reviews: Mystery of the Java Star, North Sea Oil (Shards Software); The Cricklewood Incident, Wings of War, Turtle Graphics (Salamander Software); Stargate, Willy's Revenge, Fireball (Abacus Software); Living Stone (Cable Software); Lunar Rover Patrol, Bloc Head (Dragon Data); Witchway (Wellbrooksoft).
- [215] Bob Liddil. "Bob Liddil's Magic Software Machine". In: *Dragon User* (May 1984), p. 21. Frantic laser fire pursues Bob Liddil in his strange odyssey.
- [216] Keith Brain and Steven Brain. "A serious system". In: *Dragon User* (May 1984), pp. 23, 25–26. Business software reviews: Home Finance (Abacus Software); Home Accounts (MST Consultants); Personal Bank Account (Abacus Software); Personal Banking System, Bank Reconciliation Module (Hilton Computer Services); The Filing System (Progressive Software); Filmastr (Microdeal); Infomanager (J-Soft 9); Database (MST Consultants); RMS (Record Management System) (Dragon Data); Spreadsheet (Abacus Software); MST-Calc (MST Consultants); Elite-Calc (Microcare); Dynacalc (Dragon Data).
- [217] Peter Hooton. "Caterpillar capers". In: *Dragon User* (May 1984), pp. 27, 29. BASIC type-in game, "Survival".
- [218] Graham Cunningham. "Dragon finds a new lair". In: *Dragon User* (May 1984), pp. 30–31. Graham Cunningham journeyed to Berkshire to meet Ron Bosanko of GEC McMichael, now marketing Dragon Data's products, and talks about future Dragon developments.
- [219] Paul Gale. "Creating the very latest in graphic art". In: *Dragon User* (May 1984), pp. 33–34. Paul Gale explains how to program your computer to create your very own modern graphic art.
- [220] John Royds. "A question of luck". In: *Dragon User* (May 1984), pp. 37, 39.

 It's not logic that a physicist turns to when he's in doubt, it's luck. John Royds introduces the "Monte Carlo" technique and shows how to use it on your Dragon.
- [221] Stuart Sampson. "Code with no fixed abode". In: *Dragon User* (May 1984), pp. 41, 43. Stuart Sampson follows the course of the nomadic code (Position Independent Code).
- [222] K. Garwell. "Miscellaneous mains noises". In: *Dragon User* (May 1984), pp. 45, 47. K Garwell's techniques to prevent mains noise.
- [223] John Boyes. "String Input". In: *Dragon User* (May 1984), p. 49. BASIC type-in to input a string using the joystick.
- [224] V. M. Jamooji. "Nimitron". In: *Dragon User* (May 1984), pp. 49–50, 53. BASIC type-in game of Nim.
- [225] James Leigh. "Memory". In: *Dragon User* (May 1984), pp. 53, 57. BASIC type-in memory monitor.
- [226] K. Garwell. "Numbers". In: *Dragon User* (May 1984), p. 57. BASIC type-in to list the REM statements in a program.
- [227] A. L. Witherington. "Test your reactions". In: *Dragon User* (May 1984), p. 59. BASIC type-in, "Reaction Timer".
- [228] A. Fyfe. "Transmac". In: Dragon User (May 1984), p. 59.
 BASIC and Delta executive type-in to transfer BASIC programs from tape to disk.
- [229] Bobby Patel. "Sound". In: *Dragon User* (May 1984), p. 62. BASIC type-in, "Sound Graph", detects sound from the cassette port.
- [230] John Peat. "Database". In: *Dragon User* (May 1984), p. 62. BASIC type-in small scale database to store information on cassette tape.
- [231] Brian Cadge. "Dragon Answers". In: *Dragon User* (May 1984), p. 65. Brian Cadge pits his wits against your problems and comes up with the answers.
- [232] Gordon Lee. "Win an Ultra Drive from Ikon". In: *Dragon User* (May 1984), p. 66. Pick the primes and win an Ultra Drive from Ikon Computer Products. Competition: How many primes can you find counting each prime only once, even though it may appear in the grid several times?
- [233] "Letters". In: *Dragon User* (June 1984), p. 4.

 Including information on creating a black on orange display, advice on an unsolved graphic adventure and our apologies for the program listing Mash.

- "News". In: Dragon User (June 1984), pp. 9–11.

 The latest information on Dragon-related products and events including Dragon Data's newest package. Hints about next Dragon including built-in modem and 3½" disk drives; Brian Moore speaks at Radio, Electrical and Television Retailers' Association conference; clubs in Oldham, Merseyside, Bangor (NI), Denmark; GEC Dragon sponsors chess match with David Levy; new software from Paramount Software, Hewson Consultants, Peaksoft, Market Video, Shards; disk drive enhancements from Alpha Disc; Grafpad now Dragon compatible; BB1 Communication package from Cotswold Computers; "What makes a great game?" survey from Microdeal; software price cuts from Dragon Data.
- [235] John Scriven. "Dragon software on the up and up". In: *Dragon User* (June 1984), pp. 12–18. Software reviews: Hungry Horace (Melbourne House); Pedro (Imagine Software); Mad Monty (Screenplay); Ultrapede (Softek); Shaft, Junior's Revenge, Jump Jet (Dragon Data); 3D Space Wars (Hewson Consultants); Ugh!, Galacticans (Softek); Johnny Reb (MC Lothlorien); Shaper (Shards Software), Editext (Nectarine), Sprite Magic (Knight Software).
- [236] Bob Liddil. "Bob Liddil's Magic Software Machine". In: *Dragon User* (June 1984), pp. 19–20. Bob Liddil leaves us to contemplate another strange odyssey as he departs from our fair shores (Maths Trek).
- [237] Brian Cadge. "In the fast lane". In: *Dragon User* (June 1984), pp. 21–22. Machine code type-in racing game, "GRANDPRIX".
- [238] Paul Hammond. "In search of atoms". In: *Dragon User* (June 1984), pp. 23–28. BASIC type-in game, "Atom Hunt".
- [239] Pam D'Arcy. "Machine code routine for recovering files". In: *Dragon User* (June 1984), pp. 29–30. Using 14 bytes of machine code Pam D'Arcy explains how to recover a file before the dreaded IO ERROR strikes.
- [240] Keith Brain and Steven Brain. "Speaking in dialects". In: *Dragon User* (June 1984), pp. 31–33. OS-9 software reviews: Pascal, C-Compiler, Editor Assembler Debugger (Dragon Data).
- [241] Mike Harrison. "Dragon library". In: *Dragon User* (June 1984), pp. 36–44.

 Book reviews: Dragon Magic (Foulsham); Learning to use the Dragon 32 (Gower); Boots Guide to the Dragon 32 (Granada); Getting the most from your Dragon 32 (Penguin); Dragon Trainer (Sunshine); The Working Dragon 32 (Sunshine); Dragon 32 programmers reference guide (Melbourne House).
- [242] Helen Johnstone. "Tic, tac, toe". In: *Dragon User* (June 1984), pp. 45–47. BASIC type-in game.
- [243] Roger Reading. "Hunt the Dragon". In: *Dragon User* (June 1984), pp. 47–49. BASIC type-in game.
- [244] Stanley White. "Maths". In: *Dragon User* (June 1984), pp. 49–56. BASIC type-in times table program.
- [245] John Buckley. "Tandy to Dragon Converter". In: *Dragon User* (June 1984), p. 56. Machine code type-in to retokenise BASIC programs.
- [246] Brian Cadge. "Dragon Answers". In: *Dragon User* (June 1984), p. 58.

 Brian Cadge puts his brain to work as he tackles relays, remote jacks and many other readers' problems.
- [247] Gordon Lee. "Win a disk drive". In: *Dragon User* (June 1984), p. 62.

 Alpha Disc is offering a disk drive as our major prize in this month's competition and as an added bonus, Melbourne House has 20 copies of Hungry Horace to give away in a Horace Hunt maze puzzle. Competition: Where did the darts land?
- [248] Graham Cunningham. "Editorial". In: *Dragon User* (July 1984), p. 3. News of the demise of Dragon Data; assurance that Dragon User will not be affected.
- [249] "Letters". In: *Dragon User* (July 1984), p. 4.

 Including this month further information on two of our reviews, advice on the Dragon's cassette interface, recommended software and book titles and a contact address for errors found in Pan's Sixty Programs for the Dragon 32.
- [250] "News". In: *Dragon User* (July 1984), pp. 8–9, 11.

- The latest details on software, utilities, peripherals and hardware for the Dragon including an update on the new micros coming soon from GEC Dragon. Club news: Romsey, Brighton & Hove, and worldwide pen pals; new games from Magno Software, Imagine Software and astrology from Dragon Data; "Largest range of Dragon software released at one time" from Microdeal, including photo of the Buzzard Bait "software key" (dongle); monitor-disassembler from Microtanic Software; education software from Shiva; Microvitec floppy drive.
- [251] John Scriven. "Pains and pleasures". In: *Dragon User* (July 1984), pp. 13, 15, 17. Software reviews: Nerble Force, Cosmic Clones (Dragon Data); Froggy, Bug Diver (Galactic Software); Cuthbert in the Mines (Microdeal); Chuckie Egg (A&F Software); If I Had A Million (Phoenix Software); Animator (Screenplay); Rainbow Writer (Microdeal), Sprint Compiler (Oasis Software); Teleforth (Microdeal); Petite Pascal (Oasis Software).
- [252] Keith Brain and Steven Brain. "Specialised databases". In: Dragon User (July 1984), pp. 19–20. Software reviews: Mailing List, Stock Control, Cashbook and VAT Accounts, Non-VAT Accounts, Purchase/Sales Ledger, Payroll (Abacus Software); Stock Recording System, Cash Book and VAT Register System, Sales Ledger, Purchase Ledger (Dragon Data); TIMS (Eurosoft); Dragon Sales Ledger (Micro Business Centre); Mailer/Address Book, CD Series Stock Control, Invoices/Statements, Business Accounts, MST-Exec, Stock Control System (MST Consultants); Data Retrieval System (Salamander Software).
- [253] Brian Cadge. "Activating autorunning". In: *Dragon User* (July 1984), pp. 21–22. Brian Cadge shows you how to autorun Basic programs after loading.
- [254] Iolo ap Gwynn. "Versatile Dragon". In: *Dragon User* (July 1984), pp. 23, 25, 27, 29. Iolo ap Gwynn's ASCII solution to improve the quality of your creativity and overcome the drawbacks of the Dragon's limited text screen and standard green background colour.
- [255] Mike Harrison. "For book worms". In: *Dragon User* (July 1984), pp. 33, 35, 37–38. Book reviews: Advanced Sound & Graphics (Sunshine); Inside the Dragon (Addison-Wesley).
- [256] Adam Stevens. "Connect four". In: *Dragon User* (July 1984), pp. 39–40. BASIC type-in game.
- [257] M. McPartlin. "Directory". In: *Dragon User* (July 1984), pp. 40–41, 43. BASIC type-in tape directory utility.
- [258] Ian Balshaw and Julian Chapman. "Mash". In: *Dragon User* (July 1984), pp. 43–44. BASIC type-in game, a revision of the version from April 1984.
- [259] R. Littlejohns. "Mower". In: *Dragon User* (July 1984), pp. 44–45. BASIC type-in game.
- [260] Brian Cadge. "Dragon Answers". In: *Dragon User* (July 1984), p. 49.
 Brian Cadge ties up the missing pieces, gives you a saving solution and puts an end to a variety of problems encountered by our readers.
- [261] Gordon Lee. "Printer power". In: *Dragon User* (July 1984), p. 54.

 A thermal transfer printer from Jones & Brother is this month's star prize for the successful entrant to Gordon Lee's competition. Competition: But which States were on the Professors' list?
- [262] "Letters". In: *Dragon User* (Aug. 1984), p. 5.

 Including this month further information on preventing unauthorised access to program data, help for Tandy to Dragon conversions and a short program of a formatter for printer output.
- [263] "News". In: Dragon User (Aug. 1984), pp. 8–10.

 An update on the fate of Dragon Data, news of a possible Dragon MSX machine from GEC, price reductions at Dixon's, the High Street retail chain and the latest on software, peripherals and utilities for the Dragon. New games from Imagine Software; Channel 8 suffer technical hiccup bringing games to Dragon; communications software from Telepost Systems; Oxfam call for computer software; Compusense offer complete Flex system; good news from Earls Court Computer Fair; carrying case and dust covers from Jenart Design.
- [264] John Scriven. "Tom Mix's buzzards bowl out Ian Botham". In: Dragon User (Aug. 1984), pp. 14–19.

- Software reviews: Buzzard Bait, Electron (Microdeal); Red Meanies (Salamander Software); Crash, Cuthbert in Space (Microdeal); 3D Seiddab Attack, 3D Lunattack (Hewson Consultants); Sporting Decathlon (Paramount Software); The Chocolate Factory (Minits); Tim Love's Cricket (Peaksoft); Pengon (Microdeal).
- [265] Brian Morley. "Cosmic cruiser". In: *Dragon User* (Aug. 1984), pp. 21–23. BASIC type-in game, "Drastar 4".
- [266] Gordon Ross. "Going strong with the Dragon". In: Dragon User (Aug. 1984), pp. 24–25.
 A Dragon newsletter and telephone hotline service are two of the hallmarks of Premier Microsystems, one of the leading Dragon firms.
- [267] David Berry. "Selective scanning". In: *Dragon User* (Aug. 1984), pp. 27–29.

 David Berry comes up with a key-scan routine that is called from machine code and detects continuously pressed keys.
- [268] D. L. Jones. "Eradicating IO errors". In: Dragon User (Aug. 1984), pp. 30–31.
 IO Errors are the bane of all Dragon users D L Jones looks at a variety of situations where they are more likely to occur and shows how to prevent them.
- [269] J. Lomax. "Caterpillar". In: *Dragon User* (Aug. 1984), p. 32. BASIC type-in game.
- [270] James Greenall. "Converter". In: *Dragon User* (Aug. 1984), pp. 32–33.

 BASIC type-in to convert numbers between decimal, hexadecimal and binary.
- [271] D. L. George. "Budget". In: *Dragon User* (Aug. 1984), pp. 33–39. BASIC type-in budget analysis per month.
- [272] C. Crowther. "Tron". In: *Dragon User* (Aug. 1984), p. 39. BASIC type-in game simulating the Death Bikes in Tron.
- [273] Mike Gerrard. "Mike Gerrard's Adventure Trail". In: *Dragon User* (Aug. 1984), p. 41.

 Our new monthly feature by Mike Gerrard which takes a look at the latest and the greatest in adventures for the Dragon.
- [274] Brian Cadge. "Dragon Answers". In: *Dragon User* (Aug. 1984), p. 45.

 Brian Cadge puts an end to your problems with news, views, information and routines on your subject areas.
- [275] Gordon Lee. "Cracking the code". In: *Dragon User* (Aug. 1984), p. 50.

 Cumana is offering two disk drives as this month's prize for the successful entrants to Gordon Lee's key-code puzzle. Competition: Can you decipher it, and state also, they key-code used?
- [276] "Letters". In: *Dragon User* (Sept. 1984), p. 5.

 Including this month problems with the Dragon's string handling and saving routines, help for readers with potentiometer type joysticks and tips on entering machine code listings.
- [277] "News". In: *Dragon User* (Sept. 1984), p. 8.

 Spanish conquistador takes over from Dragon Data as GEC joins in the MSX revolution. Eurohard and Dragon Data exchange contracts; Brother M1009 dot-matrix printer; problems with Dragon Users club.
- [278] Gordon Ross. "MSX what now?" In: *Dragon User* (Sept. 1984), p. 9. Discusses the mooted Dragon MSX and MSX in general.
- [279] John Scriven. "No smoking on tubeway". In: *Dragon User* (Sept. 1984), pp. 14–17.

 Software reviews: Mission XK1 (J Morrison Micros); Beam Rider (Microdeal); Horace Goes Skiing (Melbourne House); Cosmic Cruiser (Beau Jolly); Mr Dig, Touchstone (Microdeal); Castle of Doom (Paramount); Hunchback (Ocean Software); Quasimodo (Cable Software); Grabber (Microdeal); Bug Diver (Mastertronic); Superbowl (Cable Software); Mission Moonbase (Phoenix Software); Tubeway Army (Crystal Computing); HiRes (Oron Software).
- [280] Iolo ap Gwynn. "Daisywheel or dot-matrix?" In: *Dragon User* (Sept. 1984), pp. 18–19, 21. Compares Shinwa CP80 and Smith-Corona TP-1.
- [281] Gordon Ross. "Shards' diary". In: *Dragon User* (Sept. 1984), p. 23. About Shards software.

- [282] Chas Robertson. "In search of excellence". In: *Dragon User* (Sept. 1984), pp. 24–25. Discussion of Microdeal and "Nimbo" type-in game.
- [283] Brian Cadge. "Kick start for Ultra Drive". In: *Dragon User* (Sept. 1984), p. 27. Review of the Ultra Drive by Ikon Computer Products.
- [284] Keith Brain and Steven Brain. "Plug in, switch on and go..." In: *Dragon User* (Sept. 1984), pp. 28–29. Reviews an RS232 expansion from Steve's Electronics Supply.
- [285] Lam Huyen Le. "Escape". In: *Dragon User* (Sept. 1984), pp. 30–32. BASIC type-in game, "Maze Thief".
- [286] Russell Stather. "Easy Edit". In: *Dragon User* (Sept. 1984), pp. 32–33. Type-in to enhance BASIC listing and editing.
- [287] Duncan Rowland. "Shoot". In: *Dragon User* (Sept. 1984), pp. 33, 35. BASIC type-in cowboy shooting game.
- [288] Mike Harrison. "Inside the front cover". In: *Dragon User* (Sept. 1984), pp. 38–39, 41.

 Book reviews: Introducing Dragon Machine Code, Programming the 6809, 6809 Assembly Language Programming.
- [289] "Ringworld awaits the rings return". In: *Dragon User* (Sept. 1984), p. 41.

 Answer five questions to win Wintersoft's Return of the Ring there are 50 copies to be won.
- [290] Mike Gerrard. "Mike Gerrard's Adventure Trail". In: *Dragon User* (Sept. 1984), p. 45. Mike Gerrard's insight into the mysterious world of adventures. Sunken City, Son of Pettigrew.
- [291] Brian Cadge. "Dragon Answers". In: *Dragon User* (Sept. 1984), p. 47.

 Want to know how to control the cursor, use the remote jack as a switch for external devices or give a warm or cold start to your micro then Brian Cadge is the person you're after, with his regular answering lifeline.
- [292] Gordon Lee. "Win £250 software from Microdeal". In: *Dragon User* (Sept. 1984), p. 50. £250 of software from Microdeal is this month's prize to Gordon Lee's number puzzle. Competition: What number have I written on the card?
- [293] "Letters". In: *Dragon User* (Oct. 1984), p. 5.

 Including this month information on free enrolment to the Cuthbert Club run by Microdeal and bad news for readers wanting to make music by linking their Dragons to a synthesizer.
- [294] "News". In: Dragon User (Oct. 1984), pp. 8–9.

 Confirmation of Dragon Data's fate brings the news that Eurohard is to continue with the manufacture of the 32, 64, Dragon Professional and an MSX machine. Eurohard plans October launch; Activision seeks injunction against Microdeal, Microdeal gets injunction against tape copier; Manic Miner by Software Projects coming to the Dragon; 6809 colour show; Beau Jolly acquire failed Imagine Software's existing stock; John Menzies to provide Electronic Distribution of Software (EDOS); educational titles from Abacus Software, and Garland Computing drop the Dragon; Deltasoft plan bargain software.
- [295] Gordon Ross. "Touchmaster takes off". In: *Dragon User* (Oct. 1984), p. 10. Touchmaster occupy the old Dragon Data building.
- [296] John Scriven. "Run with ROM". In: *Dragon User* (Oct. 1984), p. 12. Hardware review: Bug Zapper by Windrush Micro Systems.
- [297] Mike Harrison. "Educational enlightenment". In: Dragon User (Oct. 1984), pp. 15–17.

 Software reviews: Super Spy, Maths revision (Ampalsoft); Facemaker, Shape-Up, Tables Adventure (Dragon Data); Just-a-Mot, Besieged, Wordpower (Sulis Software); Geography (Cablesoft); Chemistry, Physics, Jungle Maths, Astromaths, Star Reader (Scisoft Educational); "O" level Physics measuring instruments, "O" level Geography, First letters and words, ABC, Music Tutor, Tell the time (Abacus Software).
- [298] Steve Gathercole. "Scramble, scramble!" In: *Dragon User* (Oct. 1984), pp. 18–19, 21. BASIC type-in game, "Cave Bird".
- [299] Keith Brain and Steven Brain. "Getting to grips with machine code". In: Dragon User (Oct. 1984), pp. 23–24.
 Software reviews: S-22 (Ashby Computer Centre); Dragon Ace Trace (Microtanic Computer Systems Ltd).

- [300] Keith Brain and Steven Brain. "Sounding off". In: *Dragon User* (Oct. 1984), p. 26. Excerpt from their own book, Advanced Sound & Graphics.
- [301] Michael Turner. "A speedy space-age solution". In: *Dragon User* (Oct. 1984), pp. 26–27. Software review: Dream (Grosvenor Software).
- [302] Peter Whittaker. "Functional features". In: *Dragon User* (Oct. 1984), pp. 29–31. Tape and graphics utility functions.
- [303] "Back Track". In: *Dragon User* (Oct. 1984), p. 32.

