HHC 2009 Door Prize list
Version 2   131 prizes   2.7 ratio   9/24/09

This is the final version of the HHC 2009 door prize list and it adds a new category, Nut Documentation, to celebrate the 30th anniversary of the HP-41/HP-IL System. The prize groupings are:

I Calculators And Accessories – C (23)	**IV BOOKS, General Interest – B (8)**
II Nut Documentation – N (24) (30th Anniversary)	**V Electronics – E (6)**
III Calculator Documentation – D (48)	**VI Miscellaneous – M (22)**

The goal was to have at least as many prizes as last year and it is now three times 2008. See HHC 2008 list at:

http://holyjoe.net/hhc2008/Door%20Prizes%20Vers%203.pdf

The prizes at HHC 2008 greatly swelled (more than doubled) at the last minute because people brought the prizes with them and they didn't email the information to the Committee to put them on the list, which is most ideal from a documenting perspective. They are documented, however, in photos at:

http://holyjoe.net/hhc2009/HHC2008pix/

See page 11 last row.

There are many HP-41 related items – in a new category – added to this list in addition to the very nice HP donations; one is the most expensive HP donation ever. All members of the HP User Community, HP, and resellers are encouraged to donate prizes, new or used. Please contact Richard J. Nelson at:

rjnelsoncf@cox.net

Usually the "prizes" are divided into two groups – the premium group and the general group.

The attendee voted Best Speaker gets first pick of the general group. The Programming Contest winner, if we have a programming contest, the decision is still (time) pending, will get "second" pick. Any other "contest" winners then get their pick.

The rest of the attendees' general group winners are then drawn. Afterwards everybody gets a chance at the premium group – usually at least two or three "high end" or rare items. Last year we had nine such items which are shown in Table 1 reproduced from the HHC 2008 Conference Report. All the registration ticket numbers are placed back into the pot for the final premium group drawing.

Table 1 – HHC 2008 Premium Door Prizes & The Winners.		
Reg #	Winner	Premium Prize
2	Detlef Mueller	48gII
30	Dave Hicks	41C EEPROM box
25	Gerry Schultz	Geometry Software
16	Lora Marschall	41C System
33	Namir Shammas	71B
43	James Unterburger	41 Touchpad
32	Bill Butler	41C ROMs
3	Jim Horn	Declined
24	Geoff Quickfall	41 Touchpad
1	Richard Nelson	27S Tech. Solutions

Sometimes, normal for the last few years, we have had more door prizes than attendees, a high ratio, which means that everyone gets to take home an extra goodie or two. That is true again this year. Horse trading after the Sunday afternoon drawing, which takes place at the end of the conference, is encouraged. You must be present to win. If someone has to leave early they may give their registration ticket to a friend who will assume the responsibility of getting the item to the friend if the friend is a winner.

The list is in historical order so you should scan to the end (to also see any changes such as a new photo) to be sure there isn't something of special interest to you. The prizes are grouped into six categories The quantity is one unless specified otherwise. Prizes from the HHC Committee are designated H^2C^2.

Use your PDF viewer to enlarge the images if you need to see them better, especially to read text.

I Calculators And Accessories – C (23)

C1a. HP50g donated and described by HP.   The ultimate graphing calculator for surveying, engineering, math and science professionals and students is even better. The new HP 50g graphing calculator features an SD card slot with formatting functions, RPN~, Algebraic and Textbook data entry, the largest high-contrast screen with more usable space than ever, serial port and USB and connectivity. Plus, HP Solve, structured programming and Computer Algebra System (CAS). You also get the reassurance of award-winning HP support 24-hours a day.

C1b. HP35s donated by HP. Every HHC 2007 attendee is familiar with this machine because every attendee took one home. It was featured on the HHC 2007/08 Calendar of HP Personal Calculators.

This model was produced in the memory of the HP-35A on its 35th anniversary. It is a general purpose midrange programmable "ultimate" RPN calculator that is deal for engineers, surveyors, college students, scientists and medical professionals 30KB user memory, your choice of RPN and algebraic entry-system logic, a convenient two-line display, and the time-saving HP Solve.