 Save £1.50 on Incentive's latest game for the Dragon and enter the win-a-disk-drive competition.
- [304] David Harman. "Snake". In: *Dragon User* (Oct. 1984), pp. 33, 35. BASIC type-in game.
- [305] Alan Fyfe. "Mastermind". In: *Dragon User* (Oct. 1984), pp. 35, 37–38. BASIC type-in game.
- [306] Paul Kelly. "Hangman". In: *Dragon User* (Oct. 1984), pp. 38, 41. BASIC type-in game.
- [307] Mike Gerrard. "Mike Gerrard's Adventure Trail". In: *Dragon User* (Oct. 1984), p. 45.

 Help is at hand for adventurers stuck in sticky situations. Mike Gerrard reviews The Incredible Hulk and the first of the Channel 8 Mysterious Adventure series, The Golden Baton.
- [308] Brian Cadge. "Dragon Answers". In: *Dragon User* (Oct. 1984), p. 47. Skidding around the page Brian Cadge brakes to a halt with a dream answer.
- [309] Gordon Lee. "Searching for squares". In: *Dragon User* (Oct. 1984), p. 50. £200 of Salamander Software is the prize to Gordon Lee's grid puzzler.
- [310] "Letters". In: *Dragon User* (Nov. 1984), p. 5.

 Including this month information on a screen dump for the Epson, news of a handicapped database and some comments on the Dragon.
- [311] "News". In: Dragon User (Nov. 1984), pp. 8–9.

 Latest details of the 6809 show, new software on release and the continuing saga of the Games and Computers club. Games and Computers founder facing legal proceedings; cut price Dragons and peripherals from GEC; Compusense offer Dragon 32 part-exchange; new WS2000 modem from Miracle Technology; Weetabix game from Romik, new software from Blaby and Microdeal; Touchmaster drops prices.
- [312] Gordon Ross. "The Spanish connection". In: *Dragon User* (Nov. 1984), p. 10. Overview of Eurohard SA.
- [313] Margaret Norman et al. "Dragonsoft". In: *Dragon User* (Nov. 1984), pp. 12–13.

 Software reviews: Chicken Run (Impsoft); Cu*ber (Microdeal); Cecil Plays 21 (Snip Software); Android Invaders (Lyversoft); The Fall of Rome (Argus Press Software); Ring of Darkness (Wintersoft).
- [314] Brian Cadge. "Playing with sprites a la mode". In: *Dragon User* (Nov. 1984), p. 15. Hardware review: Premier's sprite graphics board.
- [315] D. J. Orrell. "Spiderbyte". In: *Dragon User* (Nov. 1984), pp. 17, 19. BASIC type-in game.
- [316] John Payne. "Turtle comes out of its shell". In: *Dragon User* (Nov. 1984), pp. 20–21. Turtle graphics in FORTH.
- [317] Peter Whittaker. "Build your own drawing arm". In: *Dragon User* (Nov. 1984), pp. 24–25. Hardware project.
- [318] R. Whitfield. "Jigsaw". In: *Dragon User* (Nov. 1984), pp. 27, 29, 31. BASIC type-in game, "Move It".
- [319] Neil Blagden. "Rotator". In: *Dragon User* (Nov. 1984), pp. 31, 33. BASIC type-in rotates 3D object.
- [320] Stephen Young. "Keybeep". In: *Dragon User* (Nov. 1984), p. 33. Machine code keybeep routine. Enhances program from October 1983.

- [321] John Scriven, Margaret Norman, and Brian Cadge. "Bookbytes". In: *Dragon User* (Nov. 1984), p. 39. Book reviews: Training Your Dragon (Prentice-Hall); Exploring Adventures on the Dragon (Duckworth); 6809 Machine Code Programming (Granada).
- [322] Brian Cadge. "Dragon Answers". In: *Dragon User* (Nov. 1984), p. 41.

 Delving into his memory banks Brian Cadge comes up with some harmonious answers.
- [323] Mike Gerrard. "Mike Gerrard's Adventure Trail". In: *Dragon User* (Nov. 1984), p. 45.
 Mike Gerrard looks at two new adventures from Channel 8 software and lends a helping hand to a reader in need. Feasibility Experiment, Waxworks.
- [324] Gordon Lee. "Counting counters". In: *Dragon User* (Nov. 1984), p. 50.

 Gordon Lee borrows from Lewis Carroll to complete his quiz, Melbourne House provides the prizes.

 Competition: What is the chance of drawing a white counter from the remaining bag?
- [325] "Letters". In: *Dragon User* (Dec. 1984), p. 5.

 Including this month information on musical Dragons, an ITT answer and how to secure a program listing.
- [326] "News". In: Dragon User (Dec. 1984), pp. 6–7.

 The latest on GEC's marketing plans and details of new peripherals and software on release. GEC sells last of its Dragon stock with no plans to promote it further; modem from Unicom; new releases from Cable Software, Cambrian Computersolve and Knight Software; Global Computers and the Micro Repair Club offer repair guarantee packages.
- [327] Gordon Ross. "Nationwide network". In: *Dragon User* (Dec. 1984), p. 11. Details the growing number of user groups.
- [328] Brian Cadge et al. "Dragonsoft". In: *Dragon User* (Dec. 1984), pp. 12–13.
 Software reviews: Manic Miner (Software Projects); Boris the Bold (Blaby Computer Games); Cashman (Microdeal); Darts (Blaby Computer Games); Demon Seed (Microdeal); Time Bandit (Microdeal); Back Track (Incentive Software).
- [329] Keith Brain and Steven Brain. "The Chip Shop". In: *Dragon User* (Dec. 1984), pp. 15–16.
 Discusses BASICODE and two converters: Basicode by Grosvenor Software and Basicode 2+ by Broadcasting Support Services.
- [330] Brian Cadge. "Versatile interfacing". In: *Dragon User* (Dec. 1984), p. 17. Hardware review: simple parallel interface from NCJ Electronics.
- [331] Andrew Wond. "Snakes alive". In: *Dragon User* (Dec. 1984), pp. 18, 21. Machine code with BASIC type-in game.
- [332] Gordon Lee, Brian Cadge, and Jason Orbaum. "Bookbytes". In: *Dragon User* (Dec. 1984), p. 23. Book reviews: Brainteasers for the Dragon 32 (Phoenix Publishing Associates); Giant book of games for your Dragon (Fontana); Dragon Machine Code (Shiva).
- [333] David Sam. "Dreaming up Dragon designs". In: *Dragon User* (Dec. 1984), pp. 24–25, 27. BASIC type-in graphics design program.
- [334] Wayne J. Smithson. "Screen Edit". In: *Dragon User* (Dec. 1984), pp. 29, 31, 33. BASIC type-in graphics screen editor, "Scredit".
- [335] Keith David. "Swapover". In: *Dragon User* (Dec. 1984), p. 35. BASIC type-in puzzle game.
- [336] Jason Nichols. "Dragon/Tandy converter". In: *Dragon User* (Dec. 1984), pp. 38–39, 41, 43, 45, 47. Program to convert tokenised BASIC between Dragon and Tandy. Note: byline credits John Buckley, author of a similar utility published in June 1984.
- [337] Mike Gerrard. "Mike Gerrard's Adventure Trail". In: *Dragon User* (Dec. 1984), p. 50. Mike Gerrard continues his survey of the adventure scene. The Trail of Arnold Blackwood, Arrow of Death, Arrow of Death Part 2.
- [338] Brian Cadge. "Dragon Answers". In: *Dragon User* (Dec. 1984), p. 52.

 Brian Cadge offers a range of advice including instructions on the Dragon's restore command and information on moving graphics pixel by pixel.

- [339] Gordon Lee. "Magic cards". In: *Dragon User* (Dec. 1984), p. 58.

 Beau Jolly provides the prizes to Gordon Lee's card trick question. Competition: What were the four cards (and how old is Bertram Byte)?
- [340] "Letters". In: *Dragon User* (Jan. 1985), p. 5.

 Including this month information on key functions, a plea from Incentive Software and a special offer from Snip.
- [341] "News". In: *Dragon User* (Jan. 1985), pp. 8–9.

 A round-up of the 6809 show, details of Premier's downfall and the latest on new software and peripherals. Dragon stock sold at Comet; no touch-pad from Touchmaster yet; Hareraiser Finale (Haresoft) announced; Thoth Data market pharmacy labelling package using Mumps, Farmfax offer agricultural programs.
- [342] John Scriven et al. "Dragonsoft". In: *Dragon User* (Jan. 1985), pp. 11–13.
 Software reviews: Fury (Microdeal); The Bells (Blaby Computer Games); Perilous Pit (Blaby Computer Games); Mazerace and Spellbox (P J Paul); Teach Me (AC Software); Instant Graph Plotter (R & P International Computer Services); Programmers Utilities (Microdeal); Tape Doctor (Computil).
- [343] Keith Brain and Steven Brain. "Blowing on an EPROM". In: *Dragon User* (Jan. 1985), pp. 16–17. Hardware review: EPROM programmer from Steve's Electronics Supply Company.
- [344] Gordon Ross. "Hecho en España". In: *Dragon User* (Jan. 1985), pp. 19–20. Gordon Ross talks to Eduardo Merigo, President of Eurohard SA.
- [345] P. Thompson. "King of the hill". In: Dragon User (Jan. 1985), pp. 23, 25, 27, 29. BASIC type-in game, "Q-Bert".
- [346] Paul Grieves. "Reach for recursion". In: *Dragon User* (Jan. 1985), pp. 31–32. Paul Grieves introduces programming in recursion.
- [347] Graham Smith. "Stitchet". In: *Dragon User* (Jan. 1985), p. 33.

 A short program to produce an interesting circle stitching pattern.
- [348] Robert Strange. "Sound". In: *Dragon User* (Jan. 1985), pp. 33, 35. BASIC type-in, "Sound-to-Light".
- [349] Michael Oliver. "Ski-run". In: *Dragon User* (Jan. 1985), pp. 35, 37, 39. BASIC type-in game, "Downhill Skiing".
- [350] R. H. J. Fielding. "Ultra Utility". In: *Dragon User* (Jan. 1985), p. 39. BASIC type-in for Ultra Drive users, "Directory to Printer".
- [351] Mike Harrison and Gordon Lee. "Bookbytes". In: *Dragon User* (Jan. 1985), p. 41.

 Book reviews: BASIC for your Dragon 64/32 made easy (Arrow Books); Programming the Dragon 32 (Newnes Microcomputer Books); Creating Adventure Games on your Dragon 32 (Interface Publications).
- [352] Mike Gerrard. "Mike Gerrard's Adventure Trail". In: *Dragon User* (Jan. 1985), p. 43. Mike Gerrard offers his help to adventurers in need and tackles the latest adventure from Channel 8. Time Machine.
- [353] Brian Cadge. "Dragon Answers". In: *Dragon User* (Jan. 1985), p. 45.
 Brian Cadge offers advice on moving DRAWed characters, saving graphics and obtaining the start, end and exec locations with the DragonDOS cartridge attached.
- [354] Gordon Lee. "Record space". In: *Dragon User* (Jan. 1985), p. 50.

 Cable Software offers the prizes to Gordon Lee's puzzle. Competition: How far apart are the centres when this occurs?
- [355] "Letters". In: *Dragon User* (Feb. 1985), p. 5.

 Building a simple oscilloscope, moans and groans, tips for Madness and the Minotaur and a question of intelligence.
- [356] "News". In: *Dragon User* (Feb. 1985), p. 7.

 The arrival of Spiderman, new games from Channel 8, the Ket Trilogy and the next 6809 show. Eager Edna from Cable Software withdrawn; Fruity from Impsoft.

- [357] David Rowntree et al. "Dragonsoft". In: *Dragon User* (Feb. 1985), pp. 10–11.

 Software reviews: Telepath (Snip Software); Katerpillar 2 (Microdeal); Time Attack (Tudor Williams);

 Snow Queen (Cambrian Computersolve); Po-Go-Jo (J Morrison Micros); Dungeon Raid (Microdeal)

 Yumping Yosser (Knight Software).
- [358] Hywell Francis. "Sideways ROM board". In: *Dragon User* (Feb. 1985), p. 13. Hardware review: Sideways ROM board by Race Electronics.
- [359] Steve Gathercole. "Scramble". In: *Dragon User* (Feb. 1985), pp. 14–15. Type-in game "Laser Bike".
- [360] Alan Wrigley. "Dumping on the Epson". In: *Dragon User* (Feb. 1985), pp. 17–21. Screen dump to Epson printers written in machine code.
- [361] Brian Cadge. "Go Flex". In: *Dragon User* (Feb. 1985), p. 23. Review of the Flex Operating System.
- [362] Brian Cadge. "High-speed Compiler". In: *Dragon User* (Feb. 1985), p. 25. Review of the Dynafast BASIC compiler from Compusense.
- [363] Keith David. "Meander". In: *Dragon User* (Feb. 1985), pp. 26–27. BASIC type-in 2-player strategy game.
- [364] R. Paterson. "Directory". In: *Dragon User* (Feb. 1985), p. 29.

 BASIC type-in tape directory modelled on the version published in July 1984.
- [365] S. Azzopardi. "Alien". In: *Dragon User* (Feb. 1985), p. 31. BASIC type-in that draws a familiar alien creature.
- [366] Mark Bennett. "Stock control". In: *Dragon User* (Feb. 1985), pp. 31–33. BASIC type-in stock control utility program.
- [367] Mike Gerrard. "Mike Gerrard's Adventure Trail". In: Dragon User (Feb. 1985), p. 35.
 Mike Gerrard provides hints and tips on a range of adventures including El Diablero and Return of the Ring.
- [368] Gordon Lee, Jason Orbaum, and David Rowntree. "Bookbytes". In: *Dragon User* (Feb. 1985), p. 37. Book reviews: Dragon Programs (Duckworth); A Pocket Handbook for the Dragon (Duckworth); Introducing Pascal (Granada); The Beginner's Guide to Forth (Interface).
- [369] Brian Cadge. "Dragon Answers". In: *Dragon User* (Feb. 1985), p. 39.

 More advice from Brian Cadge on program entry points, the use of Pclear and various printer problems.
- [370] Gordon Lee. "Solid state for waxworks". In: *Dragon User* (Feb. 1985), p. 42. Win 20 copies of Waxworks from Channel 8 in this month's competition from Gordon lee. Competition: How many of each colour have I?
- [371] "Letters". In: *Dragon User* (Mar. 1985), p. 5. Manic Miner query, a change of mode, back issues and an Edit command tip.
- [372] "News". In: Dragon User (Mar. 1985), p. 7.

 The latest information on new software for the Dragon plus news of a bulletin board service for Dragon 64 owners. Design Design announce Rommel's Revenge, available mail order or from Tandy dealers; new bulletin board; German clubs after new members; Oron Software offer pre-printer 256x192 grid paper; Colossal Cave from Compusense; "4 Computer Buffs" from Thames Television on Channel 4, including school Prestel service Schoolink and bulletin board; new releases from Blaby; Touchmaster raise price of power pack, drops support line; Cotswold Computers to support Unicom modem; Scramble (Feb 1985) errata.
- [373] Brian Cadge. "In Flight". In: *Dragon User* (Mar. 1985), p. 10. Software reviews: 747 Flight Simulator (DACC Ltd); Worlds of Flight (Microdeal).
- [374] John Scriven. "Dragonsoft". In: *Dragon User* (Mar. 1985), p. 11.
 Software reviews: Draconian (Microdeal); Speed Racer (Microdeal); Cuthbert in the Cooler (Microdeal).
- [375] Hywel Francis. "Expansion port". In: *Dragon User* (Mar. 1985), p. 13. Hardware review: multi-cartridge Dragon expansion system by Race Electronics.

- [376] Xavier Devreker. "Mastermind!" In: *Dragon User* (Mar. 1985), pp. 14–15, 17. BASIC type-in game.
- [377] John Smith. "Doodling". In: *Dragon User* (Mar. 1985), pp. 18–19, 21. BASIC type-in turtle graphics program.
- [378] Robin Hamilton. "Sequential files on tape". In: *Dragon User* (Mar. 1985), pp. 22–23, 25.

 Robin Hamilton explains how sequential file techniques can be used to create a 200K database on tape.
- [379] John Nash. "Task Master". In: *Dragon User* (Mar. 1985), pp. 26–27. John Nash looks at some of the mysteries of the interrupt routine.
- [380] Iolo ap Gwynn. "Brick". In: *Dragon User* (Mar. 1985), p. 28. BASIC type-in game.
- [381] A. Daniel. "Mantukan Pyramid". In: *Dragon User* (Mar. 1985), pp. 29, 31, 33. BASIC type-in game.
- [382] Mike Gerrard. "Mike Gerrard's Adventure Trail". In: *Dragon User* (Mar. 1985), p. 35.

 Mike Gerrard provides hints and tips on a range of adventures including an incredible shrinking scientist. Castle of the Skull Lord, Franklin in Wonderland, The Shrunken Scientist.
- [383] Jason Orbaum and David Rowntree. "Bookbytes". In: *Dragon User* (Mar. 1985), p. 37.

 Book reviews: The Penguin Book of Personal Computing (Penguin); Forward 100 (Viking); FORTH for Micros (Newnes); Arcade Games in BASIC (Reston).
- [384] Brian Cadge. "Dragon Answers". In: *Dragon User* (Mar. 1985), p. 39.

 Another batch of timely advice from Brian Cadge, plus a routine to unplug the DOS cartridge using software.
- [385] Gordon Lee. "Reach out for the sky". In: *Dragon User* (Mar. 1985), p. 42. Win 15 copies of Worlds of Flight from Microdeal in this month's competition from Gordon Lee. Competition: This month's competition is to compute this exact number. It is quite easy using logarithms to find an approximation, but we require the number precisely.
- [386] "Letters". In: *Dragon User* (Apr. 1985), p. 4.

 Manic Miner query, pen friend wanted, Sheffield Dragon Users group, US Plea, Top Ten critic, and more.
- [387] "News". In: Dragon User (Apr. 1985), p. 7.
 6809 Show, new software, Compusense importing 64s, and Dragon speech synthesised. Jet Set Willy from Software Projects; Speakeasy printer-port speech synthesiser from J Morrison (Micros); Blaby to bring new games to 6809 Show; Adventure International to take over Channel 8's Mysterious Adventures; Vegas Jackpot from Mastertronic; Screaming Abdabs from A&F; Incentive Software say next title is a version of Confuzion.
- [388] Brian Hinson. "Artist". In: *Dragon User* (Apr. 1985), pp. 10–11. BASIC type-in drawing program.
- [389] Mark Beckham. "Battleships". In: *Dragon User* (Apr. 1985), pp. 12–13, 15. BASIC type-in game, "Computer Battleships".
- [390] Brian Lloyd. "Dragon bulletins". In: *Dragon User* (Apr. 1985), p. 15. News of a dial-up bulletin board.
- [391] Mark Varney. "Forth Protocol". In: *Dragon User* (Apr. 1985), pp. 16–17, 19. Mark Varney explains how Forth is used as a language.
- [392] Iolo ap Gwynn. "Dragonsoft". In: *Dragon User* (Apr. 1985), p. 21.
 Software reviews: Masterstroke 2 (PiKaDee Software); Moneybox (Harris Micro Software); Downland (Microdeal).
- [393] Pam D'Arcy. "The Dragon Roars". In: *Dragon User* (Apr. 1985), pp. 22–25. Pam D'Arcy shows how to make your Dragon talk back to you.
- [394] Vince Gledhill. "Heartbeat". In: *Dragon User* (Apr. 1985), pp. 29, 31. BASIC type-in program.
- [395] P. Howarth. "Conversion". In: *Dragon User* (Apr. 1985), pp. 31, 33. BASIC type-in units conversion program.

- [396] Mike Gerrard. "Mike Gerrard's Adventure Trail". In: *Dragon User* (Apr. 1985), p. 35. Mike Gerrard goes to the Circus, and enjoys a holiday in the strangely familiar Terror Castle.
- [397] Brian Cadge. "Dragon Answers". In: *Dragon User* (Apr. 1985), p. 41. Brian Cadge with his advice for agonised Dragon owners.
- [398] Gordon Lee. "Four Dragon 64s to be won". In: *Dragon User* (Apr. 1985), p. 42. Four Dragon 64s from Compusense can be won by solving a million problems or is it a problem about a million? set by Gordon Lee. Competition: This month's competition is to determine how many other powers to ten have two factors which do not contain zeros.
- [399] "Letters". In: *Dragon User* (May 1985), p. 4.

 A case of the uppers, booting the Exec, transatlantic troubles with Dragonquest, printer dump, and a flight of fancy.
- [400] "News". In: Dragon User (May 1985), p. 7.
 Eurohard and Compusense, Design Design, Mailbox, Combat Air Patrol, and more. New software from Design Design, Harris Micro Software, Addictive Games and Vidipix.
- [401] Mike Harrison and Brian Cadge. "Dragonsoft". In: *Dragon User* (May 1985), p. 9. Software reviews: Linkword, Darts (Computerware); Sky Joust (J Morrison Micros); Blockbuster (Computerware).
- [402] Phil Brooks. "Write on!" In: *Dragon User* (May 1985), pp. 10–14. Phil Brooks shows how to mix text and graphics on your Dragon.
- [403] P. G. Scott. "Correcting the faults and problems with Dragondos". In: Dragon User (May 1985), pp. 17–19.
 P G Scott solves the problems that face unwary users of Dragon DOS.
- [404] Ashley Watson. "Flash". In: *Dragon User* (May 1985), pp. 21–23. Machine code routine to flash words on screen.
- [405] Graham Smith. "Discwasher". In: *Dragon User* (May 1985), p. 25. BASIC type-in disc formatter.
- [406] Steve Gathercole. "Dump". In: *Dragon User* (May 1985), p. 25. BASIC type-in screen dump utility.
- [407] Mike Gerrard. "Mike Gerrard's Adventure Trail". In: Dragon User (May 1985), p. 27.
 Mike Gerrard offers succour for brain weary adventurers, and reviews the latest Scott Adams' offering for the Dragon, The Sorcerer of Claymorgue Castle.
- [408] Brian Cadge. "Dragon Answers". In: *Dragon User* (May 1985), p. 31.
 Brian Cadge with his pick of the reader's queries this month, an arrays problem, EXEC queries, Dragon 64 questions, and memory loss with Dragon DOS.
- [409] Gordon Lee. "The race is on to win the sprint". In: *Dragon User* (May 1985), p. 34.

 This month, you can win one of fifteen copies of Sprint Basic Compiler, donated by Oasis Software if you can solve tricky Gordon Lee's latest mathematical mind boggler. Competition: If I had such a table covering the squares from A to NUT, how many of the squares would form recognisable English words?
- [410] "Letters". In: *Dragon User* (June 1985), p. 5.

 I/O errors, Moneybox, Coventry club query, Manic Miner correspondence, pokes, King of the Hill, reader's poll and a slapped wrist.
- [411] "News". In: *Dragon User* (June 1985), p. 7.

 Websters drop Dragon software, Cumana 3" disks, Scott Adams, games users' group, Dragon MSX, and more. Printer Control from MacGowan Consultants; new adventures from Salamander Software; Alldream now available from Grosvenor Software; errata for P G Scott's DragonDOS article (May 1985).
- [412] Jason Orbaum. "Arcade addiction!" In: *Dragon User* (June 1985), pp. 9–13.
 Software reviews: The King (Microdeal); Manic Miner (Software Projects); Scramble (Microdeal); Rommel's Revenge (Design Design); Cuthbert in the Jungle (Microdeal); Frogger (Microdeal).
- [413] Pam D'Arcy. "The numbers game". In: *Dragon User* (June 1985), pp. 15–19. Machine code type-in disassembler.

- [414] Steve Gathercole. "Loony lunar lunchtime". In: *Dragon User* (June 1985), pp. 21–25. BASIC type-in game, "Moon Miner".
- [415] Jason Orbaum and Mike Gerrard. "Dragonsoft". In: *Dragon User* (June 1985), p. 27. Software reviews: Jet Set Willy (Software Projects); Syzygy (Microdeal); Jigsaw (Vidipix).
- [416] Mike Gerrard. "Mike Gerrard's Adventure Trail". In: *Dragon User* (June 1985), p. 29. Mike Gerrard with his monthly dose of adventurer's medicine. Caverns of Doom.
- [417] Brian Cadge. "Dragon Answers". In: *Dragon User* (June 1985), p. 31.

 The invaluable Brian Cadge with a selection of readers' problems and queries.
- [418] Gordon Lee. "Enter competition or Hulk smash!" In: *Dragon User* (June 1985), p. 34.

 Quizmaster Gordon Lee sets another brain teaser for your Dragon and there are 40 adventures from Adventure International to be won. Competition: compute square roots.
- [419] "Letters". In: *Dragon User* (July 1985), p. 4.
 American cousins, writer writes, National Users Group, and more.
- [420] "News desk". In: Dragon User (July 1985), p. 7.
 Repairs and add-ons from Race and Compusense, Dragon 128K, Adventurer's Club, North Eastern BBS, and communications from Cotswold Computers.
- [421] Jason Orbaum. "Dragon adventures". In: *Dragon User* (July 1985), pp. 9–11.
 Software reviews: Pi-Mania (Automata); Keys of the Wizard (Microdeal); Franklin's Tomb (Salamander Software); Caverns of Doom (Microdeal); Syzygy (Microdeal); Escape from Pulsar 7 (Channel 8 Software).
- [422] Brian Cadge. "Looking through the Dragon's windows". In: *Dragon User* (July 1985), pp. 12–17. Machine code type-in to add text windowing commands to BASIC.
- [423] Lee Noble. "Dragon database". In: *Dragon User* (July 1985), pp. 19–21. BASIC type-in database program, "DRAGBASE".
- [424] Roy Coates. "Manic-Miner cheats the official version". In: *Dragon User* (July 1985), p. 23. Roy Coates gives the authorised cheat method.
- [425] Roy Coates. "Address specific loading". In: *Dragon User* (July 1985), p. 23.

 Another Roy Coates routine how to put machine code programs just where you want them.
- [426] Rob Lee. "Greater than or less than?" In: *Dragon User* (July 1985), pp. 25–27. BASIC type-in game for children.
- [427] Mike Gerrard. "Mike Gerrard's Adventure Trail". In: *Dragon User* (July 1985), pp. 28–29.

 This month, Mike Gerrard takes a long look at Incentive Software's Ket Trilogy plus hints and tips on other adventures.
- [428] Brian Cadge. "Dragon Answers". In: *Dragon User* (July 1985), p. 31.

 Brian Cadge, the Dragon's doctor, with another of his monthly doses of timely medicine.
- [429] Gordon Lee. "Palindromic number puzzles". In: *Dragon User* (July 1985), p. 34.

 This month's competition looks like Gordon Lee got it all backwards but if you can sort out the answer, you can win one of 20 copies of Design Design's Rommel's Revenge. Competition: Can you fill in the missing five digits? Of course, you will have to work out the rest of the number too!
- [430] "Letters". In: *Dragon User* (Aug. 1985), p. 4.

 Letters from and about Pam D'Arcy, Moon Miner query, autorun problems and many more your forum for airing your views about the Dragon.
- [431] "News desk". In: *Dragon User* (Aug. 1985), p. 7.

 The Third 6809 Show to be held in November new programs from Blaby, Datacom and Microdeal, accounting packages from two companies, a 2.8" Quick Disk for the 64, plus Plus and more. Andtek Data Design supplies new screen sets to Plus users for free; Disk Doctor from Domino Computing.
- [432] Jason Orbaum et al. "Dragonsoft". In: *Dragon User* (Aug. 1985), pp. 9, 11.
 Software reviews: Football Manager (Addictive Games); Combat Air Patrol (Vidipix); Home Base (Cable Software); Printer Control (MacGowan Consultants); Dickie Spaceman (Quickbeam Software); Dickie's Den (Quickbeam Software).

- [433] A. C. Daniel. "Semigraphics 24". In: *Dragon User* (Aug. 1985), pp. 12–13, 15. Ever wanted to design colourful screen displays with text as well? A C Daniel shows you how.
- [434] Pam D'Arcy. "Disk Detective". In: *Dragon User* (Aug. 1985), pp. 17–19. BASIC type-in disk sector editor.
- [435] Peter Whittaker. "Zooming in on the screen". In: *Dragon User* (Aug. 1985), pp. 21–23. BASIC with machine code type-in, "Zoom", to magnify portions of the screen.
- [436] David Griffin. "Reverse". In: *Dragon User* (Aug. 1985), p. 24. BASIC type-in game.
- [437] Peter Whittaker. "Disk Explorations". In: *Dragon User* (Aug. 1985), pp. 25, 27. Peter Whittaker provides two disk utilities.
- [438] Mike Gerrard. "Mike Gerrard's Adventure Trail". In: *Dragon User* (Aug. 1985), pp. 28–29.

 Mike Gerrard, Master Sorcerer, with more tips and hints for the perplexed adventurers plus news of Dragon User's own adventure Help service. Final Countdown, Mansion of Doom, Stalag/Eno.
- [439] Brian Cadge. "Dragon Answers". In: *Dragon User* (Aug. 1985), p. 31.

 Brian Cadge with another month's worth of Dragon problems a cosmopolitan bunch this time around.
- [440] Gordon Lee. "Get set to win Jet Set Willy!" In: *Dragon User* (Aug. 1985), p. 34. Gordon Lee is his usual quizzical self Jet Set Willy is the prize. Competition: There are many such sets, but which is the smallest?
- [441] "Letters". In: *Dragon User* (Sept. 1985), p. 5.
 Problems with Super Writer II, a correction from MacGowan, another from Pam D'Arcy, a slap on the wrist from Roy Coates, a long list of locations for Cable Software's Fantasy Fight, games and utilities and a request for more data.
- [442] "News desk". In: *Dragon User* (Sept. 1985), p. 7.

 Eurohard's plans for the future revealed by Chief of Development Equipment Jordi Martinez, Compusense committed to 128K Dragon for the 6809 Show, a holiday for and with your Dragon, and new titles from MacGowan, Incentive and Compusense. Eddy Steady Go! from Incentive; Dumper from MacGowan Consultants; Word Processor for Flex from Compusense.
- [443] Peter Whittaker. "Coding the words". In: *Dragon User* (Sept. 1985), pp. 8–11, 13–14. Peter Whittaker with a machine code word processor for your Dragon. Type-in, "Wordproc".
- [444] Brian Cadge. "Firmware". In: *Dragon User* (Sept. 1985), p. 19.

 The first in a series of articles designed to build up into a complete guide to the secrets of the Dragon's ROM this month, Brian Cadge looks at the cassette operating system.
- [445] Mike Gerrard, Jason Orbaum, and Brian Cadge. "Dragonsoft". In: *Dragon User* (Sept. 1985), pp. 21–23, 25.

 Software reviews: Britannia (Keydata); Screaming Abdabs (A&F Software); Bandito (Pocket Money Software); Alldream (Grosvenor Software); Slide (Pocket Money Software); Disc Doctor (Domino Computing); Robin Hood (Pocket Money Software); Pit Fiend (Pocket Money Software); Daybook, Cashbook, Sales and Purchase Ledgers (Software Design); Fearless Freddie (Microdeal); Tea-time (Microdeal).
- [446] Pam D'Arcy. "The numbers game part two". In: *Dragon User* (Sept. 1985), pp. 26–27. Pam D'Arcy has had so much mail about her disassembler for beginners in the June issue that she has had to extend it this month, how to dump to printers, and loading machine code programs with offsets.
- [447] Mike Gerrard. "Mike Gerrard's Adventure Trail". In: *Dragon User* (Sept. 1985), pp. 28–29. Mike Gerrard brings succour to beleaguered adventurers. Don't Panic (Peaksoft), Escape from Hell House (Libra Software).
- [448] Brian Cadge. "Dragon Answers". In: *Dragon User* (Sept. 1985), p. 31.

 Brian Cadge with another session of questions and answers for Dragon owners all around the world.
- [449] Gordon Lee. "Competition Corner". In: *Dragon User* (Sept. 1985), p. 34.

 Gordon Lee produces another brain boggling problem the prizes this month are copies of A'n'F Software's Chuckie Egg and Screaming Abdabs. Competition: If you were to start with this number, can you determine how many steps would be needed in order to reduce it down to 1?

- [450] "Letters". In: *Dragon User* (Oct. 1985), p. 5. Soundbox and Sprite Magic, windows, congratulations, OS9 and a beginner's [com]plaint.
- [451] "News desk". In: *Dragon User* (Oct. 1985), p. 7.

 Give the Dragon some claws, latest from Compusense, new games from Wintersoft and Cumana enter Spain plus more. Juxtaposition from Wintersoft; Impsoft reduce price of Chicken Run and Fruity; new products from J Morrison (Micros): Animated Sprite Generator/Scenario Generator and Demon Development Cartridge; Chat communications program from Compusense on multiple formats.
- [452] Iolo ap Gwynn. "Basic Basic for your Dragon". In: *Dragon User* (Oct. 1985), pp. 8–9, 11, 13. Iolo ap Gwynn has some basic advice for beginners on how to tidy up your listings. Includes BASIC type-in game, "Simon".
- [453] Brian Hinson. "Zippy titles!" In: *Dragon User* (Oct. 1985), pp. 15–17.

 Brian Hinson shows you how to add some zip to your programs with a routine which designs text screens. BASIC type-in.
- [454] Brian Cadge. "Firmware". In: *Dragon User* (Oct. 1985), p. 19.
 Brian Cadge continues his series on the Dragon's ROM this month, he wraps up the Cassette Operating System.
- [455] Peter Whittaker. "Doing the Splitz on your Dragon". In: *Dragon User* (Oct. 1985), pp. 21, 23–25. Peter Whittaker wanted to have text and graphics on screen together, but without writing text to the graphic screen here's how he managed it.
- [456] Mike Gerrard. "Mike Gerrard's Adventure Trail". In: *Dragon User* (Oct. 1985), pp. 28–29. Mike Gerrard with a page and a half of useful information for people stuck in adventures.
- [457] Jason Orbaum and Brian Cadge. "Dragonsoft". In: *Dragon User* (Oct. 1985), p. 30. Software reviews: The Games Cassette (Datacom); Dumper (MacGowan Consultants); Bubble Buster (Microdeal).
- [458] Brian Cadge. "Dragon Answers". In: *Dragon User* (Oct. 1985), p. 31. Brian Cadge back again with advice for those confused by the Dragon's jungle.
- [459] Gordon Lee. "Competition Corner". In: *Dragon User* (Oct. 1985), p. 34.

 Manic Miner from Software Projects is the prize this month, Gordon Lee sets the challenge.
- [460] "Letters". In: Dragon User (Nov. 1985), p. 5.
 Votes of thanks for information received, in defence of Super Writer, 68 Micro Group changes, a question of values, and some misgivings about the Third 6809 Show.
- [461] "News desk". In: *Dragon User* (Nov. 1985), p. 7.
 6809 Show blues who's running it? not the 6809 Show, Microdeal opts out of distribution, Wintersoft changes plans, bytes into a Danish, watch out for a Total Eclipse, how to be Harvey Smith, and BBSO9. Wintersoft split Juxtaposition into two: first part called "Barons of Ceti V"; Show-Jump from Computerware; Eclipse Software announce Total Eclipse.
- [462] Steve Gathercole. "Clay shooting!" In: *Dragon User* (Nov. 1985), pp. 8–9, 11, 13. BASIC with machine code type-in game, "Clay Shoot".
- [463] Roy Coates. "Dragon graphics". In: *Dragon User* (Nov. 1985), p. 15.

 Roy Coates, the man who created the Dragon version of Software Projects' Manic Miner, lets out a few trade secrets in how to get great graphics on your micro.
- [464] Pam D'Arcy. "Dragon Bingo!" In: *Dragon User* (Nov. 1985), pp. 17, 19, 21. BASIC type-in game.
- [465] Roy Coates. "A Plus for the Dragon". In: *Dragon User* (Nov. 1985), pp. 25, 27. Roy Coates reviews the Plus cartridge from Andtek Data Design.
- [466] Jason Orbaum, Mike Gerrard, and John Scriven. "Dragonsoft". In: *Dragon User* (Nov. 1985), pp. 29–30, 33–34.

 Software reviews: Cosmic Crusader (Blaby Software); Diamond Dash, Diamond Dash 2 (Starship Software); Star Swoop (Blaby Software); Endless Noughts and Crosses (R & P International); Black Tower (Thrillsoft); Datafall (Microdeal); Caverns of Chaos (Blaby Software); Learn BASIC Programming on the Dragon 32 (Logic 3, book); Toppler (Microdeal); Olympia (Blaby Software); Fingers (Blaby Software).

- [467] Mike Gerrard. "Mike Gerrard's Adventure Trail". In: *Dragon User* (Nov. 1985), pp. 36–37. Mike Gerrard with a page and a half of hints, tips and reviews for the dedicated Dragon adventurer this month he looks at Compusense's version of the first ever adventure, and Scott Adams' first title, inspired by the same game: Crowther and Woods' Advent.
- [468] Brian Cadge. "Dragon Answers". In: *Dragon User* (Nov. 1985), p. 39.

 Brian Cadge with another month's worth from his bulging mail-bag: if you have a Dragon problem, why don't you drop him a line?
- [469] Brian Cadge. "Firmware". In: *Dragon User* (Nov. 1985), p. 41.

 This month it is the turn of the Text Input and Output section of the Dragons' ROM. The routines in the 'Text Manager' deal with reading the keyboard, and writing characters to the screen and printer.
- [470] Gordon Lee. "Competition Corner". In: *Dragon User* (Nov. 1985), p. 42.
 Gordon Lee sets another mind tickling puzzle this month Design Design provide the prizes: 20 copies of Dark Star, their new space strategy game.
- [471] "Letters". In: *Dragon User* (Dec. 1985), p. 4.

 Yet more Jet Set Willy correspondence and Roy Coates tells how to cheat! Plus pleas for help and advice, and more.
- [472] "News desk". In: *Dragon User* (Dec. 1985), p. 7.

 The 6809 Show who will be there, and what they will be showing; Pam D'Arcy sets up her own company; Grosvenor and Harris release programs; and Microdeal goes on the road.
- [473] Peter Whittaker. "The Dragon draws in two dimensions". In: *Dragon User* (Dec. 1985), pp. 9, 11, 13, 15.

 Peter Whittaker shows how you can give your flat screen the illusion of depth not for beginners.
- [474] Roy Collinson. "Machine code made simple". In: *Dragon User* (Dec. 1985), pp. 16–17. Roy Collinson takes you through some easy machine code routines.
- [475] Brian Cadge. "Firmware". In: *Dragon User* (Dec. 1985), p. 23.

 This month we take a look at the graphics and sound sections of the Dragon's ROM. These can be usefully used in machine code programs for setting up elaborate displays, and for playing music, but for fast action games customised routines will be needed.
- [476] Steve Gathercole. "Fire torpedo one!" In: *Dragon User* (Dec. 1985), pp. 26, 28. Steve Gathercole shows you how to re-create a classic game from the arcades. Machine code with BASIC type-in.
- [477] Mike Gerrard, Jason Orbaum, and Brian Cadge. "Dragonsoft". In: *Dragon User* (Dec. 1985), pp. 29–31. Software reviews: Juxtaposition (Wintersoft); Dark Star (Design Design); Trekboer (Microdeal); Eddie Steady Go! (Incentive Software); Show-jump (Computerware); Mailbox (Harris Micro Software).
- [478] Brian Cadge. "Dragon Answers". In: *Dragon User* (Dec. 1985), p. 33. Yet more questions answered by Brian Cadge.
- [479] Mike Gerrard. "Mike Gerrard's Adventure Trail". In: *Dragon User* (Dec. 1985), pp. 35, 37. Mike Gerrard gets even more space this month, by popular demand. He looks at two of Scott Adams' adventures, and answers the usual pile of queries from frustrated adventurers.
- [480] Steve Gathercole. "Cat and mouse!" In: *Dragon User* (Dec. 1985), pp. 38–39, 41. A game for four to six year olds from Steve Gathercole. BASIC type-in.
- [481] Roy Coates. "The Dragon's Claw". In: *Dragon User* (Dec. 1985), pp. 42–43. Roy Coates looks at an interesting new development in Dragon peripherals.
- [482] Gordon Lee. "Competition Corner". In: *Dragon User* (Dec. 1985), p. 46.
 Gordon Lee sets the question, and includes a puzzling little Christmas bonus program Microdeal provide 20 copies of Trekboer as the prize.
- [483] "News desk". In: Dragon User (Jan. 1986), p. 4.
 Microdeal's roadshow results Dragon robotics from Lucidata Incentive new release 6809 Show stop press.
- [484] "Letters". In: *Dragon User* (Jan. 1986), p. 6.

 The economics of contributing Dragon Beach head Dragon Plus query National Dragon Users Group.

- [485] Roy Coates. "Dragon Plus". In: *Dragon User* (Jan. 1986), pp. 9–10. The ultimate expansion for the Dragon? Roy Coates checks it out.
- [486] Gareth Fenton. "Advanced Basic". In: *Dragon User* (Jan. 1986), pp. 13–15.

 Tighten up your Basic programming technique while you play Bomber from the keyboard of Gareth Fenton. BASIC type-in game.
- [487] Pam D'Arcy. "The Joyful Dragon". In: *Dragon User* (Jan. 1986), pp. 17–18.

 The mysteries of joystick operation explained by Pam D'Arcy. Including a machine code type-in joystick testing program.
- [488] John Boyes. "Dragon Logic". In: *Dragon User* (Jan. 1986), p. 20.

 Logical operations revealed and how to use them in your own programs... binary will never be the same again.
- [489] Jason Orbaum, Mike Gerrard, and David Rowntree. "Dragonsoft". In: *Dragon User* (Jan. 1986), p. 24. Software reviews: The Sword and the Sorcerer (Blaby Software); The Dark Pit (Microdeal); Music Master (Golden Key Software).
- [490] Mike Gerrard. "Mike Gerrard's Adventure Trail". In: *Dragon User* (Jan. 1986), pp. 26, 28. It's that man Mike Gerrard again and this month more about Scott Adams. Also help with Syzygy and the Clog-Dancing Shepherds of Milton Keynes.
- [491] Robin Beard. "Cheat Sheet!" In: *Dragon User* (Jan. 1986), pp. 30–31.

 A cheat program plus maps should help out the baffled in Return of the Ring, thanks to Robin Beard.
- [492] Brian Cadge. "The Dragon means business". In: *Dragon User* (Jan. 1986), p. 32.
 Brian Cadge examines a suite of professional business programs. Software reviews: Invoicing, Stock Recording, Sales Ledger, Purchase Ledger, Labelling (Compusense).
- [493] Brian Cadge. "Dragon Answers". In: *Dragon User* (Jan. 1986), p. 30. Another batch of puzzled readers enlightened by our resident expert Brian Cadge.
- [494] Brian Cadge. "Firmware". In: *Dragon User* (Jan. 1986), p. 38.

 This month we cover the control of Basic variables (simple numeric and strings). This information will be of use mainly to the programmer who wishes to add new commands/USR routines to Basic.
- [495] Gordon Lee. "Competition Corner". In: *Dragon User* (Jan. 1986), p. 42. Gordon Lee sets another poser - this time with the New Year firmly in mind... and this month, 25 pairs of Melbourne House tapes are up for grabs.
- [496] "News desk". In: Dragon User (Feb. 1986), p. 4.
 New Dragon show in South Wales Details of next Dragon weekend away Incentive 6809 Show competition results Two new software houses.
- [497] "Letters". In: *Dragon User* (Feb. 1986), p. 6.