C1c. HP33s donated by HP. A current version of C2.   *See C2 photo below.*

C1d. Wireless multimedia keyboard QTY 2 Model unknown.   *Photo not available*

C1e. Home Media Server donated by HP. OK, this also is not a calculator, but we thought that we would keep HP's generous contributions together in one place. This server streams to your PC's and iPhones™. HP Mediasmart Server – EX487   US$749.99 MSRP You may get additional details at HP's website:

http://www.mediasmartserver.net/2008/12/28/review-hp-mediasmart-server-ex48/

This is the "grand prize" and is a really nice system used to backup home media files, share pictures, server video and music, etc. Watch video at this link.

http://www.hp.com/united-states/campaigns/mediasmart-server/

C2. HP 33s, early production, H^2C^2. Known for its unusual slanted keys this midrange scientific was announced April 29, 2004 and is currently available.

Accuracy, functionality, and dependability are three vital attributes that successful scientific projects require and the pocket-sized HP 33s scientific programmable calculator is designed to deliver them. It also features 31KB user memory, the choice of RPN and algebraic data-entry modes, a powerful two-line display, and the timesaving HP Solve application making it an ideal choice in scientific calculators. The HP33s is permitted for use on SAT Reasoning Test, SAT Subject Tests in Mathematics Level 1 and Level 2, ACT Mathematics Test, PSAT/NMSQT, AP Chemistry/Physics, PLAN, and EXPLORE.
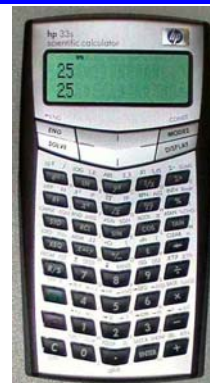
Calculators And Accessories – C Continued

C3. Tandy Model 200 Portable Computer. *Donated by Dr. Joseph Schulman.* This comes complete with protective case, four owner's Manuals, and a Service Manual. The TRS-80 model 200 portable computer is an enhanced version of, and is mostly software compatible with, the earlier, and more popular, TRS-80 model 100 from 1983. **Announced:** 1984; **Price:** US $999 w/ 24K RAM; **Weight:** 4.25 lbs; **CPU:** Intel 80C85A @ 2.4MHz; **RAM:** 24K, 72K max; **Ports:** parallel, serial ports Bar code, modem, cassette; **Display:** LCD display: 40 X 16 text 240 x 128 graphics; **Power:** 4 'AA' batteries; **Storage:** Audio cassette in/out; **OS:** Microsoft BASIC in ROM

C4. **HP200LX with 206 MB RAM**. *Donated by Dale Thorn.* This machine is in very good condition and is very memory efficient in terms of the information you may have with you. Backup the PCMCIA memory card driver ASAP.

The **HP 200LX** (also known as Project Felix) is a personal digital assistant introduced by Hewlett-Packard in 1994. It was often called a palmtop computer, and it was notable that it was, with some minor exceptions, a MS-DOS compatible computer in a palmtop format, complete with a monochrome graphic display, qwerty keyboard, serial port, and PCMCIA expansion slot. The HP200LX is still heavily used and is supported by may third party suppliers. It is a very popular palmtop that followed the first of its kind, the HP-95LX.

C5. **HP200LX with 439 MB RAM**. *Donated by Dale Thorn*. This machine is in very good condition and is very memory efficient in terms of the information you may have with you. Backup the PCMCIA memory card driver ASAP.

The **HP 200LX** (also known as Project Felix) is a personal digital assistant introduced by Hewlett-Packard in 1994. It was often called a palmtop computer, and it was notable that it was, with some minor exceptions, a MS-DOS compatible computer in a palmtop format, complete with a monochrome graphic display, qwerty keyboard, serial port, and PCMCIA expansion slot. The HP200LX is still heavily used and is supported by may third party suppliers. It is a very popular palmtop that followed the first of its kind, the HP-95LX

C6. Magic Calculator. *Donated by Wlodek.* This generically named eight digit calculator is quite popular as four bangers go. Google "magic calculator" and you will get 122,000 hits yet few of them actually describe what it is. It seems that the name is a catchy one and there are articles written on how to perform trigonometry calculations using one – a version with square root however.

If you are a collector you must have one of these in your collection just to be vaguely complete in representing the many thousands of designs of four bangers. Of course this one comes by way of the UK and the battery is included.