 More controversial correspondence from the Dragon community Lack of Tandy support at 6809 show the 6809 show... was it worth the effort?
- [498] Jason Orbaum. "Show Business!" In: *Dragon User* (Feb. 1986), pp. 10–11. He came, he saw, he did a little shopping Jason Orbaum throws objectivity to the wind and gives you one man's view of November's 6809 show his own.
- [499] Mike Gerrard. "Taking the tablets". In: *Dragon User* (Feb. 1986), pp. 12, 14.

 The Touchmaster graphics tablet at its new low price Mike Gerrard takes some time off from adventuring to check it out and draws some interesting conclusions.
- [500] Peter Whittaker. "The Third Dimension". In: *Dragon User* (Feb. 1986), pp. 16, 18–20. Peter Whittaker does it again get some stunning 3-D effects from your Dragon with these programs. Never mind the theory just look at those graphics. Includes BASIC type-in programs.
- [501] Brian Hinson. "Donkey's Tail". In: *Dragon User* (Feb. 1986), pp. 22–28.

 A computer version of that old family favourite from the keyboard of Brian Hinson. BASIC type-in game.
- [502] Jason Orbaum. "Dragonsoft". In: *Dragon User* (Feb. 1986), p. 29. Software review: Shocktrooper (Microdeal).

- [503] Brian Cadge. "Dragon Answers". In: *Dragon User* (Feb. 1986), p. 30.
 Brian Cadge gets to grips with the latest batch of battered, bewildered and bemused Dragon enquiries, and comes up with some helpful answers.
- [504] Mike Gerrard. "Mike Gerrard's Adventure Trail". In: *Dragon User* (Feb. 1986), pp. 32, 34. Mike Gerrard starts a new beginners' section, on the subject of mazes get out of that if you can. Also Castle Blackstar and Sam Buick come under the microscope.
- [505] Brian Cadge. "Firmware". In: *Dragon User* (Feb. 1986), p. 37.

 This month we look at the various firmware 'vectors' used for Reset, Interrupts and Expansion.
- [506] Gordon Lee. "Seeing stars". In: *Dragon User* (Feb. 1986), p. 38.

 With Valentine's Day in the offing, Gordon Lee's in the mood for love and there are 25 games to be won from those old warhorses, Incentive Software.
- [507] "Letters". In: Dragon User (Mar. 1986), p. 4.
 Melbourne House Book errata New bulletin board Pope Gregory XIII shock horror More Pokes for your favourite Dragon games National Dragon Users Group... buy of the Year?
- [508] "News desk". In: Dragon User (Mar. 1986), p. 6.
 1986 gets off to a slow start Incentive announce new release and silence the critics Delay on Wintersoft's Juxtaposition II... inside for details Dispatch delay at Eclipse-Fenmar.
- [509] Dave Rogers and Colin Hogg. "Flee! Flea!" In: *Dragon User* (Mar. 1986), pp. 8–9, 12.

 The ultimate maze game for your Dragon this one is hot! Brought to your computer by the programming team of Colin Hogg and Dave Rogers. BASIC with machine code support routines type-in.
- [510] Jason Orbaum. "Machine code for humans". In: *Dragon User* (Mar. 1986), p. 14. So he's not just a pretty face... Jason Orbaum et al. start a series on machine code for humans! Don't miss it.
- [511] Peter Whittaker. "The Logical Dragon". In: *Dragon User* (Mar. 1986), pp. 16–18. Peter Whittaker shows you how to make your Dragon learn with this expert systems program.
- [512] Brian Cadge and Jason Orbaum. "Reviews". In: Dragon User (Mar. 1986), p. 19.
 Reviews: Disk Utilities (Ian Elkington); Mail War (GP Guardians); DRAGONDOS Programmer's Guide (Grosvenor Software).
- [513] Pam D'Arcy. "Mixing it with Basic". In: *Dragon User* (Mar. 1986), pp. 20–22. Pam D'Arcy time again. This month a detailed look at passing values from Basic to machine code. Check it out.
- [514] Brian Cadge. "Firmware". In: *Dragon User* (Mar. 1986), p. 23.

 This month we look at the Miscellaneous Firmware locations and routines. These are those not already covered which do not fall into any particular category, but which may be of use.
- [515] Steve Gathercole. "Cupid Cupid". In: *Dragon User* (Mar. 1986), pp. 24–27.

 Ah... it's Springtime and romance is in the air. Steve Gathercole rises to the occasion in the shape of this arcade gem in 100% code.
- [516] Brian Cadge. "Dragon Answers". In: *Dragon User* (Mar. 1986), p. 28.

 Brian Cadge consults the oracle of Delphi and comes back with some useful answers to a whole bunch of readers' enquiries.
- [517] Mike Gerrard. "Mike Gerrard's Adventure Trail". In: *Dragon User* (Mar. 1986), pp. 29–30. Mike Gerrard is in a particularly helpful mood this month.
- [518] C. L. Naylar. "Puzzle it out!" In: *Dragon User* (Mar. 1986), p. 31. Construct your own wordsearch puzzles using this program sent in to us by C L Naylar.
- [519] Gordon Lee. "March Puzzle". In: *Dragon User* (Mar. 1986), p. 34.
 Gordon Lee sets the pace and this month there are 25 copies of Quickbeam's 6809 express to be won.
- [520] "News desk". In: Dragon User (Apr. 1986), p. 4.
 Quickbeam 'Shaolin Master' update Show report from Cardiff Plus follow-up Show in Leeds Microdeal to organise two conventions this year Details inside Plus Total Eclipse update... and more!

- [521] "Letters". In: *Dragon User* (Apr. 1986), p. 6.

 This month (amongst others) more bulletin board numbers update on OS-9 users group the very last word on transformers plus your letter (whoops... that's next month, isn't it?)
- [522] "Dragon User People's Chart". In: *Dragon User* (Apr. 1986), p. 7.

 This is it, the results of the first People's Chart, compiled by you, the Dragon User plus your chance to vote in Chart Number Three. Vote! Vote! Vote!
- [523] Peter Whittaker. "Any Questions?" In: *Dragon User* (Apr. 1986), pp. 8, 10–11.

 They say everyone's an expert at something so why not try creating your own expert system, using this program by Peter Whittaker.
- [524] Roy Coates. "Getting in control". In: *Dragon User* (Apr. 1986), pp. 12–13.

 The new MXT controller, from Compusense, opens up vast new applications for your Dragon from burglar alarm to teasmaid. Was Roy Coates impressed? Read on for details.
- [525] Steve Gathercole. "Countdown". In: *Dragon User* (Apr. 1986), pp. 14–16, 21.

 The Earth is in peril yet again and naturally, only you can save it. Defuse the three bombs that are set to blow our world to bits... all in machine code from the keyboard of Steve Gathercole. Machine code type-in game with supporting BASIC.
- [526] Jason Orbaum and Geoffrey Campbell. "Heart of the matter". In: *Dragon User* (Apr. 1986), pp. 22–24. Messrs Jason Orbaum and Geoffrey Campbell continue our exploration into the world of machine code this month discussing chip architecture and flow-charting.
- [527] Jason Orbaum. "Dragonsoft". In: *Dragon User* (Apr. 1986), p. 26. Software reviews: Copta Snatch (Blaby Software); Draconian (Microdeal); Zak's Son (Cable, via Computape).
- [528] Brian Cadge. "Dragon Answers". In: *Dragon User* (Apr. 1986), p. 28.

 More technical answers to a whole bunch of readers technical... and not-so-technical questions... from the keyboard of the awesomely knowledgeable Brian Cadge.
- [529] Mike Gerrard. "Mike Gerrard's Adventure Trail". In: *Dragon User* (Apr. 1986), pp. 29–30. Mike Gerrard collects the usual assortment of waifs and strays of the adventure world and puts them back on the straight and narrow. Tips galore...
- [530] Brian Cadge. "Firmware". In: *Dragon User* (Apr. 1986), p. 32.

 All good things come to an end... and judging by the mail bag, this one has been particularly popular.

 The final instalment of the Dragon Firmware guide. DragonDOS memory map, hardware locations and firmware routines.
- [531] Gordon Lee. "Taking chances". In: *Dragon User* (Apr. 1986), p. 34.
 Gordon Lee ponders the improbables this month and sets his usual brain teaser which presents you with a chance to win a copy of Micro Vision's Beanstalker. Competition: Can you say how many volunteers there were? As a clue, there are fewer than you might, at first, think!
- [532] "Letters". In: *Dragon User* (May 1986), p. 4.
 User group in Germany seeks contacts Pope Gregory the controversy continues cowboy computer repairs a cautionary tale and many more.
- [533] "News desk". In: Dragon User (May 1986), p. 6.
 Details of Leeds show McGowan go to Golders Green how to stop that mains interference free Dos manuals from Cumana.
- [534] "Dragon User People's Chart". In: *Dragon User* (May 1986), p. 6. You came, you saw, you voted - a new number one and a new chart entry - it's all there.
- [535] Jason Orbaum and Brian Cadge. "Dragonsoft". In: *Dragon User* (May 1986), p. 8. Software reviews: Total Eclipse (Eclipse-Fenmar); Beanstalker (Micro Vision); Disk-Kit (Pamcomms Ltd).
- [536] The Expert. "Expert's Arcade Arena". In: *Dragon User* (May 1986), p. 9. Yup... by public demand... your very own arcade feature devoted to Dragon arcade games - written by the mysterious "Expert". Pokes, hints, tips - we want them!
- [537] Jason Orbaum and Geoffrey Campbell. "Operation Code". In: Dragon User (May 1986), pp. 10–11.

- This month, Orbaum and Campbell hand out the first helping of actual code can your brain handle it?
- [538] Pat McCabe and Colin Turner. "Knight Games". In: *Dragon User* (May 1986), pp. 12–16. Moving down a gear from our normal arcade action, this month we present an intriguing chess-based puzzle, all in machine code thanks to Pat McCabe and Colin Turner. Machine code type-in game.
- [539] Peter Whittaker. "Taking Control". In: *Dragon User* (May 1986), pp. 22–25.

 For those of you following the Machine Code Tutor series, but without an assembler this could be what you're looking for from the keyboard of Peter Whittaker. Machine code type-in.
- [540] Brian Cadge. "Pure Speculation!" In: *Dragon User* (May 1986), pp. 26–27.

 This year's Budget gave a boost to small investors so Brian Cadge was asked to take stock of Sharebox. Software review of Sharebox (Harris Micro Software).
- [541] Brian Cadge. "Dragon Answers". In: *Dragon User* (May 1986), p. 28.

 Brian Cadge takes a lucky dip out of the mail bag and sets to right one or two of those annoying Dragon wrongs.
- [542] Mike Gerrard. "Mike Gerrard's Adventure Trail". In: *Dragon User* (May 1986), pp. 30, 32.

 This time, Mike Gerrard treads boldly where no Dragon reviewer has gone before, into the outer reaches of the Universe and is still back in time to help a few stranded adventurers.
- [543] Gordon Lee. "The Numbers Game". In: *Dragon User* (May 1986), p. 34.

 Gordon Lee is out to tease your brains again and with the lure of the chance of winning a copy of Kung Fu The Master from Blaby how can you resist? Competition: Can you determine what the odds would be of all 36 of the dice coming to rest with the sixes uppermost?
- [544] John Cook. "Editorial". In: *Dragon User* (June 1986), p. 3. Last Dragon User before it goes subscription-only.
- [545] "Letters". In: *Dragon User* (June 1986), p. 4. Mail (Martin Parker); Poke Error (Andrew Jenkins); Co-Co Flee (P. A. Chirico); Flee Flaw? (Danny Bowles); Upgrade (Robert Hammond); 2+2=4 (Pam D'Arcy); Hunter (Dawn Gamble); Co-Co Club (S. R. Kilcoin); Fringe (Stan Opyrchal).
- [546] "Dragon User People's Chart". In: *Dragon User* (June 1986), p. 5.

 The only nationwide poll of what you think is the best in Dragon Software compiled each month by you, the consumer. Vote, vote, vote!
- [547] "News desk". In: *Dragon User* (June 1986), p. 6.
 Charity tape on the cards for the Dragon Advance news of new Incentive release Dragon week-end that was 6809 Convention and more... Page Six for full details.
- [548] Roy Coates and Brian Cadge. "Dragonsoft". In: *Dragon User* (June 1986), p. 8. Software reviews: Moon Cresta (Incentive Software); Diskpix (Pamcomms Ltd); Printer Control (MacGowan Consultants).
- [549] Roy Coates. "On-line Computing". In: *Dragon User* (June 1986), p. 10.
 Beginning an occasional series, Roy Coates takes a look at communications starting with Chatplus 2 and Viewdata (Compusense).
- [550] Steve Gathercole. "Jaws!" In: *Dragon User* (June 1986), pp. 12–15.

 Just when you thought it was safe to go back to the keyboard... arcade action from Steve Gathercole.

 Machine code type-in game.
- [551] Jason Orbaum. "Changing bases". In: *Dragon User* (June 1986), pp. 16–17.

 Eyes down for the next lesson this month, we deal with number bases the theory behind decimal, hex and binary notation.
- [552] Peter Whittaker. "Graphic Display". In: *Dragon User* (June 1986), pp. 18–22. Have you ever wanted to put text on to the graphics screen even program from the graphics screen! Peter Whittaker shows you how.
- [553] Pam D'Arcy. "Danger Zone". In: *Dragon User* (June 1986), p. 24.

 The in's and out's of the Clear command on the Dragon explained by Pam D'Arcy.

- [554] Brian Cadge. "Dragon Answers". In: *Dragon User* (June 1986), p. 26.

 Questions, questions... Brian Cadge once again stretches his might and comes up with some answers for those annoying technical problems.
- [555] The Expert. "Expert's Arcade Arena". In: *Dragon User* (June 1986), p. 28.

 The mysterious Expert mumbles on incoherently for your delectation more useful Pokes this month, plus a competition for those with a good memory.
- [556] Mike Gerrard. "Mike Gerrard's Adventure Trail". In: *Dragon User* (June 1986), pp. 30, 32. Mike Gerrard reporting again this time focusing on Space Trek II... plus the usual bunch of clues and tips for the troubles adventurers.
- [557] Gordon Lee. "June Puzzle". In: *Dragon User* (June 1986), p. 34.
 Gordon Lee takes a random walk around number generation and sets this month's poser. Competition: However, can you find a four-digit number, all of its digits being different, which repeats itself after four operation?
- [558] Helen Armstrong. "Editorial". In: *Dragon User* (July 1986), p. 1. Dragon User goes subscription-only.
- [559] "Letters". In: *Dragon User* (July 1986), p. 2. Air your opinions about the whole Dragon world, before the eyes of thousands.
- [560] "Dragon User People's Chart". In: *Dragon User* (July 1986), p. 3. Find out which program everyone else is buying - and send in your top five - you could win £25!
- [561] "News desk". In: *Dragon User* (July 1986), p. 4.

 The future of your Dragon we ask the experts tidy your computer 6809 convention revealed.
- [562] Jason Orbaum. "Dragonsoft". In: *Dragon User* (July 1986), p. 6. Software reviews: Aquanaut 471, The Vortex Factor, Rommel 3-D (Microdeal).
- [563] M. Croucher. "Down The River". In: *Dragon User* (July 1986), pp. 7–11. Machine code type-in game, "Canoe".
- [564] Geoff Ettridge. "Choosing a Disk Drive". In: *Dragon User* (July 1986), pp. 12–13.

 Are you thinking of upgrading to a Disc Drive? Read this first it contains some invaluable advice.
- [565] Brian Cadge. "Dragon Answers". In: *Dragon User* (July 1986), p. 14.
 Brian Cadge collects his usual assortment of waifs and strays and puts them back on the straight and narrow.
- [566] Dr. A. Daniel. "Journey Planner". In: *Dragon User* (July 1986), pp. 15–17.

 Here's a useful program for the summer holidays plan your car journeys on your Dragon. Try it and see! BASIC type-in utility.
- [567] Peter Whittaker. "Extra Graphics". In: *Dragon User* (July 1986), pp. 18–23.

 Peter Whittaker wasn't satisfied with his Touchmaster Graphics software so he wrote his own. This is it! BASIC with machine code type-in.
- [568] The Expert. "Expert's Arcade Arena". In: *Dragon User* (July 1986), pp. 24–25.
 Who is this man? What is his name? How much are we paying him? This month, finally a Jet Set Willy map.
- [569] Mike Gerrard. "Mike Gerrard's Adventure Trail". In: *Dragon User* (July 1986), pp. 26, 28. Mike Gerrard time again with his usual batch of news and help for stranded adventurers.
- [570] Gordon Lee. "Mind The Cracks". In: *Dragon User* (July 1986), p. 30.

 Gordon Lee hops from slab to slab in pursuit of this month's prizes some great incentives.
- [571] "Letters". In: *Dragon User* (Aug. 1986), p. 2.

 Two new User Groups a routine to change the cursor shape questions about the Dragon Plus add on Back issues.
- [572] "Dragon User People's Chart". In: *Dragon User* (Aug. 1986), p. 3. Vote for your five favourite Dragon programs, dream up an entertaining anagram, and win £25 in software.
- [573] "News desk". In: *Dragon User* (Aug. 1986), p. 4.
 Wither Eclipse-Fenmar? new games software on the way 6809 Christmas Show details.

- [574] Jason Orbaum. "Dragonsoft". In: *Dragon User* (Aug. 1986), p. 6. Software reviews: Superbowl (Cable, via Computape); Lazer Zone (Microdeal); Ruby Robba (Blaby).
- [575] Roy Coates. "What a wonderful show!" In: *Dragon User* (Aug. 1986), p. 7.
 Roy Coates, who should be at home writing some more games, reports from the John Penn Dragon show at Ossett Town Hall, where he saw some new software.
- [576] Jason Orbaum. "Flag And Branch". In: *Dragon User* (Aug. 1986), pp. 8–9. Part Five of our machine code series Jason Orbaum waves the flags.
- [577] Geoffrey Campbell. "Addressing Modes". In: *Dragon User* (Aug. 1986), pp. 9–10. Part six follows fast, with Geoff Campbell on the spot.
- [578] Brian Cadge. "Dragon dialects". In: *Dragon User* (Aug. 1986), pp. 11–12.

 Beginning a new series on language alternatives to Dragon basic, Brian Cadge looks into Pascal.
- [579] Brian Cadge. "Dragon Answers". In: *Dragon User* (Aug. 1986), p. 13.

 We have the answers on extra graphics storage, disk interfacing, and DeltaDOS but what are the questions?
- [580] Dennis Riley. "Screen Designer". In: *Dragon User* (Aug. 1986), pp. 14–20. Use all the Dragon's graphics and text facilities to design, save and display custom screen. Machine code type-in.
- [581] Jonathan Bates. "Sound Ability". In: *Dragon User* (Aug. 1986), pp. 20–22.

 A set of routines to make the most of the Dragon's sound capabilities which are larger than you might think. Machine code type-ins.
- [582] Pam D'Arcy. "Sliding Graphics". In: *Dragon User* (Aug. 1986), pp. 23–25.

 Pam D'Arcy uses her basic to write a non-arcade graphics game, and explains the techniques as she goes. BASIC type-in game.
- [583] The Expert. "Expert's Arcade Arena". In: *Dragon User* (Aug. 1986), pp. 26–27.

 Not only a map of The Dark Pit but a listing to save Total Eclipse game [Total Eclipse Savegame Editor]. We haven't tested it. This is live publishing!
- [584] Mike Gerrard. "Mike Gerrard's Adventure Trail". In: *Dragon User* (Aug. 1986), pp. 28–29. Mike Gerrard with problems and solutions, and a closer look at Aquanaut 471.
- [585] Gordon Lee. "Mini Maths". In: *Dragon User* (Aug. 1986), p. 30. Lots of little puzzles this month but you need only solve one of them to win the prize.
- [586] "Letters". In: *Dragon User* (Sept. 1986), p. 2. Some Poke corrections - a left over Lee listing - new user groups - pleas for more OS-9 - missing persons.
- [587] "Dragon User People's Chart". In: *Dragon User* (Sept. 1986), p. 3.

 Find out which is the software flavour of the month, and what wit wins the £25 worth of Microdeal software.
- [588] "News desk". In: *Dragon User* (Sept. 1986), p. 4.

 FREE to Dragon User readers, a limited run of Dragon 32 reference cards Dragon internal hardware bargains new software for the Trojan light pen.
- [589] Jason Orbaum and Roy Coates. "Dragonsoft". In: *Dragon User* (Sept. 1986), p. 6. Software reviews: Boulder Crash (Blaby); The Curse of Camarc (K. Hunter); Temple of Doom (Blaby).
- [590] J. Hewitt. "Counties Quiz". In: *Dragon User* (Sept. 1986), pp. 7–12. You can test yourself to distraction with this game of 52 separate counties and districts in the British Isles. BASIC type-in quiz game.
- [591] Pam D'Arcy. "Books and Machine Code". In: *Dragon User* (Sept. 1986), pp. 12–14. Pam D'Arcy has heard a thousand questions on machine code and other subjects, so she has rounded up the books where she looks to find the answers.
- [592] C. C. A. Smith. "PUT ... EOR". In: Dragon User (Sept. 1986), p. 15.
 C.C.A. Smith adds an exclusive OR to PUT and shows everyone up. Machine code type-in with BASIC demonstration.

- [593] Ziv Eliraz. "Core Wars". In: *Dragon User* (Sept. 1986), pp. 16–21.

 In the heard of the Dragon, program hunts program with Red Code, pitting subtlety against stealth.

 Machine code with BASIC type-in game.
- [594] Geoff Campbell and Jason Orbaum. "Get Logical". In: *Dragon User* (Sept. 1986), p. 22. Geoff Campbell and Jason Orbaum take a step towards the intimidating but, not really dangerous subject of Boolean algebra.
- [595] Jason Orbaum. "Scott Adams Adventures". In: *Dragon User* (Sept. 1986), p. 22. The first in an occasional series of retrospectives on the adventures of Scott Adams.
- [596] Mike Hosken. "Mini Logo". In: Dragon User (Sept. 1986), pp. 24–26.BASIC type-in turtle graphics.
- [597] Brian Cadge. "Dragon Answers". In: *Dragon User* (Sept. 1986), p. 27. Brian Cadge another page of advice and technical answers from the mailsack.
- [598] The Expert. "Expert's Arcade Arena". In: *Dragon User* (Sept. 1986), p. 28. The Expert takes issue with another set of arcade pokes, advice and arguments.
- [599] Mike Gerrard. "Mike Gerrard's Adventure Trail". In: *Dragon User* (Sept. 1986), pp. 29–30. The secrets of Juxtaposition unlocked.
- [600] Gordon Lee. "Prime Examples". In: *Dragon User* (Sept. 1986), p. 31.

 Gordon Lee sends a Dragon to catch a wild goose or two. Competition: How many solutions can you find?
- [601] "Letters". In: *Dragon User* (Oct. 1986), pp. 2–3.

 Amateur radio voice overs on tape random numbers any Delta DOS users? a lost Bridge cartridge easy deletions corrections and suggestions.
- [602] "News desk". In: Dragon User (Oct. 1986), p. 4.
 Dragon power supplies more cheap spares adventure from Maridian utility from Pamcomms NDUG new DU delivery date.
- [603] "Dragon User People's Chart". In: *Dragon User* (Oct. 1986), p. 5.

 This month's top five games and an opportunity to win £25 worth of software.
- [604] Jason Orbaum. "Dragonsoft". In: *Dragon User* (Oct. 1986), p. 5. Software reviews: Cassette 50 (Cascade Games), Electronic Author (Smithson Computing).
- [605] Pam D'Arcy. "Disc rescue". In: *Dragon User* (Oct. 1986), pp. 7–8. Pam D'Arcy rescues good sectors from a corrupted disc.
- [606] P. Whittaker. "Fault Line". In: *Dragon User* (Oct. 1986), pp. 9–11. Create landscapes in BASIC with hidden line removal.
- [607] David Berry. "Mission impossible". In: *Dragon User* (Oct. 1986), pp. 12–16. Machine code with BASIC type-in game, "Rapier".
- [608] Dene Bebbington. "Concealing Data". In: *Dragon User* (Oct. 1986), pp. 17–18. Dene Bebbington shows you how to encode and decode text files.
- [609] "News desk". In: Dragon User (Oct. 1986), p. 19.New utility from Harris Micro Software anti static devices.
- [610] Paul Wicks. "Mode 24". In: *Dragon User* (Oct. 1986), pp. 20–24. Semigraphics 24 screen driver.
- [611] The Expert. "Expert's Arcade Arena". In: *Dragon User* (Oct. 1986), p. 27. Frankie, Boulder Crash, Copta Snatch map.
- [612] Brian Cadge. "Dragon Answers". In: *Dragon User* (Oct. 1986), p. 28.

 Bauds and bits a loose connection music from beeps where is the CC register? random access file sorting.
- [613] Mike Gerrard. "Mike Gerrard's Adventure Trail". In: *Dragon User* (Oct. 1986), p. 29. Juxtaposition solution.
- [614] Gordon Lee. "Adding Anagrams". In: *Dragon User* (Oct. 1986), p. 31.

 Add up letters to make a number and win a copy of Boulder Crash. Competition: Professor Bumble looked for help to Dr. Browze. Can you help?

- [615] "Letters". In: *Dragon User* (Nov. 1986), p. 2.

 Hands up the scum who wrote that... withdraw your foul imputations, sirrah, or, by Jove, we... we... we'll PRINT it!
- [616] "Dragon User People's Chart". In: *Dragon User* (Nov. 1986), p. 3.

 J.R. sleeps a little easier, as Juxtaposition slips one rung, but his dreams are filled with strange omens...
- [617] "News desk". In: Dragon User (Nov. 1986), p. 4. Another software house drops out of the race as Microdeal buys out Wintersoft; 6809 show in November; Sourcemaker changes.
- [618] Brian Cadge and Jason Orbaum. "Dragonsoft". In: *Dragon User* (Nov. 1986), p. 6. Software reviews: Sourcemaker (Pamcomms Ltd); Wizard's Quest (Microdeal); Cuthbert and the Golden Chalice (Microdeal).
- [619] "Special Offer". In: *Dragon User* (Nov. 1986), p. 7. Exclusive to Dragon User, £1 off Quickbeam Software's new game Fire Force.
- [620] D. Rothery. "Using discs". In: *Dragon User* (Nov. 1986), pp. 8–11. Wrinkles and tricks with disc drives which the manuals don't tell, with listings.
- [621] Terry Probyn and Derek Probyn. "Curtain up!" In: *Dragon User* (Nov. 1986), pp. 14–15. How to hide one graphics screen behind another graphics screen, and reveal it at the drop of a command. Machine code type-in for graphical transitions.
- [622] Desmond King. "Missile attack". In: *Dragon User* (Nov. 1986), pp. 16–19.

 Thirteen cities to defend from alien missile attacks. Well, whaddya expect? Local missile attacks??

 BASIC with machine code type-in game.
- [623] L. Pilz. "Analyzing costs". In: Dragon User (Nov. 1986), pp. 20–24.
 L Pilz's worksheet helps you update accounts and manage finances. BASIC type-in utility.
- [624] Brian Cadge. "Dragon Answers". In: *Dragon User* (Nov. 1986), p. 26. DeltaDOS help; return to Basic; source code for EPROMS; gapped files.
- [625] The Expert. "Expert's Arcade Arena". In: *Dragon User* (Nov. 1986), pp. 28–29.

 The Expert faces up to the competition but where is the prize? Pokes for would be Chuckie Egg designers, and more. Includes map for Juxtaposition.
- [626] Mike Gerrard. "Mike Gerrard's Adventure Trail". In: *Dragon User* (Nov. 1986), pp. 31–32. Mike Gerrard takes a trip around three new adventures from Broomsoft, and a selection of guest artistes.
- [627] Gordon Lee. "Winning dice". In: *Dragon User* (Nov. 1986), p. 34.

 How many needles do you have to drop to find the exact value of pi? How long does it take? Can you win Microdeal's new Wizard's Quest? Competition: Can you estimate how many games, out of a thousand played, you would expect to win?
- [628] "Letters". In: *Dragon User* (Dec. 1986), p. 2. Pokes; puzzle conversion; competition answers please; tape head tales; any CAD?
- [629] "Dragon User People's Chart". In: *Dragon User* (Dec. 1986), p. 3. Who is top of the pop, whiz, pows for Christmas? Vote and see.
- [630] "News desk". In: *Dragon User* (Dec. 1986), pp. 4, 6.

 Packet radio software; handy paper hanger; Analyzer corrections; Incentive move; joysticks now available; arcade game; Basic 42 update; NDUG; greetings, disasters and apologies.
- [631] Jason Orbaum and Geoff Campbell. "Take command". In: *Dragon User* (Dec. 1986), p. 8.

 The last and final part of the Orbaum and Campbell Machine Code Quest... this time around.
- [632] Brian Cadge, Pam D'Arcy, and Jason Orbaum. "Dragonsoft". In: *Dragon User* (Dec. 1986), pp. 10–11. Software reviews: Disk Support Tool 1.5, 1.6 (Bernd Knechtel Software); SuperDOS disc controller ROM (Grosvenor Software); Gordon Bennett (Smithson Computing); Ninja Warrior (Computape); Dragon Music (Maridian Software); Decathlon (Maridian Software).
- [633] Malcolm Cowan. "LHEX". In: *Dragon User* (Dec. 1986), pp. 12–13.

 Malcolm Cowan bows to OS-9 and provides a dump command for Flex. Machine code type-in.

- [634] Brian Cadge. "The Story of C". In: *Dragon User* (Dec. 1986), pp. 14, 16. Brian Cadge looks at a language which is gaining ground in the industry.
- [635] Roy Coates. "Basic 42". In: *Dragon User* (Dec. 1986), p. 18. Roy Coates reviews the new system software and utilities from Harris Micro Software.
- [636] P. Marlow. "Shuffleword". In: *Dragon User* (Dec. 1986), pp. 20–21.

 Anagrams galore for you to solve in this game by P Marlow. BASIC type-in game.
- [637] The Expert. "Expert's Arcade Arena". In: *Dragon User* (Dec. 1986), pp. 24–25. Read the Expert's Christmas wants list first then you can read the super games poke list. Plus a map of Fantasy Flight.
- [638] Stephen Denning. "Switching joysticks". In: *Dragon User* (Dec. 1986), p. 27. Hardware modification for switching joysticks to use them with the Dragon.
- [639] Peter Whittaker. "Disk to Tape". In: *Dragon User* (Dec. 1986), p. 28.

 Peter Whittaker demonstrates how to save disc programs onto tape and save costly storage space.

 BASIC type-in utility.
- [640] Mike Hides. "Text Screen Dump". In: *Dragon User* (Dec. 1986), p. 30.

 Mike Hides gets lower case into ASCII and out onto the printer. Small machine code type-in utility.
- [641] Mike Gerrard. "Mike Gerrard's Adventure Trail". In: *Dragon User* (Dec. 1986), pp. 32, 34. Mike Gerrard reviews new adventure software from readers and writers.
- [642] Brian Cadge. "Dragon Answers". In: *Dragon User* (Dec. 1986), p. 36. Second language ROM; Justifying text; INPUT USING?; 80 track disks?; Configuring Stylograph.
- [643] Gordon Lee. "Out on the tiles". In: *Dragon User* (Dec. 1986), p. 38.

 Out on the tiles for starters, but finish by crossing Santa with a Snowman to make a perfect square. Well, almost...
- [644] "Letters". In: Dragon User (Jan. 1987), p. 2.
 More machine code books from Pam D'Arcy; a Cardiff users group; how to double your single sided discs; DOS warning; Chuckie Egg hiscore.
- [645] "Dragon User People's Chart". In: Dragon User (Jan. 1987), p. 3.A roundup of the best selling programs from the past ten months of voting.
- [646] "News desk". In: *Dragon User* (Jan. 1987), p. 4.
 OS-9 licence given to H.C. Andersen software; The Thirteenth Task from Arc Software; new progs from Microvision; Quickbeam take over Smithson Computing; Christmas offers from Buzz Software.
- [647] Gordon Lee. "The Answer". In: *Dragon User* (Jan. 1987), p. 5. This is Gordon Lee's own solution to the October competition.
- [648] Mike Hosken. "Daisywheel graphics". In: Dragon User (Jan. 1987), p. 6.
 Mike Hosken's method for using an ordinary daisywheel printer as a graphics device. BASIC type-in screen dump program.
- [649] Brian Hulley. "Fractal pictures". In: *Dragon User* (Jan. 1987), pp. 8–10.
 All the trees are bare, and the snowflakes are falling. At least, they are inside Brian Hulley's Dragon, where self-replicating graphic designs are expanding to fill the screen. BASIC type-in fractal generating programs.
- [650] Jason Orbaum and Roy Coates. "Dragonsoft". In: *Dragon User* (Jan. 1987), p. 12. Software reviews: Shaolin Master (Quickbeam); 6809 Express (Quickbeam); LOGO 3.4 (Bernd Knechtel Software).
- [651] Dave Barnish. "Inside the 32". In: *Dragon User* (Jan. 1987), pp. 13–19.

 A blockbuster look at the memory and processing structure of the Dragon 32, by Dave Barnish B.Sc.
- [652] Hugh Petfield. "Memory Browser". In: *Dragon User* (Jan. 1987), p. 20. BASIC type-in to display memory contents.
- [653] R. Bailey. "Intelligent Pattern Generator". In: *Dragon User* (Jan. 1987), p. 20. BASIC type-in to generate random patterns.

- [654] The Expert. "Expert's Arcade Arena". In: *Dragon User* (Jan. 1987), p. 21.

 The Expert takes a few pokes at his hapless followers, and drops even more hints about his Christmas present.
- [655] Brian Cadge. "Dragon Answers". In: *Dragon User* (Jan. 1987), p. 23.

 Brian Cadge takes a look at ATN functions; RESTORE in Dragon Basic; printer lead pin outs; intercepting printer output; changing disc drives without stopping the program.
- [656] Gordon Lee. "Winners and Losers". In: *Dragon User* (Jan. 1987), p. 24.

 Gordon Lee looks at some fine examples of the right and wrong way to win a DU puzzle.
- [657] Mike Gerrard. "Mike Gerrard's Adventure Trail". In: *Dragon User* (Jan. 1987), pp. 26, 28. Mike Gerrard hits the trail again, this time with the two gentlemen of Verona, and Fernando Poo straight from the author.
- [658] Gordon Lee. "Design or chance". In: *Dragon User* (Jan. 1987), p. 30.
 Gordon Lee gets designs on the Dragon with a challenge to come up with the most interesting repeating pattern.
- [659] "Letters". In: *Dragon User* (Feb. 1987), pp. 2–3.

 Taking control; club let-down; question corner; good service; thanks for help; a missing correspondent; power supply regulation; Dragons help handicapped children.
- [660] "News desk". In: *Dragon User* (Feb. 1987), p. 4. New power supply from Peaksoft; Blaby still want to sell games; no more Eclipse; newsletter; pro mains clean-up.
- [661] R. E. Warwick. "Boss DOS". In: *Dragon User* (Feb. 1987), pp. 6–8.
 R. E. Warwick looks at DragonDOS plus 2.3 and sees errors eliminated and improvements implemented.
- [662] Mike Hides. "Dragonsoft". In: *Dragon User* (Feb. 1987), p. 10. Software reviews: Telewriter (Microdeal).
- [663] Brian Cadge. "Dragon Answers". In: *Dragon User* (Feb. 1987), p. 11.

 Daisywheels and dots; replacing fuses; printer port to cartridge port; accessing joystick ports in machine code.
- [664] Pam D'Arcy. "Epson made easy". In: *Dragon User* (Feb. 1987), pp. 12–14. Pam D'Arcy's short cuts to print control for Epson and Epson compatible printers.
- [665] Brian Cadge. "Dragon FORTH". In: *Dragon User* (Feb. 1987), pp. 16–17.

 Brian Cadge describes the history and uses of Forth language, and reviews a Forth package from National Dragon User Group.
- [666] R. Andrews. "Conundrum". In: *Dragon User* (Feb. 1987), pp. 18–19.

 The second in a pair of word-shuffling games for anamorphic anagramists. BASIC type-in program.
- [667] Gordon Lee. "Winners and Losers". In: Dragon User (Feb. 1987), p. 20.
 Gordon Lee looks at some competition entries for the September 1986 competition, and some methods for testing prime numbers.
- [668] The Expert. "Expert's Arcade Arena". In: *Dragon User* (Feb. 1987), pp. 21–23.

 A map special, with maps for Tanglewood, Wizard's Quest, Brock's Kingdom and parts 4 and 5 of Copta Snatch. Queries, complaints and requests for an eye test to the Expert, please.
- [669] Ziv Eliraz. "Speech recognition". In: *Dragon User* (Feb. 1987), pp. 24–26.

 The Dragon can listen. Ziv Eliraz shows how the Dragon can be trained to respond to the spoken word. Machine code type-in that adds commands to BASIC.
- [670] Mike Gerrard. "Mike Gerrard's Adventure Trail". In: *Dragon User* (Feb. 1987), pp. 27–28. Clues, solutions, hints and other help from Mike Gerrard and his correspondents.
- [671] Gordon Lee. "The Answer". In: *Dragon User* (Feb. 1987), p. 29. This is Gordon Lee's own solution to the November competition.
- [672] Gordon Lee. "Going straight". In: *Dragon User* (Feb. 1987), p. 30.

 Where Gordon is challenging you to do a word search but this time, with prime numbers. And you have to make them up by yourself. Also, beginning a glossary of useful arithmetical terms for puzzlers.

- [673] "Letters". In: *Dragon User* (Mar. 1987), pp. 2–3. Air your opinions with extra puff.
- [674] "News desk". In: Dragon User (Mar. 1987), pp. 4–5.
 Another 6809 Show in March; Ossett again in April; Sourcemaker update; new games from Microdeal and Quickbeam.
- [675] Tim Wilkins et al. "6809 Show Reports". In: *Dragon User* (Mar. 1987), pp. 6–7. Four readers give their personal view of the 6809 Show at the Royal Horticultural Halls in November 1986.
- [676] Rod Bushell. "Saving Grace". In: *Dragon User* (Mar. 1987), p. 8.

 The Dragon World is a smaller place than once it was, and it's under siege. How long can it last? Rod Bushell sees that the odds are stacked, but others may be in the same boat.
- [677] David Rothery. "OS-9 Blues". In: *Dragon User* (Mar. 1987), pp. 9–12.

 D. Rothery demonstrates how to get the most out of Stylograph using OS-9.
- [678] Jason Orbaum. "Dragonsoft". In: *Dragon User* (Mar. 1987), p. 13. Software reviews: Fire Force (Quickbeam); DModem (H. C. Andersen Computer a/s).
- [679] Brian Cadge. "Dragon Answers". In: *Dragon User* (Mar. 1987), p. 14. Menu options; virtual screen values; MIDI interface; data transfer; 'C' language.
- [680] Malcolm Cowan. "FLEXible printing". In: *Dragon User* (Mar. 1987), pp. 16–17.

 Malcolm Cowan introduces EPS, a little program to make FLEX easier to use with Epson compatible printers. Machine code type-in.
- [681] D. W. Marriott. "Disc controller". In: Dragon User (Mar. 1987), pp. 18, 20.
 D. W. Marriott presents a utility to control discs under the Cumana system.
- [682] The Expert. "Expert's Arcade Arena". In: Dragon User (Mar. 1987), pp. 21–22.
 This month the LONGEST ROUNDUP OF DRAGON GAMES YOU HAVE EVER SEEN from one pair of fingers.
- [683] Gordon Lee. "Winners and Losers". In: *Dragon User* (Mar. 1987), p. 23.

 Gordon Lee examines the technique of solving his October competition (the ELGAR puzzle).
- [684] Philip G. Scott. "Hooks and Ns". In: *Dragon User* (Mar. 1987), pp. 24–26. Hang up your facilities, RESTORE your ns and RENUM your lines Philip G. Scott gets the hooks in
- [685] Gordon Lee. "The Answer". In: *Dragon User* (Mar. 1987), p. 27. This is Gordon Lee's own solution to the December competition.
- [686] Mike Gerrard. "Mike Gerrard's Adventure Trail". In: *Dragon User* (Mar. 1987), pp. 28–29. Tips on Tanglewood and Wizard's Quest, another newsletter, and advice for new adventurers.
- [687] Gordon Lee. "Never a cross word". In: *Dragon User* (Mar. 1987), p. 30.

 In which Gordon Lee's glossary of recreational mathematical terms is continued and suddenly, just when you are least expecting it, he springs a Cross Number on you.
- [688] "Letters". In: *Dragon User* (Apr. 1987), pp. 2–3. Contributors and user groups; A message from Buzz Software; Epson update; yet more on Fire Force; About Analyzer; and many more.
- [689] "News desk". In: *Dragon User* (Apr. 1987), pp. 4–5.

 Dragoneer wins king size game (Moon Cresta); Pulser Software list (Magbase); London 6809 Show; Compusense change address; Direct mail dilemma.
- [690] Jason Orbaum et al. "Dragonsoft". In: *Dragon User* (Apr. 1987), pp. 6–7. Software reviews: Tanglewood (Microdeal); Fire Force (Quickbeam).
- [691] Rudy Duyck. "Tandy/Dragon Basic Converter". In: *Dragon User* (Apr. 1987), pp. 8–13. Rudy Duyck converts CoCo Basic tokens to their Dragon equivalent. Machine code type-in utility.
- [692] Brian Cadge. "Dragon Answers". In: *Dragon User* (Apr. 1987), p. 15.

 Inverting the screen in '64 mode; Incorporating the time and date in a database; Text compression for quiz game writing; Connecting the joystick port to a keypad.

- [693] The Expert. "Expert's Arcade Arena". In: *Dragon User* (Apr. 1987), pp. 16–19. Maps for Tanglewood's Castle Schark and Dwarf Dive, the first part of Total Eclipse, and the last part of Dragon Games round-up.
- [694] Jonathan McGowan. "High Noon". In: *Dragon User* (Apr. 1987), pp. 21–24.

 Jonathan McGowan presents a high speed machine code shoot-out for two players, complete with cactus cover and buckboard. Machine code type-in game.
- [695] Gordon Lee. "Winners and Losers". In: *Dragon User* (Apr. 1987), p. 25.