C7. An early 10s model with accessories. *Donated by Joseph K. Horn.* This is a one of a kind HP10s to add to your collection. The HP10s is a general purpose scientific low end model with an attractive white case. HP describes it as easy to use, accurate and dependable, HP Scientific Calculators are designed for students and professionals providing performance on all levels for years. These reliable calculators are equipped with easy-to-use problem solving tools, enhanced capabilities and customizing options, plus award-winning HP support. Simple-to-use and designed to go with you as your challenges grow, the HP 10s takes on the toughest problems.

C8. HP 10s. *Donated by Gene Wright.* See the description of C7 above.
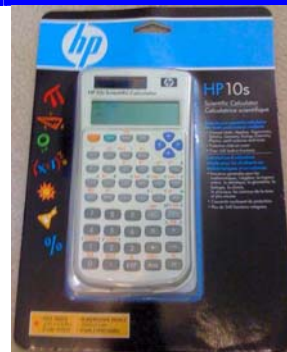
C9. Kado business card sized Calculator. *Donated by Gene Wright.*
Item No: KD-1005
Brand: KADIO   Product: 10D Scientific calculator
DESCRIPTION   Size:90x59x10mm
Quantity:400   Measure:49x33x30cm
G.W.:22.6kg   C.B.M.:0.049   Button Cell Battery

C10. HP 50g Calculator in original packaging. *Donated by Joseph K. Horn.*

See HP's description in **C1a.** This HP's most powerful calculator and is classified as a high end Gen4 machine. Gen1 is the HP-65/67, 5 yrs, '74-'79; Gen2 is the HP-41C/CV/CX, 3 yrs, '79-'82; Gen3 is the HP-75/71, 5 yrs, '82-'87; and Gen4 is the HP28/48/49/50, '87-'09, 22 yrs. Gen2 & Gen3 greatly overlap. We eagerly await Gen5 and are seriously concerned that product convergence will happen before HP invests the R & D required to push the computational state of the art forward.

C11. HP-IL Cassette Drive, 82161A. *Donated by Richard J. Nelson.* Includes HP-IL cables, manuals, unused battery, AC adapter, and extra cassette tapes.

C12. HP-75 Hard Leather case. Unused. QTY 6. *Donated by Richard J. Nelson.* 11" x 6-1/4" x 1-5/8" HWD (height width depth).

The handle is held by snaps and is removable for efficient brief case use. This unused case has a secure snap clasp for the top loading flap, is black felt lined, and is useful to protect the HP-75C, tools, cables, etc. There is a separate compartment for magnetic cards so it is wider than the HP-75C/D.

Collectors who have an HOP-75C of HP-75D will want one of these to be complete.

C13. Sparcom drive 95 Owner's Manual. *Donated by Joseph Horn.* Many HP calculator related Owner's Manuals have been scanned and posted on the Internet. The Drive 95 Manual doesn't seem to be one of them.

The Drive 95 is very useful for any calculator that has a serial port. It is also easy to modify it to be powered from the AC line. Ask an HHC 2009 committee member for details.

C14. HP Solve Equation Library Card for the HP48SX. *Donated by Joseph K. Horn.*
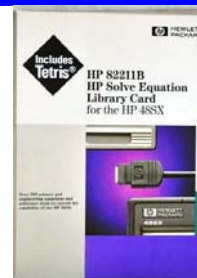
II Nut Documentation – N (24) (30th Anniversary)

N1. HP-41 Dedicated 82104A Card Reader Owner's Handbook. QTY 3
Donated by Richard J. Nelson. HP P/N 82104-90001 Rev. B, 11/79. 11/85, 5" x 6-1/2", 69 pages, wire spiral bound, 4 oz.

We will have a special HP-41 Repair Clinic to provide the information, supplies, and process to insure that every HP-41 Card reader may work again – to replace the polyurethane card drive wheel. Because of this we must have a manual available and here it is. Look for other HP-41 documentation on later versions of this list.
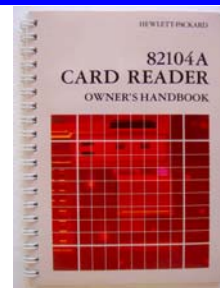
N2. Extend Your HP-41 QTY 3 *Donated by Richard J. Nelson.* This famous extensive HP-41 book provides a User's perspective on the HP-41 written by W.A.C. Meir-Jedrzejowicz. 684 pp. 7-1/2" x 8-5/8" metal wire spiral bound. Published by Synthetix of Berkeley California. There are three versions of this book and this is a 1983 second printing. Synthetic Programming and the Hex Table is described and there are 33 programs listed – short routines are not included in the list.

If you win this book have Wlodek autograph it since he is attending HHC 2009.

N3. HP-41 Synthetic Programming Made Easy By Keith Jerett. *Donated by Richard J. Nelson.* The second book (after Wickes) that really made Synthetic Programming easier. 192 pp. 7-1/4" x 8-1/2" plastic wire spiral bound. © 1982 Synthetix when Keith lived in Manhattan Beach CA.
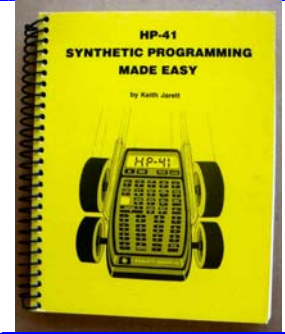
The Byte Grabber program is included with other synthetic routines and both the listings and bar code is provided. Later copies have a note added across the bottom, "FULLY COMPATIBLE WITH THE NEW HP-41CX." The colored plastic Hex table is included inside the book.

N4. HP-41 Extended Functions Made Easy QTY 2 By Keith Jerett. *Donated by Richard J. Nelson.* 264 pp. 7-1/4" x 8-1/2" plastic wire spiral bound. © 1983 Synthetix in Berkeley when Keith moved North.
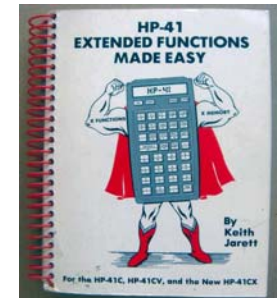
Keith acknowledges the contributions of Clifford Stern who was the technical consultant throughout the development of the book. Clifford wrote most of the advanced application programs described in chapter 10. Keith bought his first HP (HP-45A in 1973) and got programming hooked by writing manual programs for it.

N5. PPC ROM with original Hard Copy Manual and Hex Table card. *Donated by Richard J. Nelson.* 500 pp. 8-1/2" x 11." This is the 1981 HP-41 project that involved hundreds of users to write and document 153 routines for the HP-41C/CV/CX calculator in an 8 K plug in HP manufactured custom ROM.

The project is completely documented in the manual and over one man century (24 hour days) of time (8,765.8 hours/yr.) was spent on it. Imagine HP spending 876,580 hours on a similar software project. At a conservative $15 per 1980 hour that would be $26,297.40 dollars for each page of the document. In today's dollars ('80-'09 cpi factor 2.587379) that would be $68,040 per document page.

N6. HP-41 HP-IL System Dictionary by Cary E. Reinstein. *Donated by Richard Nelson.* 90 pp, 8-1/2" x 11." This is the PPC Version without the cover photograph. See **N8** for the original version.

Cary gave PPC the Copyright to this very controversial book. The book features over 900 definitions of HP-41C/CV functions and how to use them, an introduction to HP-IL interface terminology, complete timing charts of HP-41C functions, memory maps, subroutine decision table, special "synthetic" programs to assign any conceivable function to any key and to produce 128 tones from 0.02 to 5 seconds in 16 frequencies, reference charts for the printer and the TIME module and much more.

N7. PPC ROM. QTY 3 *Donated by Richard J. Nelson.* Also see **N5**. These PPC ROMs do not have the hard copy manual. Instead the manual is a PDF file stored on a 512 MB thumb drive which is shown on top of the 0.008 MB ROM. Note how much memory has shrunk in 30 years. The thumb drive is several times smaller than the HP-41 module and a current capacity in this package is 2,000 MB. The plastic HEX card is included.