 Gordon Lee goes over solutions to the November competition, which involved simulation.
- [696] Mike Gerrard. "Mike Gerrard's Adventure Trail". In: *Dragon User* (Apr. 1987), pp. 27–28. Hints and help and an exchange of addresses on many titles, map for Ring of Darkness, and an announcement: soon Mr. Gerrard will not be exactly as we have always known him. Read on.
- [697] Gordon Lee. "Multiple missiles". In: *Dragon User* (Apr. 1987), pp. 29–30.
 Go round and round a dartboard to make a set of cubes, and win Tanglewood. And the final instalment of the Recreational Mathematics Glossary.
- [698] "Letters". In: *Dragon User* (May 1987), pp. 2–3. OS-9 news; disabling Telewriter; OS-9 Blues update; yet more Fire Force.
- [699] "News desk". In: *Dragon User* (May 1987), p. 4.
 R & AJ Preston now selling Blaby games; another Analyzer update; what became of our Wizard's Quests?; 6809 Show.
- [700] Iolo ap Gwynn. "Simon". In: *Dragon User* (May 1987), pp. 5–7.
 Iolo ap Gwynn opts for a simpler name and comes up with Simon a version of the electronic game which makes use of PCOPY for speed. BASIC type-in game.
- [701] Robert Margrave et al. "Dragonsoft". In: *Dragon User* (May 1987), pp. 8, 23. Software reviews: Stone Raider II (Microdeal); DOSplus 2.7 Disc ROM (P. G. Scott); Diskfix (H. C. Andersen Computer a/s); Hi-Text (Microvision Software).
- [702] Dene Bebbington. "Searching techniques". In: *Dragon User* (May 1987), pp. 10–12. Dene Bebbington explores a jungle of searching routines, and provides some answers to the problem of unsorted lists. BASIC routines.
- [703] Roger Merrick. "Introduction to wordprocessing". In: *Dragon User* (May 1987), pp. 13–14. In the first of two articles, Roger Merrick starts from first principles to examine the needs of word processing.
- [704] Paul Dagleish. "Into the directory". In: *Dragon User* (May 1987), pp. 16–22.

 Paul Dagleish takes a long rope and lowers himself into the DragonDOS directory, with directory access programming in mind. Details of the DragonDOS directory structure, and a Basic09 program to transfer files from DragonDOS to OS-9.
- [705] Pete Gerrard. "Write: ADVENTURE". In: *Dragon User* (May 1987), pp. 24–25. Peter Gerrard begins a column on writing your own adventures from scratch.
- [706] Philip Beed. "National Dragon Users' Group". In: *Dragon User* (May 1987), p. 25. Introducing the National Dragon Users' Group, by member Philip Beed.
- [707] Gordon Lee. "Winners and Losers". In: *Dragon User* (May 1987), p. 26.
 Gordon Lee looks at his own and other solutions to DU's December competition, with programming tips.
- [708] Brian Cadge. "Dragon Answers". In: *Dragon User* (May 1987), p. 27.
 Brian Cadge answers your questions. Dragon 64 serial port; Shell sort; INKEY\$; Strings in BASIC; Tandy to Dragon disc file transfer.
- [709] Pete Gerrard. "Mike Gerrard's Adventure Trail". In: *Dragon User* (May 1987), pp. 28–29. Peter Gerrard takes up his leathern sack and lanthorn and sets off down the trail what awaits him?
- [710] Gordon Lee. "Three letter cards". In: *Dragon User* (May 1987), pp. 30–31.

 Gordon Lee shuffles cards to see what they spell, and Ducksoft offer copies of Exploring Adventures on the Dragon for the winners. Competition: Can you find any sequences of more than three words?

- [711] "Letters". In: *Dragon User* (June 1987), pp. 2–3.
 Why the Dragon hasn't been developed as a business computer; new DeltaDOS user group; Hi score heavies.
- [712] "News desk". In: *Dragon User* (June 1987), p. 5. Show organisers speak; Quickbeam new address; Boulder Crash upgrade; HIGH NOON listing corrections; new 68 Micro Group address.
- [713] Philip Stott et al. "Dragonsoft". In: *Dragon User* (June 1987), pp. 6–7. Software reviews: Airball (Microdeal); Superkid (Quickbeam); Adventure Writer (Cowen Software); Predictor (Benley via John Penn).
- [714] Vince Gledhill. "All set at Ossett". In: *Dragon User* (June 1987), p. 8.

 Our man on the spot reports good vibes and merriment from the John Penn Ossett Dragon Show.
- [715] Roger Merrick. "Three little words..." In: *Dragon User* (June 1987), pp. 10–11.

 Roger Merrick looks in detail at three Dragon wordprocessors: Minitext, Stylograph and Telewriter.
- [716] Dr. Anthony Daniel. "Graphics screen wordprocessor". In: *Dragon User* (June 1987), pp. 12–18. Dr. Anthony Daniel's word processor uses the Dragon's graphics pages to make complex page layout simple. BASIC type-in wordprocessor application.
- [717] Brian Cadge. "Dragon Answers". In: *Dragon User* (June 1987), p. 19. Single drives into twin drives; numbers to any base; saving Dream source code.
- [718] The Expert. "Expert's Arcade Arena". In: *Dragon User* (June 1987), p. 20.

 The Expert investigates Frankie's armpits, pokes Miser's Dream, and there was going to be an Airball map but it hasn't arrived... hold on, what's that whistling noise...?
- [719] Gordon Lee. "The Answer". In: *Dragon User* (June 1987), p. 20. This is Gordon Lee's own solution to the March competition.
- [720] Mike Booker. "Boxing data". In: *Dragon User* (June 1987), pp. 22–23.

 Mike Booker displays data fields with field delimiters ie, he boxes them. BASIC type-in "Format Control Program".
- [721] Gordon Lee. "Winners and Losers". In: *Dragon User* (June 1987), p. 24.
 Gordon Lee looks at a selection of entrants for the January competition, including the winning listings.
- [722] Pete Gerrard. "Write: ADVENTURE". In: *Dragon User* (June 1987), pp. 26–27.

 This month Peter Gerrard gets down to the nitty gritty of developing a vocabulary and getting it into the computer.
- [723] Pete Gerrard. "Pete Gerrard's Adventure Trail". In: *Dragon User* (June 1987), pp. 28–29. Yet another hefty slab of tips from readers and from Peter Gerrard, as well as maps of Syzygy and Temple of Vran.
- [724] Gordon Lee. "Teen Idol". In: *Dragon User* (June 1987), p. 30.

 This month's Gordon Lee puzzle invokes the numbers seven and (more mysterious still) seventeen, and (more mysterious still) we're not telling you what the prize is...
- [725] "Letters". In: *Dragon User* (July 1987), p. 2.
 Poet's corner; CoCo conversions; OS-9 Cash and VAT problem; hints on Filmastr and Analyzer; Keep firing.
- [726] "News desk". In: *Dragon User* (July 1987), p. 3.

 Compusense developing new OS-9 buffer; H C Anderson's Superwriter II for disc; South Bay Computer Club drop in; book offer next month; copyrighting software; German group.
- [727] Jason Orbaum, Simon Jones, and Mike R. Vine. "Dragonsoft". In: *Dragon User* (July 1987), p. 4. Software reviews: Music Maker (John Penn Software); Superkid (Quickbeam); Miser's Dream (Microvision).
- [728] Frank Philbrow et al. "Take ten printers..." In: *Dragon User* (July 1987), pp. 5–14.

 Add one and you have eleven. You also have the largest survey of Dragon-compatible printers ever presented by Dragon User and its readers. Hardware reviews: Amstrad DMP 2000, Amstrad DMP 300, Brother M-10009, Centronics GLP, Mannesmann Tally MT 80 Plus, Panasonic KX-P1080U, Samleco DX-86, Shinwa CP80, Shinwa CPA80, Tandy CGP Printer/Plotter, Tandy DMP 105.

- [729] The Expert. "Expert's Arcade Arena". In: *Dragon User* (July 1987), pp. 15–17.

 Total Eclipse map from Joe Brincat; beating Shaolin Master Plus; sneaky routine for Moon Cresta; using the RESET poke.
- [730] B. Yeoman Walker. "An Epson, not an Epson". In: *Dragon User* (July 1987), pp. 18–20, 26.
 B. Yeoman Walker on printer codes, with a program to print out Star DP510 type styles. BASIC type-in utility.
- [731] Mike Hides. "Moving programs". In: *Dragon User* (July 1987), pp. 21–22.

 Mike Hides moves machine code without taking a peek. Machine code type-in shows the start, end and exec addresses of binary files loaded from disk.
- [732] Brian Cadge. "Dragon Answers". In: *Dragon User* (July 1987), p. 23.
 Pixel colours from X,Y; autorun conversion; break key disable for Tandy; renumbering large programs; loading CoCo ROM.
- [733] Gordon Lee. "Winners and Losers". In: *Dragon User* (July 1987), p. 24.

 Gordon Lee goes over the techniques for solving the February competition, with comments from entrants.
- [734] Pete Gerrard. "Write: ADVENTURE". In: *Dragon User* (July 1987), pp. 25–26. Peter Gerrard takes his dictionary and begins to build a vocabulary.
- [735] Pete Gerrard. "Pete Gerrard's Adventure Trail". In: *Dragon User* (July 1987), pp. 27–28.

 Deep in the heart of a Colossal Cave bumbles Pete Gerrard's Uncle Elmer, who seems to be finding something...
- [736] Gordon Lee. "Make a note". In: *Dragon User* (July 1987), p. 30.

 Gordon Lee describes how to divide and conquer, but ends on a happier note the prize is Music Maker. Competition: In how many different ways can you carry out this substitution, if we make a rule that for each pair of values, MAKER is higher than MUSIC?
- [737] "Letters". In: *Dragon User* (Aug. 1987), pp. 2–3. DeltaDOS; thoughts on Basic 42; autorun solution; and plenty more.
- [738] "News desk". In: *Dragon User* (Aug. 1987), pp. 4–5.

 Dragon show in September; 67 Dragons in letterbox; new light pen software; modem for Dragon 64.
- [739] Ken G. Smith. "Dragonsoft". In: *Dragon User* (Aug. 1987), p. 5. Software reviews: Dragon 64 Prism Modem 2000 comms package (Hayton Electronics).
- [740] Gordon Lee. "The Answer". In: *Dragon User* (Aug. 1987), p. 6. This is Gordon Lee's own solution to the May competition.
- [741] Gordon Lee. "The April Answer". In: *Dragon User* (Aug. 1987), p. 7.

 Remember how we couldn't fit last month's Answer in? Well, here it is. Along with some of their poetry...
- [742] J. B. Slinger. "Puzzling over FORTH". In: *Dragon User* (Aug. 1987), pp. 8–14. J. B. Slinger investigates FORTH by untangling past Gordon Lee puzzles.
- [743] Gordon Lee. "Winners and Losers". In: *Dragon User* (Aug. 1987), p. 15.
 Gordon Lee looks at some of the solutions to the March competition, and compares run times from 10.96 seconds to 3 hours.
- [744] Ken G. Smith. "The Show goes on". In: *Dragon User* (Aug. 1987), p. 16. Ken G. Smith finally makes it back from the 6809 Show and reports to HQ.
- [745] Olav Havard Noraberg, Jakob Hoffmann, and John Oliver. "Down in the dumps". In: Dragon User (Aug. 1987), pp. 17–19.
 We asked for dumps, you sent us dumps. These three are for the Epson FX-85, OKI-80 Microline and Tandy CGP-155 plotter.
- [746] Brian Cadge. "Dragon Answers". In: *Dragon User* (Aug. 1987), p. 20. Sound to the cassette port; connecting an Anadex printer; Flex or OS-9?
- [747] Matthew Lodge. "Super SAM". In: *Dragon User* (Aug. 1987), pp. 21–22.

 Treat your Synchronous Address Multiplexer gently it doesn't mind being interrupted, but it hates being poked, says Matthew Lodge.

- [748] Philip Beed. "Electronic Author". In: *Dragon User* (Aug. 1987), pp. 23–24. Philip Beed writes up Quickbeam's Electronic Author.
- [749] Pete Gerrard. "Write: ADVENTURE". In: *Dragon User* (Aug. 1987), pp. 27–28. Peter Gerrard gets back to his parser and digresses into a little marketing advice.
- [750] Pete Gerrard. "Pete Gerrard's Adventure Trail". In: *Dragon User* (Aug. 1987), pp. 29–30. Retailing Basic games (why they don't); pokes for Keys of the Wizard.
- [751] Gordon Lee. "Tomorrow the world!" In: *Dragon User* (Aug. 1987), p. 31. Gordon Lee is looking for a mysterious factor, while Peaksoft are shelling out T-shirts.
- [752] "Letters". In: *Dragon User* (Sept. 1987), pp. 2–3.

 Dragon music library; tip for Tanglewood; what about hardware projects?; user club; more machine code please; more flying eggs.
- [753] "News desk". In: *Dragon User* (Sept. 1987), p. 4.

 A couple of corrections; some corrections; and some corrections. The latest Dragon Update, and a new range of printer stands at reasonable prices.
- [754] Roy Coates and Bernice Hennessy. "Dragonsoft". In: *Dragon User* (Sept. 1987), p. 5. Software reviews: Magbase (Pulser Software); Data Retrieval System, D.R.S. (Grosvenor Software).
- [755] Mike Hosken. "Datasort". In: *Dragon User* (Sept. 1987), pp. 6–13.

 Mike Hosken has raided the spaghetti tree to devise a database which will sort nearly anything. BASIC type-in.
- [756] Anthony Daniel. "Mountain building". In: *Dragon User* (Sept. 1987), pp. 14–16.
 Anthony Daniel takes to the hills with a program to construct your favourite synclines and anticlines.
 BASIC type-in.
- [757] Brian Cadge. "Dragon Answers". In: *Dragon User* (Sept. 1987), p. 17.

 Brian Cadge gets to grips with converting Tandy save/load code; is it possible to cannibalise an Amstrad printer?; looking through many Windows; and two oldies: List disable and On Error Run.
- [758] Gordon Lee. "Winners and Losers". In: *Dragon User* (Sept. 1987), p. 19.
 Gordon Lee looks at some of the solutions to the April competition and tackles the touchy subject of "E" numbers are they bad for your health?
- [759] A. R. Butterfield, J. F. Singleton, and P. Marlow. "Down in the dumps". In: *Dragon User* (Sept. 1987), pp. 20–21.
 Another selection from our stack of printer screen dumps. This month: the Epson FX-85, the Tandy Color Graphic Printer, and the Tandy CGP-115.
- [760] Pete Gerrard. "Write: ADVENTURE". In: *Dragon User* (Sept. 1987), pp. 22–23. Not content with telling the player where to go and what to do, now you put the descriptive prose in too, the humour, the verse.
- [761] Pete Gerrard. "Pete Gerrard's Adventure Trail". In: *Dragon User* (Sept. 1987), pp. 24–25.

 Pete Gerrard in search of Universe 2 small wonder he can't find it, because he's in Aquanaut 471 finding the solution.
- [762] Gordon Lee. "Odd One Out". In: *Dragon User* (Sept. 1987), p. 26. "No repunits between 4am and 4am" said the Red Queen. "Do what?" said Alice. Who will unravel these primitive roots? And win a copy of Misers Dream by Microvision? Competition: Can you supply the missing digits?
- [763] Gordon Lee. "The Answer". In: *Dragon User* (Sept. 1987), p. 27.

 Gordon Lee's personal solution to the June competition winners are announced as usual, and many thanks to BROOMSOFT who came galloping out of the sunset with the mystery prizes.
- [764] "Letters". In: *Dragon User* (Oct. 1987), pp. 2–3.

 Expensive software from America; graphics hint; why no DragonDOS book?; Tandy DMP105 superseded; where is Peter Whittaker?; Stylograph suggestion; Tally mod; video upgrade; directory directive; where are the birds?
- [765] "News desk". In: *Dragon User* (Oct. 1987), pp. 4–5.

 Dragon User back issues; software from The Solver; Magbase pricelist; discs from TDK; editor sounds off again.

- [766] Roy Coates et al. "Dragonsoft". In: *Dragon User* (Oct. 1987), pp. 5–7.
 Software reviews: Dragon/PC Convert (Compusense); Crazy Foota (Computape); Kamakarzy (R&A Preston); Biorhythms (Occult Software); Galactic Gus (Quickbeam); Toolkit & Scribe (Premier Microsystems).
- [767] Julian Osbourne. "Auto boot". In: *Dragon User* (Oct. 1987), pp. 8–9.

 Julian Osbourne puts the boot in to DragonDOS. Machine code type-in to create a BOOT sector on DragonDOS disks.
- [768] R. G. Whittaker. "Two extra commands". In: *Dragon User* (Oct. 1987), pp. 10–11.
 R. G. Whittaker adds commands to invert and scroll to Dragon Basic. Machine code type-in.
- [769] Martyn Armitage. "Scopy for SuperDos". In: *Dragon User* (Oct. 1987), pp. 12–15.

 Stuck with a single disc drive? Martyn Armitage devises a routine to copy from disc to disc under SuperDOS without tears. Machine code type-in.
- [770] Richard Hatton. "Down in the dumps". In: *Dragon User* (Oct. 1987), pp. 16–17. Just one this month, for the Tandy DMP 110 dot matrix printer.
- [771] George Cartwright and Jonathan Cartwright. "A Composer at Ossett". In: Dragon User (Oct. 1987), p. 18.
 George and Jonathan Cartwright offer a personal view of the Ossett show, and some helpful hints for Dragon Composer.
- [772] Gordon Lee. "Winners and Losers". In: *Dragon User* (Oct. 1987), p. 19.
 Gordon Lee looks at some of the entries to the May competition, and has a few (three letter) words to say about it.
- [773] The Expert. "Expert's Arcade Arena". In: *Dragon User* (Oct. 1987), pp. 20–21. Introducing the famous Hacking Sheet, by Paul Burgin.
- [774] Pete Gerrard. "Write: ADVENTURE". In: *Dragon User* (Oct. 1987), pp. 22–23. Is there something following you? If not, Pete Gerrard tells you how to obtain one, and what to do with it.
- [775] Mike Gerrard. "Mike Gerrard's Adventure Trail". In: *Dragon User* (Oct. 1987), pp. 24–25. Mike Gerrard tackles Tanglewood and Trekboer, while singlehandedly beating off a wasp.
- [776] Gordon Lee. "All around the square". In: *Dragon User* (Oct. 1987), p. 26. How many angles in a triangle? Are you sure? Ask Gordon Lee.
- [777] Gordon Lee. "The Answer". In: *Dragon User* (Oct. 1987), p. 27. Gordon Lee's own solution to the July competition.
- [778] "Letters". In: *Dragon User* (Nov. 1987), pp. 2–3.
 Stylograph and Telewriter defended; OS-9 user group address; tips on winning; ancient game rediscovered.
- [779] "News desk". In: *Dragon User* (Nov. 1987), p. 4. Cut price OS-9 offer from H. C. Andersen; 6809 Show in London in December; New games from Starship; show in Cardiff in November; games on disc from Preston; Microvision quits; Arc cuts prices.
- [780] Jason Orbaum, Philip Stott, and Stephen Cogan. "Dragonsoft". In: *Dragon User* (Nov. 1987), pp. 6–7. Software reviews: Telewriter Delta disc upgrade (Microdeal); Airball, Stone Raider II (Microdeal), Trun (R & A. J. Preston), Adventure Writer (Cowan Software); The Immortal Strain (Broomsoft); Catacomb Crisis (Microvision); Frankie (Quickbeam).
- [781] P. Marlow and D. Diggins. "Down in the dumps". In: *Dragon User* (Nov. 1987), pp. 8–10. More screen dumps. Tandy CGP-115 and Brother M1009.
- [782] Pam D'Arcy. "Pamcodes". In: *Dragon User* (Nov. 1987), p. 11.

 By popular demand, Pam D'Arcy begins a new from-the-very-bottom guide to machine code for beginners.
- [783] Richard Boryna. "Motorbiking". In: *Dragon User* (Nov. 1987), pp. 12–17.

 A Dragon version of the bike-leaping arcade game, by Richard Boryna, complete with engine noises. Clear the neighbourhood! BASIC type-in game.

- [784] Gareth Fenton. "Interrupt driven sound". In: *Dragon User* (Nov. 1987), pp. 18–19.

 Another way of making the Dragon produce continuous sound! By Gareth Fenton. Machine code typein.
- [785] Gordon Lee. "Winners and Losers". In: *Dragon User* (Nov. 1987), p. 20. Gordon Lee looks at some leading questions about zeros.
- [786] Brian Cadge. "Dragon Answers". In: *Dragon User* (Nov. 1987), p. 21.

 Swapping control structures; over enthusiastic write protect; tokenised Basic; what modem?; using b/w monitors.
- [787] Pete Gerrard. "Write: ADVENTURE". In: *Dragon User* (Nov. 1987), pp. 22–23. CALL STROMBRIGNER, SACK PROOFREADER... but they're in the pub...
- [788] Pete Gerrard. "Pete Gerrard's Adventure Trail". In: *Dragon User* (Nov. 1987), pp. 24–25.

 A few hints for Syzygy, The Vortex Factor and Madness and the Minotaur, and part of the great missing El Diablero inlay.
- [789] Gordon Lee. "All hands to the wall". In: *Dragon User* (Nov. 1987), pp. 26–27.

 Not daunted by receiving 2,680 three letter words from a competitor three months ago, Gordon Lee now looks for six letter words.
- [790] Gordon Lee. "The Answer". In: *Dragon User* (Nov. 1987), p. 27. Gordon Lee's own solution to the August competition.
- [791] "Letters". In: *Dragon User* (Dec. 1987), pp. 2–3.

 Tips on Dream; clusters and segments; September lament; Pulser praise; whatever happened to Eurohard?; NDUG bargain; Ireland calling; Toolkit and Scribe; Disk Full Error.
- [792] "News desk". In: *Dragon User* (Dec. 1987), pp. 4–5.

 The 6th 6809 Show; New Era modem; Starship need publisher; DOS cartridges found; two new adventures; mag on tape; printer research.
- [793] R. L. N. Hewson and Philip Stott. "Dragonsoft". In: *Dragon User* (Dec. 1987), p. 6. Software reviews: COMRON EPROM (Peaksoft); Starcrash (Simon Hargrave).
- [794] The Expert. "Expert's Arcade Arena". In: *Dragon User* (Dec. 1987), p. 7. All we have is a hint sheet, but what a hint sheet! Part II from Paul Burgin.
- [795] Pam D'Arcy. "Pamcodes". In: *Dragon User* (Dec. 1987), pp. 8–10. Part 2 of Pam D'Arcy's new series on machine code for beginners - return to sender.
- [796] Terry Probyn and Derek Probyn. "Crossword". In: *Dragon User* (Dec. 1987), p. 10. Figure out Terry and Derek Probyn's Dragonword, and win a tape.
- [797] Paul Harrison. "64 Columns". In: *Dragon User* (Dec. 1987), pp. 12–13.

 Paul Harrison does an upgrade on the Dragon's screen display. Machine code type-in screen driver with BASIC character designer.
- [798] D. Diggins. "Music Editor". In: Dragon User (Dec. 1987), pp. 14–16.
 D. Diggins composes a basic sound editor with nine different options. BASIC type-in program.
- [799] D. Diggins. "Son et Lumière". In: *Dragon User* (Dec. 1987), pp. 18–19.

 Use your Dragon as a slideshow controller. Hardware advice and BASIC type-in programs.
- [800] Pete Gerrard. "Write: ADVENTURE". In: *Dragon User* (Dec. 1987), pp. 20–21. Lamenting his languishing Dragon, Pete Gerrard suggests some new subject matter for would-be adventure writers.
- [801] Pete Gerrard. "Pete Gerrard's Adventure Trail". In: *Dragon User* (Dec. 1987), pp. 22–23. The El Diablero inlay mystery, and more hints than you've had power supplies.
- [802] Brian Cadge. "Dragon Answers". In: *Dragon User* (Dec. 1987), p. 24.
 Odd colour; drifting point problem; Dragon speech for Tandy?; machine code transfer; Tandy rom routines.
- [803] Gordon Lee. "Winners and Losers". In: *Dragon User* (Dec. 1987), p. 20. If everybody's right, how come everybody doesn't win?

- [804] Gordon Lee. "Make your own maze". In: *Dragon User* (Dec. 1987), pp. 26–27. Gordon Lee is still going around in that maze, but he seems to be painting the walls as well. Help him, and win a copy of Total Eclipse.
- [805] Gordon Lee. "The Answer". In: *Dragon User* (Dec. 1987), p. 27. Gordon Lee's solution to the September competition.
- [806] "Show information and map". In: *Dragon User* (Dec. 1987), p. 28. The 6th 6809 Colour Show for the Dragon and Tandy.
- [807] "Letters". In: *Dragon User* (Jan. 1988), pp. 2–3.
 Why high prices?; range right routine; clubs in Scandinavia; conversion techniques; competition is useful.
- [808] "News desk". In: *Dragon User* (Jan. 1988), pp. 4–5.

 Harris's new utility; three from Dragonfire; improved Supasmooth power supply; September 'stats offer; new Hargrave adventure.
- [809] Philip Stott. "Dragonsoft". In: *Dragon User* (Jan. 1988), p. 6.
 Software reviews: The King's Quest (Simon Hargrave); The Quest For The Meaning Of Life (Simon Hargrave).
- [810] The Expert. "Expert's Arcade Arena". In: *Dragon User* (Jan. 1988), p. 7. Back from his travels, and still asking difficult questions...
- [811] Ken G. Smith. "Introducing Modems". In: *Dragon User* (Jan. 1988), pp. 8–9.

 A beginners' guide to modulator/demodulators and what they talk about on the telephone, by Ken G. Smith.
- [812] Terry Probyn and Derek Probyn. "Crossword". In: *Dragon User* (Jan. 1988), p. 9. Win a tape, no tiebreakers.
- [813] Pam D'Arcy. "Pamcodes". In: *Dragon User* (Jan. 1988), pp. 10–11, 24. Pam D'Arcy reaches labels and branches in her series on machine code for beginners.
- [814] David Makin. "Music extender". In: *Dragon User* (Jan. 1988), pp. 12–19. David Makin and eight pages of upgrades for Music Maker.
- [815] Pete Gerrard. "Pete Gerrard's Adventure Trail". In: *Dragon User* (Jan. 1988), pp. 20–21.

 This month Pete Gerrard ties up some Fishy Business, pronounces on Madness and the Minotaur and goes halves on Syzygy.
- [816] Pete Gerrard. "Write: ADVENTURE". In: *Dragon User* (Jan. 1988), pp. 22–23. It's getting dangerous in the dungeon. Even warriors have to move around in gangs, says Pete Gerrard.
- [817] Mike Townsend. "Down in the dumps". In: *Dragon User* (Jan. 1988), p. 24. A low-res dump for the Memotech DMX80.
- [818] Gordon Lee. "Winners and Losers". In: *Dragon User* (Jan. 1988), p. 25. Calculating the answer to the August competition, and how to test your accuracy.
- [819] Gordon Lee. "Happy New Year". In: *Dragon User* (Jan. 1988), pp. 26–27.
 Gordon Lee said to the numbers, go forth, multiply and increase. And lo! they were too big for the computer. Win Larkspur Waldorf is Trapped from John Penn Software.
- [820] Gordon Lee. "The Answer". In: *Dragon User* (Jan. 1988), p. 27. Gordon Lee's solution to the October competition.
- [821] Brian Cadge. "Dragon Answers". In: *Dragon User* (Jan. 1988), p. 24. No RAM pack for Dragons; Maplin interface; sharp and flat notes; using binary coded decimal.
- [822] "Letters". In: *Dragon User* (Feb. 1988), pp. 2–3.

 Dragon teaches with maths; disc fill error; splig errers; more projects please; re-edit EDIT; more splig; WP guru fights back.
- [823] "News desk". In: *Dragon User* (Feb. 1988), p. 4.
 Microdeal quits; Harris has cheaper disc drives; OS-9 user group; new FORTH for OS-9; safety plug.
- [824] Mike Stott. "Dragonsoft". In: *Dragon User* (Feb. 1988), p. 5. Software reviews: Diskbase (Pulser Software); Boulder Crash 2 (Giant Soft).

- [825] Mike Hides and Julian Osbourne. "Reboot". In: *Dragon User* (Feb. 1988), pp. 6–7. Some further thoughts on the BOOT command from Mike Hides and Julian Osbourne.
- [826] Martyn Armitage. "BREAKing the '64". In: *Dragon User* (Feb. 1988), pp. 8–9.

 Martyn Armitage interrupts the Dragon 64's PRINT routine. Machine code type-in to allow the BREAK key to interrupt printing.
- [827] Gordon Lee. "Winners and Losers". In: *Dragon User* (Feb. 1988), p. 9. Gordon Lee helps September's competitors to sort out their fives and sixes.
- [828] Pam D'Arcy. "Pamcodes". In: *Dragon User* (Feb. 1988), pp. 10–12. Pam D'Arcy succumbs to assembler and tackles the Yellow Blob.
- [829] Terry Probyn and Derek Probyn. "Crossword". In: *Dragon User* (Feb. 1988), p. 12. Last month's winners, this month's contest.
- [830] The Expert. "Expert's Arcade Arena". In: *Dragon User* (Feb. 1988), p. 13. The Expert engages with Airball and redesigns the mag.
- [831] C. J. Walton. "Dragon drives direct". In: Dragon User (Feb. 1988), pp. 14–21.
 C J Walton describes how to use a bought interface to turn the Dragon into a driver for many kinds of common DC motors.
- [832] Pete Gerrard. "Write: ADVENTURE". In: *Dragon User* (Feb. 1988), pp. 22–23. Pete Gerrard puts real character into his characters.
- [833] Pete Gerrard. "Pete Gerrard's Adventure Trail". In: *Dragon User* (Feb. 1988), pp. 23–24. Pete Gerrard tells a tale of Trekboer and rabbits on.
- [834] K. Redhead. "Down in the dumps". In: *Dragon User* (Feb. 1988), p. 25.A dump for the Brother HR-5.
- [835] Gordon Lee. "Faster, faster, faster!" In: *Dragon User* (Feb. 1988), pp. 26–27. Gordon Lee lets circumstances run away with him.
- [836] Gordon Lee. "The Answer". In: *Dragon User* (Feb. 1988), p. 27. Gordon Lee's own solution to the November competition.
- [837] "Letters". In: *Dragon User* (Mar. 1988), pp. 2–3.
 What became of the Dragon Professional?; Rights wronged; Pam's Survey; where is the NEC7220?; Hi Score corner; Dec and Jan crossword solution.
- [838] "News desk". In: *Dragon User* (Mar. 1988), p. 4.

 Adventure from Dragonfire; update on Dragon shows; two computer clubs: North East England, and Norway.
- [839] Ken G. Smith. "In the land of the crystal chandaliers". In: *Dragon User* (Mar. 1988), p. 5. Ken G. Smith goes to the 6th 6809 Show, samples the wares and the carpets.
- [840] Donald Morrison, Philip Stott, and Brian Cadge. "Dragonsoft". In: *Dragon User* (Mar. 1988), pp. 6–7. Software reviews: Indoor Football (Quickbeam Software); Zotoka (Preston); The Heir of Tyos (Simon Hargrave); Ruby Robba, Perilous Pit, Desperado Dan, Kung Fu The Master (Preston).
- [841] Pam D'Arcy. "Pamcodes". In: *Dragon User* (Mar. 1988), pp. 8–10. Pam D'Arcy continues with the fourth part of her introduction to machine code.
- [842] Terry Probyn and Derek Probyn. "Crossword". In: *Dragon User* (Mar. 1988), p. 10. Last month's winners, this month's contest.
- [843] Julian Brown. "Total Profits". In: *Dragon User* (Mar. 1988), p. 11. Some advice on Total Eclipse for space capitalists from Julian Brown.
- [844] Martin Vermeer. "READ-PC". In: *Dragon User* (Mar. 1988), pp. 12–15.

 A program by Martin Vermeer to read MS/DOS PC discs to either DragonDOS or OS-9 for the Dragon.
- [845] Paul Reid. "How green is my black". In: Dragon User (Mar. 1988), p. 16.A small hardware modification by Paul Reid to give the Dragon a green on black display.
- [846] The Expert. "Expert's Arcade Arena". In: *Dragon User* (Mar. 1988), p. 17. Pit Fiend, Wizard's Quest and some advice on maps from his Muchness the Expert.

- [847] Andrew Hill. "Down in the dumps". In: *Dragon User* (Mar. 1988), pp. 18–19. A dump for the Seikosha GP100A.
- [848] Martyn Armitage. "Dragon Comms". In: *Dragon User* (Mar. 1988), pp. 20–21. An introduction to the Dragon's communications by Martyn Armitage.
- [849] Gordon Lee. "Winners and Losers". In: *Dragon User* (Mar. 1988), p. 22. Gordon Lee finds that some October contestants went to unnecessary lengths.
- [850] Pete Gerrard. "Pete Gerrard's Adventure Trail". In: *Dragon User* (Mar. 1988), pp. 23–24. Pete Gerrard dispenses more handy adventure hints.
- [851] Pete Gerrard. "Write: ADVENTURE". In: *Dragon User* (Mar. 1988), pp. 24–25. Pete Gerrard turns his back on ambition and learns about DROPping it ALL.
- [852] Gordon Lee and Graham Barber. "From Gray to black and white". In: *Dragon User* (Mar. 1988), pp. 26–27.

 Gordon Lee takes something simple like Gray code (what?) and challenges you to turn it into binary (how?)
- [853] Gordon Lee. "The Answer". In: *Dragon User* (Mar. 1988), p. 27. Gordon Lee's own solution to the December competition.
- [854] Brian Cadge. "Dragon Answers". In: *Dragon User* (Mar. 1988), p. 28. You ask the questions, we answer: I/O as input, GET invert error, adding a RAM extension.
- [855] "Letters". In: *Dragon User* (Apr. 1988), pp. 2–3.

 A report from the real world; newsletter woe; programmer needed by small trader; bug splatted; do the Americans look at life differently? Plus the Crossword 3 solution.
- [856] Terry Probyn and Derek Probyn. "Crossword". In: *Dragon User* (Apr. 1988), p. 3. The fifth Dragon Crossword.
- [857] Mike Stott and David Linsley. "Dragonsoft". In: *Dragon User* (Apr. 1988), pp. 4–5. Software reviews: Spy Against Spy (Pulser); Formula One (Pamcomms, John Penn).
- [858] "News desk". In: Dragon User (Apr. 1988), p. 5.
 New games from Dragonfire Services; Thirteenth Task offer continues; German computer meeting;
 Diskbase and Destiny from Pulser.
- [859] Pam D'Arcy. "Pamcodes". In: *Dragon User* (Apr. 1988), pp. 6–8. Pam D'Arcy continues with the fifth part of her introduction to machine code.
- [860] Gordon Lee. "Winners and Losers". In: *Dragon User* (Apr. 1988), p. 22. Gordon Lee discusses the possible solutions to November's brain-teaser.
- [861] The Expert. "Expert's Arcade Arena". In: *Dragon User* (Apr. 1988), pp. 10–11. Module Man, map and method, and some more hints.
- [862] D. A. Craig. "Circuits on screen". In: Dragon User (Apr. 1988), pp. 12–18.
 D. A. Craig presents a CAD program for electronics designers. BASIC type-in CAD application.
- [863] Pete Gerrard. "Write: ADVENTURE". In: *Dragon User* (Apr. 1988), pp. 19–20. Pete Gerrard goes in search of a good story.
- [864] Pete Gerrard. "Pete Gerrard's Adventure Trail". In: *Dragon User* (Apr. 1988), pp. 20–21.

 Pete Gerrard tackles Trekboer, visits Vortex Factor, touches on Tanglewood and then goes off and gives some more advice about publishing.
- [865] Gordon Lee. "Chase the Ace". In: *Dragon User* (Apr. 1988), pp. 22–23.

 Gordon Lee is bagging his packs and going for a good deal. Competition: ... but can you do it without this information?
- [866] Gordon Lee. "The Answer". In: *Dragon User* (Apr. 1988), p. 23. Gordon Lee's own solution to the January competition.
- [867] Brian Cadge. "Dragon Answers". In: *Dragon User* (Apr. 1988), p. 24.
 Build your own disc drive; build your own RAM card; low res screens in OS-9; what is DLOAD?; where is the extra 32K?

- [868] "Letters". In: *Dragon User* (May 1988), pp. 2–3. Motorbiking; Booting DragonDOS; Dragon Professionals.
- [869] Terry Probyn and Derek Probyn. "Crossword". In: *Dragon User* (May 1988), p. 3. Crossword six with tapes to win.
- [870] "News desk". In: Dragon User (May 1988), pp. 4–5.
 Quickbeam quits; new Pulser product; Orange Software: new house launches; Comms port; Cardiff Airport; Martin Vernon found alive; new DUDE organiser.
- [871] Pam D'Arcy. "Pamcodes". In: *Dragon User* (May 1988), pp. 6–8.

 Pam D'Arcy continues with the sixth part of her introduction to machine code.
- [872] Philip Stott et al. "Dragonsoft". In: *Dragon User* (May 1988), pp. 8–9, 11, 14. Software reviews: Pyradventure (Dragonfire Services); Space Trek and Reversi (Preston); Crazy Foota 2 (Computape); Picture Maker (John Penn); Printer Control (McGowan Consultants).
- [873] Eric Hall. "The Tandy Disc". In: *Dragon User* (May 1988), pp. 10–11. Eric Hall looks closely at the format of Tandy discs and how they can be exploited by Dragon users.
- [874] Nigel Mason. "Getting the point". In: *Dragon User* (May 1988), pp. 12–14.

 Nigel Mason describes how to incorporate a mouse-controlled arrow into the Dragon. Machine code type-in.
- [875] Gordon Lee. "Winners and Losers". In: *Dragon User* (May 1988), p. 15. Gordon Lee discusses the solutions to the December competition.
- [876] Philip G. Scott. "The outside track". In: *Dragon User* (May 1988), pp. 16–17.

 Philip G. Scott suggests a way to get more storage space out of your discs. Machine code disk track recovery program that also allows formatting extra tracks.
- [877] Ken Smith. "Big for its size". In: *Dragon User* (May 1988), p. 18. Ken Smith describes his Cumana drives and the DOSs which operate with them.
- [878] Pete Gerrard. "Write: ADVENTURE". In: *Dragon User* (May 1988), pp. 19–20. This month, Pete Gerrard concentrates on getting it all.
- [879] Pete Gerrard. "Pete Gerrard's Adventure Trail". In: *Dragon User* (May 1988), pp. 20–21. Pete Gerrard, Dimli and Strombrigner get involved in the Cricklewood Incident.
- [880] Gordon Lee. "The Gordon Ratio". In: *Dragon User* (May 1988), pp. 22–23.

 Gordon Lee gets hung up on number series will they let him take his Mensa test? Competition: the task is to devise a program to compute this value to an accuracy of 125 decimal places.
- [881] Gordon Lee. "The Answer". In: *Dragon User* (May 1988), p. 23. Gordon Lee's own solution to the February competition.
- [882] Brian Cadge. "Dragon Answers". In: *Dragon User* (May 1988), p. 24. Declaring arrays in Basic; Serial numbers on the Dragon; Merging Basic.
- [883] Graham Smith. "Roll out the Show". In: *Dragon User* (May 1988), p. 24.
 Graham Smith of Orange Software does the participant bit and reports from Cardiff Airport.
- [884] "Letters". In: *Dragon User* (June 1988), pp. 2–3.
 Reviewer's Lament; FLEX wanted; black and white; OS-9 Group; more on READ-PC; cursors found.
- [885] "News desk". In: *Dragon User* (June 1988), p. 4.

 Bob Harris takes over Dragon User; Whitehouse joysticks; Quickbeam discs; New Computape address; NDUG.
- [886] Terry Probyn and Derek Probyn. "Crossword". In: *Dragon User* (June 1988), p. 5. Crossword seven with tapes to win.
- [887] Philip Stott et al. "Dragonsoft". In: *Dragon User* (June 1988), pp. 6–7, 10–11.

 Software reviews: Supernova (Orange Software); Forest of Doom (Orange Software); Computa-Text and Script (Dragonfire Services); Matchmaker (Orange Software); Pyradventure Amenophis III (Dragonfire Services); Orange Boot (Orange Software); KLIK Utility (Harris Micro Software).
- [888] Roger Merrick. "Update the Dragon". In: Dragon User (June 1988), pp. 8–10.

- Roger Merrick suggests a number of hardware and software extensions to put the Dragon in line with newer micros. RAM upgrades; Disc drives; Cartridge port expander; RS232; EPROM programmer; Speech sound cartridge; Orchestra90; Dragon's Claw; Maplin kits; Hard disc; Dragon Plus.
- [889] The Expert. "Expert's Arcade Arena". In: *Dragon User* (June 1988), pp. 12–13. His Eggfullness presents the first half of the Chuckie Egg Screen Designer. Machine code type-in.
- [890] Pam D'Arcy. "Pamcodes". In: *Dragon User* (June 1988), pp. 14–15.

 Pam D'Arcy continues with the seventh part of her introduction to machine code.
- [891] Ted Newman. "Slowing it down". In: *Dragon User* (June 1988), pp. 16–17. Ted Newman puts the brakes on the CumanaDOS directory. Machine code type-in.
- [892] Helen Armstrong. "Ossett '88". In: *Dragon User* (June 1988), pp. 18–19. Helen Armstrong bears tidings from the north.
- [893] David Rothery. "Basic09 in perspective". In: *Dragon User* (June 1988), pp. 20–22. David Rothery reassesses the most versatile Dragon Basic. Includes Basic09 type-in, "DMP110 printer set up".
- [894] Pete Gerrard. "Write: ADVENTURE". In: *Dragon User* (June 1988), pp. 23–24. Pete Gerrard goes in search of new characters.
- [895] Pete Gerrard. "Pete Gerrard's Adventure Trail". In: *Dragon User* (June 1988), pp. 24–25. Pete Gerrard with more hints and opinions. Including help for Demon Knight and a map for Return of the Ring.
- [896] Gordon Lee. "...and add the number you first thought of". In: *Dragon User* (June 1988), pp. 26–27. Gordon Lee finds that hailstones tend to snowball.
- [897] Gordon Lee. "The Answer". In: *Dragon User* (June 1988), p. 27. Gordon Lee's own solution to the March competition.
- [898] Brian Cadge. "Dragon Answers". In: *Dragon User* (June 1988), p. 28.

 Brian Cadge replies to more queries about the inner workings of the Dragon. Baud rates; Composite video on a Commodore 1901 monitor; Sine waves; Faulty keyboard.
- [899] "Letters". In: *Dragon User* (July 1988), pp. 2–3.

 Help wanted with software experience; what was in the back issues?; we will pay for better games; more projects please; stand up and write; Gemini needed; feature updates.
- [900] "News desk". In: *Dragon User* (July 1988), p. 4.

 Take your Dragon and shout about it. Orange Software continue to extend their disc range; [Tano]

 Dragon 64s from California Digital; Siegfried Computer-Gruppe; Advertise Dragon User!; Reporters, please.
- [901] The Expert. "Expert's Arcade Arena". In: *Dragon User* (July 1988), pp. 6–8.

 The second half of the Chuckie Egg Screen Designer before TE goes on his hols. Machine code type-in continued.
- [902] Terry Probyn and Derek Probyn. "Crossword". In: *Dragon User* (July 1988), p. 8. Crossword eight with tapes to win.
- [903] Mike Stott, Philip Stott, and Ken Smith. "Dragonsoft". In: *Dragon User* (July 1988), pp. 9–11. Software reviews: Lucifer's Kingdom (Orange Software); Underbeings of Croth (Dragonfire Services); Larkspur Waldorf is Trapped (John Penn Discount Software); Indoor Football (Quickbeam via Computape); Rola-ball (Preston); Everything you always wanted to know about OS-9 (Jason Shouler, book).
- [904] Pam D'Arcy. "Memory and assembly". In: *Dragon User* (July 1988), pp. 12–14. Pam D'Arcy maps out the Dragon's memory for machine code users.
- [905] Gordon Lee. "Winners and Losers". In: *Dragon User* (July 1988), p. 14. Gordon Lee discusses the solution to the January competition.
- [906] Jonathan Cartwright. "Data grows on trees". In: *Dragon User* (July 1988), pp. 15–18.