Nut Documentation – N (30th Anniversary) Continued

N8. HP-41 HP-IL System Dictionary by Cary E. Reinstein. *Donated by Richard J. Nelson.* 90 pp, 8-1/2" x 11." This is the original version that Cary published. See the contents description at **N6.**
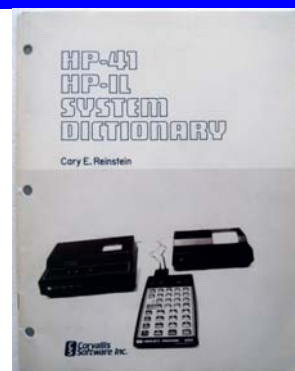
N9. Creating Your Own HP-41 Bar Code HP 82153-90019. QTY 4 *Donated by Richard Nelson.* 79 pp, 8-1/2" x 11."
Section 1: Description of Bar Code Types (Program and data).
Section 2: physical Specifications (Size and shape, paper and ink considerations)
Section 3: Sample Software (Generating program type Bar code).
Section 4: Algorithms (checksum, bar code for several types)
Appendix A – Flowcharts
Appendix B – HP-85 Adaptations of PRGMBR and FULFCN)
Figures 1 – 9.
Tables I – V.
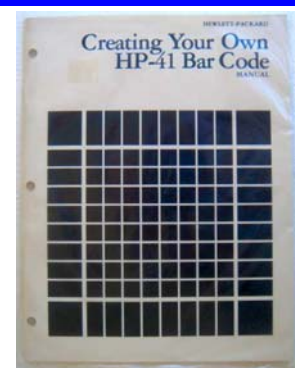
N10. Synthetic Programming by W. C. Wickes. *Donated by Richard J. Nelson.* 79 pp, 8-1/2" x 11." "A simple exercise will introduce you to the world of synthetic programming, and perhaps motivate you to expend the effort to read the rest of this book. Try the following hocus-pocus:

1. Insert one memory module into the HP-41C.	03 RDN
2. Execute a 'Master Clear'.	6. Turn the HP-41C off.7. Remove the
3. Set SIZE 063 (if your module is double density, set SIZE 127)	memory module, wait 60 seconds; replace
4. Switch to PRGM mode.	8. Turn the HP-41C on.
5. Key in these three program lines.	9. Press RTN
01 12345	10. Key in '1.435245455 EEX 59'
02 STO IND 17	11. Press SST
	12. Switch ALPHA on.
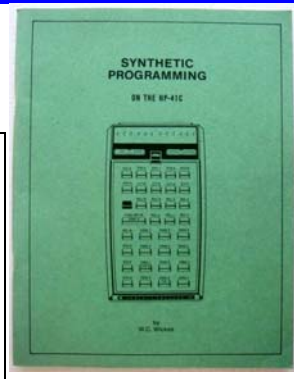
Where did that creepy little 'man' come from? Switch PRGM on, press BST once and you will see the program line '01 STO M'. This synthetic program line is the combination of 'IND 17' program byte and the 'RDN' byte . . ."

**N11. HP-41C Owner's Manual.** *Donated by Richard J. Nelson.*

N12. HP-41C/HP-41CV Owner's Manual. *Donated by Richard J. Nelson*

N13. HP-41CX Owner's Manual. *Donated by Richard J. Nelson*

N14. HP-41 Solutions Book Set. *Donated by Richard J. Nelson.* Very few people have a complete set of solution books and there are three sets for door prizes this year. This one is nearly complete. Antennas, Applied Statistics, Business Statistics/Marketing/Sales, Calendars, Cardiac/Pulmonary, Chemical Engineering, Chemistry, Civil Engineering, Control Systems, Electrical Engineering, Fluid Dynamics & Hydraulics, Games, Games II, Geometry, Heating, Ventilating & Air Conditioning, High Level Math, Home Construction Estimating, Lend/Lease/Savings, Lending/Savings/Leasing, Mechanical Engineering, Optometry I (General), Optometry II (Contact Lens), Physics, Real Estate, Small Business, Solar Engineering, Structural Analysis, Structural Design, Surveying, Taxes, Test Statistics, and Time Module Solutions I. The shaded titles are NOT included.
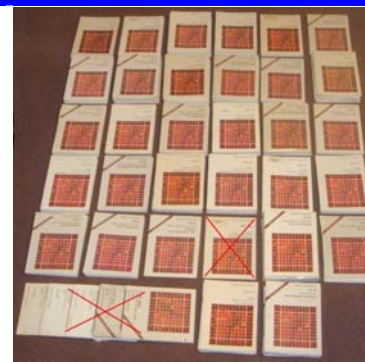
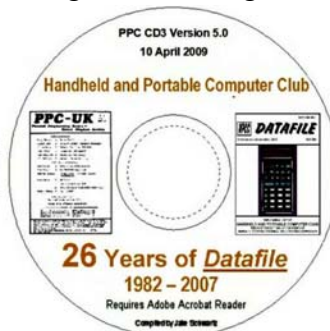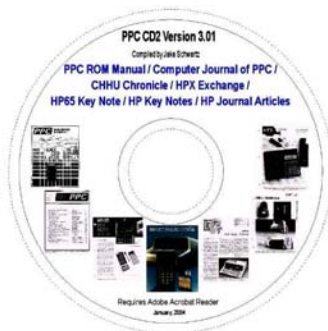# III Calculator Documentation – D (48)

D1. **Set of 4 PPC CD's** in latest versions *donated by Jake Schwartz*. These CD's are described at: http://www.pahhc.org/ppccdrom.htm and they contain Legacy HP Calculator information.

PPC CD #1 – 65 Notes, PPC Calculator Journal, and PPC Journal issues.
PPC CD #2 – PPC Journal, Computer Journal of PPC, CGGU Chronicle, HPX Exchange, HP65 Keynote, HP Key Notes, and HP Journal calculator related articles.
PPC CD #3 – Handheld and portable Computer Club 25 years of *Datafile* issues 1982 – 2007.
PPC CD #4 – Australian Newsletters and HHC Proceedings 1997 through 1999.

D2. HHC 2008 Video of Conference. Five DVD's donated by Jake Schwartz. For the well presented details see: *http://www.pahhc.org/video.htm*

D3. HP-71 FORTH/Assembler ROM IDS, Forth/Assembly, QTY 2, Donated by *Richard J. Nelson*. The 523 pages is printed double sided two HP pages to a page in landscape orientation. This is an "official" HP internal document released to CHHU under the NOMAS program of CHHU. The user community accepts this information "as is" and agrees not to contact the manufacturer. NOMAS is Not Manufacturer Supported. The document includes the Internal Maintenance Specification, IMS, and the Internal Design Specification, IDS, for the HP-71 FORTH/ASSY ROM. This is a good source for Saturn μp code in the HP48,49,50.
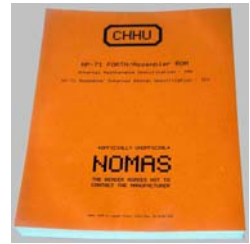
D4. Tips And Programs For The HP-32S – A Handbook for Science and Engineering by W.A.C. Meir-Jedrzejowicz. 86 pp. 5-3/4" x 8-3/8" spiral bound.

Chapter 1 – TIPS

Chapter 2 – STOP/PSE/VIEW/RCL/INPUT

Chapter 3 – LONGER PROGRAMS

Chapter 4 – MORE INFORMATION

The book also includes a list of other books from SYNTHETIX, Conversion Factors, and Constants.
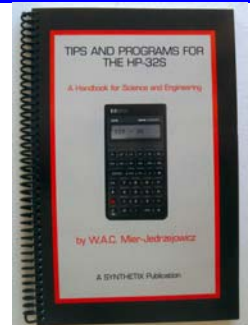
D5. HP-28S Calculator Enhancement for Single-Variable Calculus by John Kenelly, Preliminary Edition, donated by *Richard J. Nelson*. This how-to book is © Harcourt Brace Jovanovich, Inc., is 99 pages and 7-3/8" wide by 9-1/4 "high. Topics (for students) include: Graphing, Evaluating functions, Finding derivatives, Illustrating linear approximations and the Mean-Value theorem, Solving equations, Curve sketching, parametric equations, Integration, Taylor Polynomials and Infinite Series. A very short bibliography, Program Index, and Subject is included. Display illustrations for plots are included.
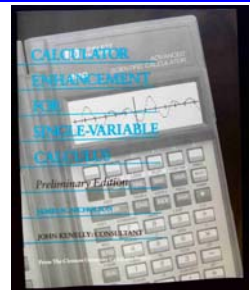
D6. HP67/97 Solution Books, One dozen. *Donated by Richard J. Nelson.* These are unused and original HP shrink wrapped. Titles: Aircraft Operation, 14; Anesthesia, 15; Avigation, 12; Biology, 12; Butterworth and Chebyshev, 10; Calendars, 13; Cardiac, 13; COGO-Surveying, 13; Energy Conservation, 10; Home management, 11; Medical Practioner, 13; Optics, 12. The numbers are the number of programs. These are a great reference for their subjects.