 Jonathan Cartwright uses trees and branches to store and retrieve data. Includes BASIC type-ins to simulate a binary tree and provide a spell checker.

- [907] Ken Smith. "The Dragon on Prestel". In: *Dragon User* (July 1988), pp. 18, 20. Ken Smith tells of his early experiences on BT's main database.
- [908] Jonathan Cartwright. "Screen Compressor". In: *Dragon User* (July 1988), pp. 19–20.

 Jonathan Cartwright squeezes his screens into smaller spaces. BASIC type-in performs Run-Length Encoding (RLE); machine code type-in decompresses.
- [909] Rudy Duyck. "Copy to order". In: *Dragon User* (July 1988), pp. 21–22. Rudy Duyck copies files in any direction on Dragon Data and Eurohard DOSses. BASIC type-in utility.
- [910] Pete Gerrard. "Write: ADVENTURE". In: *Dragon User* (July 1988), pp. 23–24. Pete Gerrard homes in on mistakes made by adventure writers in game planning.
- [911] Pete Gerrard. "Pete Gerrard's Adventure Trail". In: *Dragon User* (July 1988), pp. 24–25.

 A solution to Pyramids of Doom, some adventure mags, and a headbanging for software writers.
- [912] Gordon Lee. "A lifetime in 48 days". In: *Dragon User* (July 1988), p. 26.
 Gordon Lee counts the time it takes to make your first million. Competition: devise a simple program to convert a number input in digital form to its 'word' equivalent.
- [913] Gordon Lee. "The Answer". In: *Dragon User* (July 1988), p. 27. Gordon Lee's own solution to the April competition.
- [914] Brian Cadge. "Dragon Answers". In: *Dragon User* (July 1988), p. 28.

 Brian Cadge on saving programs to disc, a mysterious problem with Dream, inserting information into a running program and diverting TRON to the printer.
- [915] "Letters". In: *Dragon User* (Aug. 1988), pp. 2–3.

 Alterations to the DOSs; excellent service from Dragon suppliers; Basic09 tweak; RAE offered; devious disc drives.
- [916] "News desk". In: *Dragon User* (Aug. 1988), p. 4. New software from Dragonfire, Pulser, Orange; H. C. Andersen price reductions; advice for reviewers.
- [917] R. L. N. Hewson and Donald Morrison. "Dragonsoft". In: *Dragon User* (Aug. 1988), pp. 6, 11, 19. Software reviews: Destiny trio (Pulser Software, disc); Picture Maker (John Penn Software); Mandragore (Kouga Software); Utopia (Pulser Software); The Great Fish Van Scandal (Orange Software).
- [918] Paul Grade. "Dragonsword!" In: *Dragon User* (Aug. 1988), p. 7.
 Paul Grade's mighty pen takes a quick stab at anything which drops its guard for a second.
- [919] P. D. Smith. "64K in two 32K pages". In: Dragon User (Aug. 1988), pp. 8–10.
 P D Smith consults Motorola and comes up with more stories of the sam chip. Discusses the "page" bit.
- [920] Terry Probyn and Derek Probyn. "Crossword". In: *Dragon User* (Aug. 1988), p. 10. The ninth Dragon crossword, with tapes to win.
- [921] Roger Merrick. "Hard but not too hard". In: *Dragon User* (Aug. 1988), pp. 12–13. Roger Merrick relates his experience of driving a hard disc and OS-9 on his Dragon.
- [922] Craig Anderson. "Dragon Invoicer". In: *Dragon User* (Aug. 1988), pp. 14–18.

 Craig Anderson, like a true Dragon, knows the value of every item in his hoard. BASIC type-in, "Invoice Compiler".
- [923] R. L. Moss. "Raise your graphs". In: Dragon User (Aug. 1988), pp. 20–21.
 Faster mathematical drawing by R L Moss and his Dragon. BASIC type-in to create polar and parametric cartesian graphs.
- [924] Ray Deakins. "Colour connection". In: *Dragon User* (Aug. 1988), p. 21.
 Ray Deakins makes a hardware mod to balance the Dragon's colour. Substitute a variable capacitor as found in the Dragon 64 for the fixed value in the 32.
- [925] Gordon Lee. "Winners and Losers". In: *Dragon User* (Aug. 1988), p. 22.

 Gordon Lee looks at some of the entries to the May competition, with the winning listings.
- [926] Pete Gerrard. "Write: ADVENTURE". In: *Dragon User* (Aug. 1988), pp. 23–24. Pete Gerrard looks at the ideas, the characters, and wonders what they will do next.
- [927] Pete Gerrard. "Pete Gerrard's Adventure Trail". In: *Dragon User* (Aug. 1988), pp. 24–25.

 Professor Deadrock, the Japanese adventurer, sets out on another solution (Pyramid of Doom).

- [928] Gordon Lee. "Is this a record?" In: *Dragon User* (Aug. 1988), pp. 26–27.

 Another Gordon Lee brain-twister, with Preston's Hotel on Mayfair as the prize. Competition: The answer should be your assessment of the total length of the spiral.
- [929] Gordon Lee. "The Answer". In: *Dragon User* (Aug. 1988), p. 27. Gordon Lee's own solution to the May competition.
- [930] Brian Cadge. "Dragon Answers". In: *Dragon User* (Aug. 1988), p. 28.
 Brian Cadge answers some more technical queries on the inside of the Dragon. Angled lines; Programs in EPROM; SOUND from machine code; Split screen; More than 128K?
- [931] "Letters". In: *Dragon User* (Sept. 1988), pp. 2–3.

 Best book for machine code; Pam's parting under pressure; useful routine; crossword answers.
- [932] "News desk". In: *Dragon User* (Sept. 1988), p. 4.
 November show at Weston-super-Mare; Prolog 2; Maplin projects; New Keyboard?; New Era in software; ribbon re-maker.
- [933] Ken G. Smith and Simon Jones. "Dragonsoft". In: *Dragon User* (Sept. 1988), pp. 6–7. Software reviews: Visitext-Plus, Electronic Author (Orange Software, disc); Champions (Peaksoft via Computape).
- [934] Paul Grade. "Dragonsword!" In: *Dragon User* (Sept. 1988), p. 8. Paul Grade with words of advance and warning to would-be clubbers.
- [935] David Hill. "Access and Search". In: *Dragon User* (Sept. 1988), pp. 10–15.

 David Hill devises a search routine for altering data files. Machine code type-in utility to search a BASIC programme for specified string.
- [936] Gordon Lee. "Winners and Losers". In: *Dragon User* (Sept. 1988), p. 16. Gordon Lee looks at his solution to the February competition.
- [937] Graham Smith. "Vive les differences". In: *Dragon User* (Sept. 1988), pp. 16, 19. Graham Smith on the difference between the Dragons 32 and 64.
- [938] Paul Burgin. "Gosub". In: *Dragon User* (Sept. 1988), pp. 17–19.

 Paul Burgin with a graphics routine that writes itself. Machine code and BASIC program that creates BASIC to generate text screens.
- [939] Ken G. Smith. "Display Switcher". In: *Dragon User* (Sept. 1988), p. 20. Ken G. Smith solves his monitor problem with a modest hardware adaptation. Small hardware mod to disconnect the colour crystal for a clearer mono display.
- [940] Graham Smith. "Duplidisk update". In: *Dragon User* (Sept. 1988), p. 21. An upgrade of the popular disc-copying program to run from disc.
- [941] Terry Probyn and Derek Probyn. "Crossword". In: *Dragon User* (Sept. 1988), p. 22. Crossword ten with tapes to win.
- [942] Pete Gerrard. "Write: ADVENTURE". In: *Dragon User* (Sept. 1988), pp. 23–24. Pete Gerrard takes a swipe at writing-utilities.
- [943] Pete Gerrard. "Pete Gerrard's Adventure Trail". In: *Dragon User* (Sept. 1988), pp. 24–25. Pete Gerrard gets back to Return of the Ring.
- [944] Gordon Lee. "A little number". In: *Dragon User* (Sept. 1988), pp. 26–27.

 Gordon Lee tries to approximate pi. The square wheel? Competition: This unknown, which is what you have to find, is a fraction with a whole number for both the numerator and the denominator. What are the simplest numbers which will fit?
- [945] Gordon Lee. "The Answer". In: *Dragon User* (Sept. 1988), p. 27. Gordon Lee's own solution to the June competition.
- [946] Brian Cadge. "Dragon Answers". In: *Dragon User* (Sept. 1988), p. 28. More notes; bubble sort is slow; triangle inversion; ascii terminal.
- [947] "Letters". In: *Dragon User* (Oct. 1988), pp. 2–3.

 A Dragon start in life; relocating Dream; Lucifer's best; lives in Utopia; line unwrap; picture appeal; Hi-score corner.

- [948] "News desk". In: *Dragon User* (Oct. 1988), p. 4.

 Dragonfire goes to disc; New ball game from Starship; adventure from Orange; H C Andersen list; New Era expands; Gordon Lee in Scientific American.
- [949] Paul Grade. "Dragonsword!" In: *Dragon User* (Oct. 1988), p. 6. Paul Grade says, don't blame it all on the pirates.
- [950] Clive G. Scott and Philip Stott. "Dragonsoft". In: *Dragon User* (Oct. 1988), pp. 7–8. Software reviews: Edit+ (Compusense); Dynafast (Compusense); Lucifer's Kingdom (Orange Software).
- [951] Gordon Lee. "Winners and Losers". In: *Dragon User* (Oct. 1988), p. 8. Gordon Lee looks at the April and May competition results.
- [952] D. J. Gray. "DragonDOS Toolkit". In: Dragon User (Oct. 1988), pp. 9–11.
 D J Gray adapts the DeltaDOS Premier Microsystems Toolkit for DragonDOS.
- [953] Bernice Hennessy. "Playbaby". In: *Dragon User* (Oct. 1988), pp. 12–13.

 Bernice Hennessy tries to keep the weenies occupied in a good cause. BASIC type-in toy for the very young.
- [954] Terry Probyn and Derek Probyn. "Crossword". In: *Dragon User* (Oct. 1988), p. 13. The eleventh Dragon Crossword rolls crisply out of a neat white envelope.
- [955] Anthony Daniel. "Music Catalogue". In: *Dragon User* (Oct. 1988), pp. 14–17.

 Anthony Daniel presents an easy-to-use cataloguing database, designed for music but adaptable to nearly anything. BASIC type-in application.
- [956] J. F. Rowles. "Phoneticode". In: Dragon User (Oct. 1988), p. 18.
 J F Rowles devises a phonetic guide to help the computer sort and search for unlikely names. Small BASIC type-in snippet.
- [957] The Expert. "Expert's Arcade Arena". In: *Dragon User* (Oct. 1988), p. 19. The Expert's assistant and side-order chef gets some details up to date.
- [958] K. Redhead. "Polar graphics". In: Dragon User (Oct. 1988), pp. 20–25.
 K. Redhead whiles away the hours converting mathematical formulae into graphic patterns. BASIC type-in.
- [959] Gordon Lee. "A nice round sum". In: *Dragon User* (Oct. 1988), pp. 26–27.

 Gordon Lee delves yet further into the word of pi, and finds an ancient tombstone. Competition: Can you fill in the correct figure for the fourth digit?
- [960] Gordon Lee. "The Answer". In: *Dragon User* (Oct. 1988), p. 27. Gordon Lee's own solution to the July competition.
- [961] Brian Cadge. "Dragon Answers". In: *Dragon User* (Oct. 1988), p. 28. SeeK error; IBM disc drives; OS-9 to tape; Dream source code.
- [962] "Letters". In: *Dragon User* (Nov. 1988), pp. 2–3.

 Illegal letters?; more Armitage; ribbon help; dump adaptation needed; utility appeal; backissue collectors; too old to Expert!; Atari acknowledgement.
- [963] "News desk". In: Dragon User (Nov. 1988), p. 4.
 Kouga releases Ball Dozer; Siegfried's keyboards; Solver set for sale; ad. copy dates; Dragon couriers overcome odds.
- [964] David Rothery et al. "Dragonsoft". In: *Dragon User* (Nov. 1988), pp. 6–7, 15.

 Software reviews: Business Finance Recording System (Llewellyn Robins Studios); Diamond Manor (Dragonfire Services); Copycat (Pulser Software, utility); Seal'n'Type keyboard cover (R & A J Preston, hardware); Picture Maker (John Penn).
- [965] Roger Merrick. "Something stirred..." In: *Dragon User* (Nov. 1988), pp. 8–9. Roger Merrick warms to the early history of the CoCo, the Tandy Colour Computer.
- [966] Paul Grade. "Dragonsword!" In: *Dragon User* (Nov. 1988), p. 10. Paul Grade asks, is there really such a thing as a computer? Or is it all a con?
- [967] Terry Probyn and Derek Probyn. "Crossword". In: *Dragon User* (Nov. 1988), p. 11. Crossword 12 with tapes to win.

- [968] P. D. Smith. "Four More Commands". In: Dragon User (Nov. 1988), pp. 12–13.
 P D Smith resurrects, interrogates, pin points and normalises his disc files. Machine code type-in adds four new disk commands to BASIC: RETRIEVE, INFO, DETAILS and DOS.
- [969] Paul Weedon. "Primesearch revisited". In: *Dragon User* (Nov. 1988), pp. 14–15.

 Paul Weedon makes life easier for those interested in prime matters. BASIC type-in populates a disk file with prime numbers.
- [970] Wayne Smithson. "Sound house". In: *Dragon User* (Nov. 1988), pp. 16–20. Wayne Smithson takes another crack at being a star with a simple sound digitiser. Machine code type-in acquires single-bit audio samples from the cassette port.
- [971] The Expert. "Expert's Arcade Arena". In: *Dragon User* (Nov. 1988), p. 21.

 The Expert casts an eye back over the year's most recent and best arcade game releases.
- [972] Gordon Lee. "Winners and Losers". In: *Dragon User* (Nov. 1988), p. 22. Gordon Lee looks at some entries to the competition.
- [973] Pete Gerrard. "Write: ADVENTURE". In: *Dragon User* (Nov. 1988), pp. 23–24. Pete Gerrard gets into some deep geography in the capital.
- [974] Pete Gerrard. "Pete Gerrard's Adventure Trail". In: *Dragon User* (Nov. 1988), pp. 24–25.

 Pete Gerrard visits an adventure forum and says, beware of experts bearing personal opinions.
- [975] Gordon Lee. "How many monkeys in a coconut?" In: *Dragon User* (Nov. 1988), pp. 26–27.

 Gordon Lee has a nice assortment of coconuts plus Utopia and Spy against Spy from Pulser Software to win. Competition: Instead of starting with a three-digit sequence of keys on the keypad, choose four digits.
- [976] Gordon Lee. "The Answer". In: *Dragon User* (Nov. 1988), p. 27. Gordon Lee's own solution to the August competition.
- [977] Brian Cadge. "Dragon Answers". In: *Dragon User* (Nov. 1988), p. 28.

 Dragon and Quattro; EXEC for TEXT; a note about Postscript; wanted: shares software.
- [978] "Letters". In: *Dragon User* (Dec. 1988), pp. 2–3.

 Disc protection, rights and wrongs; strange scenarios; CAD line missing vertically; Micronet mystery; still a Dragoner.
- [979] "News desk". In: *Dragon User* (Dec. 1988), pp. 4–5.
 WIMPS and show news from Dragonfire; Pro-tech out of Cumana disk interfaces but have Premier cartridge boards; Stewart Orchard voice synthesiser; Orange enlighten on DOSplusDELTA; Whitehouse power supplies cease; New Era problem solved; Kouga licenses disc rights to Orange.
- [980] The Expert. "Expert's Arcade Arena". In: *Dragon User* (Dec. 1988), p. 6.

 The Expert dons his fins, checks out Ball Dozer and reckons that small is beautiful.
- [981] David Rothery. "Decisions, decisions". In: *Dragon User* (Dec. 1988), pp. 8–9.

 David Rothery feeds the Dragon the evidence and gets it to make up his mind for him. But will he listen? BASIC type-in, "Decision Maker".
- [982] Paul Grade. "Dragonsword!" In: *Dragon User* (Dec. 1988), p. 10.
 In between being depressed about apathy, Paul Grade squeezes in some thoughts about Dragon shows.
 Looking forward to the show in Weston-super-Mare.
- [983] Terry Probyn and Derek Probyn. "Crossword". In: *Dragon User* (Dec. 1988), p. 11. No software titles this month. Instead all the answers have a festive flavour!
- [984] Mike Stott et al. "Dragonsoft". In: *Dragon User* (Dec. 1988), pp. 12–15, 22.

 Software reviews (and one service): North Sea Action (Orange Software); Balldozer (Kouga Software);

 Orange FLEX 1 (Orange Software); Alladink ribbon reinking; Discup (Pulser Software); Bust Out (Dragonfire Services); The Curse of Camarc (Orange Software); Sherlock (Orange Software); Utopia (Pulser Software).
- [985] Richard Boryna. "Siege!" In: *Dragon User* (Dec. 1988), pp. 16–21.
 Richard Boryna says, put yourself in the position of a mangonel. It beats being the target. BASIC type-in game.

- [986] Pete Gerrard. "Write: ADVENTURE". In: *Dragon User* (Dec. 1988), pp. 23–24. Pete Gerrard goes in search of a role in life.
- [987] Pete Gerrard. "Pete Gerrard's Adventure Trail". In: *Dragon User* (Dec. 1988), pp. 24–25. This month, Pete rifles through the files and comes up with some hints on the golden oldies.
- [988] Gordon Lee. "What's a word worth?" In: *Dragon User* (Dec. 1988), pp. 26–27.

 Gordon Lee has one of his famous word grid contests for computers or non-computers this month. Win an accounts program from New Era Software.
- [989] Gordon Lee. "The Answer". In: *Dragon User* (Dec. 1988), p. 27. This is Gordon Lee's own solution to the September competition.
- [990] Helen Armstrong. "Editorial". In: *Dragon User* (Jan. 1989), p. 1. Helen Armstrong on the death of Dragon User.
- [991] "Letters". In: *Dragon User* (Jan. 1989), pp. 2–3, 14, 25.

 Atari man bots Dragon; where's the OS-9 Group?; CoCo converter; Primesearch errors; Pete opines; Alladink illumination; Postscript printing.
- [992] "News desk". In: *Dragon User* (Jan. 1989), p. 4.
 Dragonfire updates; Visitext plus; DragonDOS bug report; Jones has only one Era; October Update.
- [993] Bob Harris. In: *Dragon User* (Jan. 1989), p. 5. Bob Harris explains the demise of Dragon User, with a postscript from Helen.
- [994] David Rothery et al. "Dragonsoft". In: *Dragon User* (Jan. 1989), pp. 6–7, 15.

 Software reviews: Express/OS-9 (Compusense); Mandragore (Kouga Software); Editext (R & A J Preston); Rola-Ball (R & A J Preston).
- [995] N. J. Cleaver. "Screening the Dragon". In: Dragon User (Jan. 1989), p. 8.
 Adding EM shielding to the Dragon.
- [996] J. B. Slinger. "Introduction to Dynacalc". In: Dragon User (Jan. 1989), pp. 9–11.
 J B Slinger introduces the spreadsheet package Dynacalc.
- [997] Craig Henderson. "Basic Monitor". In: *Dragon User* (Jan. 1989), pp. 12–14. BASIC type-in machine code monitor program.
- [998] Steve Taylor. "Quick on the Draw". In: *Dragon User* (Jan. 1989), pp. 16–18. Fast line drawing in machine code.
- [999] Roger Merrick. "Word processor applications". In: *Dragon User* (Jan. 1989), p. 19. Roger Merrick finds that there is more to WP than words.
- [1000] Ken G. Smith. "Show us an alternative". In: *Dragon User* (Jan. 1989), p. 20. Ken G. Smith makes a great journey into the Black Country to find the legendary Einstein, and maybe Dragons.
- [1001] J. R. Sutcliffe. "Breaking out in Chains". In: *Dragon User* (Jan. 1989), p. 20. J R Sutcliffe tackles an old command.
- [1002] Paul Grade. "Dragonsword!" In: *Dragon User* (Jan. 1989), p. 21. Paul Grade gets his inspiration from a fruit.
- [1003] The Expert. "Expert's Arcade Arena". In: *Dragon User* (Jan. 1989), p. 22. Including cheats for Mudpies, Cashman, Guardian Angel and Rola-Ball.
- [1004] Pete Gerrard. "Write: ADVENTURE". In: *Dragon User* (Jan. 1989), pp. 23–24. Pete Gerrard slips naturally into a role.
- [1005] Pete Gerrard. "Pete Gerrard's Adventure Trail". In: *Dragon User* (Jan. 1989), pp. 24–25. Solution to The Final Solution.
- [1006] Gordon Lee. "Cereal data". In: *Dragon User* (Jan. 1989), pp. 26–27.
 When Gordon Lee talks about cornflakes, he really means factorials! Ten copies of Mandragore from Kouga software to win. Competition: What is the smallest factorial with seven digits all alike, and can you say what this digit is?
- [1007] Graham Smith. "Chip swap". In: *Dragon User* (Jan. 1989), p. 28. Graham Smith provides 'Eprom Switching' in a DeltaDOS cartridge.