D7. HP-11C Owner's Handbook and Problem-Solving Guide. *Donated by Richard J. Nelson.* HP P/N 00011-90001 initial release. Includes 7/81 Addendum. 5" x 6-1/2", 260 pages, wire spiral bound, 10 oz. Part 1 Section 1-Getting Started; Section 2-Stack, LASTX & Data Storage; Section 3-Numeric Functions; Section 4-disoplay Control; Part II Section 5-programming Basics; Section 6-Program Editiing; Section 7-Program Decisions & Control; Section 8-subroutines; Section 9- the Index register; Part III Section 10-Applications Programs; Section 11-Programming Techniques; Appendix A-Error Contitions; Appendix B- Stack Lift and LASTX;; Appendix C- Memory Reallocation; Appendix D-Battery, Service …
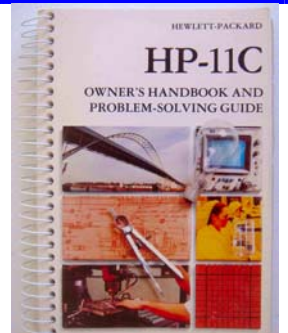
**D8. HP-12C Owner's Handbook And Program Solving Guide.** *Donated by Richard J. Nelson.* HP P/N 00012-90001 Rev. G, 11/85, 5" x 6-1/2", 246 pages, wire spiral bound, 9 oz. Part I: Problem solving; Section 1-Gatting Started; Section 2-Percentage and Calendar Functions; Section 3-Basic financial Functions; Section 4-Additional Financial Functions; Section 5-Additional Operating Features; Section 6-Statistical Functions; Section 7-Mathematics and Number-Alteration Functions; Section 8-Programming Basics; Section 9-Branching and Looping; Section 10-Program Editing; Section 11-Multiple programs; Section 12-Real Estate and Lending; Section 13-Investiment Analysis; Section 14-Leasing; Section 15-Savings; Section 16-Bonds; Appendix: automatic memory Stack; . . .
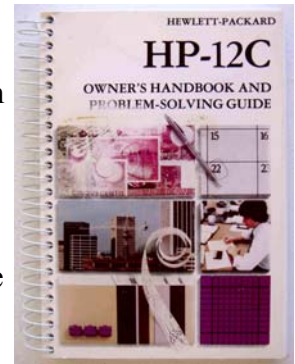
D9. HP-12C Solutions Handbook. *Donated by Richard J. Nelson.* HP P/N 00012-90009 Rev. F, 11/85, 5" x 6-1/2", 152 pages, wire spiral bound, 5 oz. Note the marking on the cover. This is based on D6 above from Section 12 onward which is the Solutions part. It has been completely reworked after two years (86 to 87). HP just used the previous cover on this copy (and a few others).
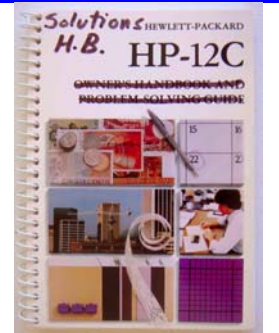
Even the Appendix which list the formulas used is quite different with little duplication. If you are interested in finance mathematics you will want both books.

D10. HP-15C Owner's Handbook. *Donated by Richard J. Nelson.* HP P/N 00015-90001 initial release, 3/82. 11/85, 5" x 6-1/2", 293 pages, wire spiral bound, 12 oz. This historical Owner's Handbook first presented the HP Solver found on the Legendary HP-15C Calculator.
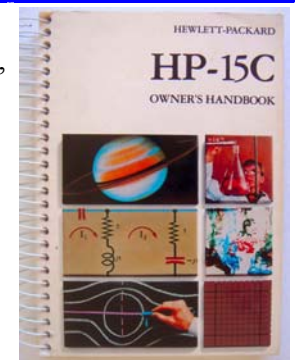
This machine is especially known for these important sections:
Section 13: Finding the Roots of an Equation
Section 14: Numerical Integration
Appendix D: A Detailed Look at $\boxed{\text{SOLVE}}$
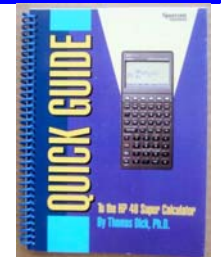Appendix E: A Detailed Look at $\boxed{\int_y^x}$

D11. HP-16C Computer Scientist owner's Handbook. QTY 2. *Donated by Richard J. Nelson.* HP P/N 00016-90001 initial release, 4/82. 11/85, 5" x 6-1/2", 133 pages, one perfect bound one wire spiral bound, 12 oz.
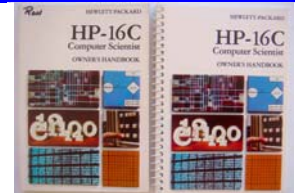
This classic machine Owner's Manual is hard to come by and is very popular.

D12. Quick Guide To the HP 48 Super Calculator. QTY 2. *Donated by Richard J. Nelson.* By Oregon State University's Thomas Dick, 76 pp, 5-1/4" x 7-1/8", © 1992 Sparcom Corporation.

This is essentially the book you first read when you take the HP-48S/SX calculator out of its box. Most of the pages are dedicated to symbolic math, equations, and plotting. The plotting shows screen dumps of the curves being discussed.

D13. HP-55 Mathematics Programs book. *Donated by Gene Wright.* 175 pp. 6" x 8-1/2" Metal wire bound. This is a comprehensive guidebook with 74 programs such as complex arithmetic & functions, linear algebra, trigonometry, business, Integration & Interpolation, and Number theory, Calendar Day of the week, Days between two dates, Simultaneous equations in two or three unknowns, Cosine Integral, numerical solution to differential equations, Synthetic division, polynomial evaluation, number base conversions, Newtons method of solution to f(x)=0, etc.
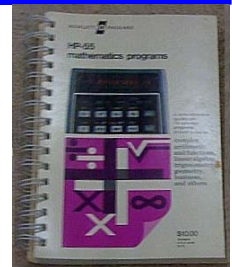
D14. HP48G Series User's Guide. *Donated by Gene Wright.* 598 pp, 5-3/8" x 8-3/8." This is the "Owner's Manual" you receive with the HP 48G or HP 48GX.
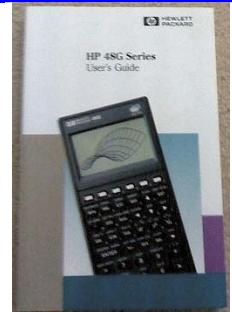
D15. HP-97Standard Pac Manual with magnetic cards. *Donated by Gene Wright.* 152 pp, 5-3/4" x 8-1/2". "The HP-97 Standard Pac provided an excellent nucleus from which to build your program library. The programs address topics common to business, science, and engineering as well as providing enjoyable programs such as Arithmetic Teacher, Follow Me, and Moon rocket lander. . . . Standard Pac differs from optional HP-67/97 application pacs in that it contains explanations of important programming techniques.
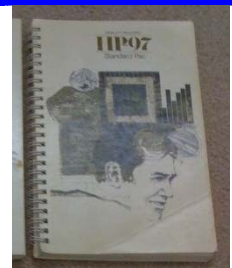

D16. HP-67/HP-97 Butterworth and Chebyshev Solution Books. *Donated by Gene Wright.* Of the 40 titles in this series this is the only one with two volumes. 8-1/2" x 11". Volume 1 is 62 pages, 7 programs. Volume 2 is 37 pages continuing to page 99 and 3 programs. Butterworth Lowpass, BW & C response, BW & C Group delay, Order Calculation, Lowpass Normalized coefficients, normalized Lowpass Transformation types 1, 2, 6, & 7, Same for 8, 9, 10, 11. Normalized Lowpass to Bandstop etc.

D17. HP48SX ROM card that emulates the HP-41CV. QTY 1 *Manual Donated by Joseph K. Horn, Card and overlay by Richard J. Nelson.* Also see D19.

This applications program has been reviewed by Stephen J. Thomas at:
http://www.hpmuseum.org/cgi-sys/cgiwrap/hpmuseum/archv014.cgi?read=53796
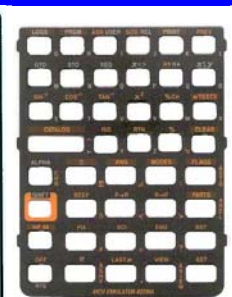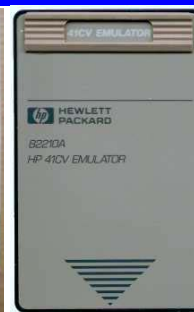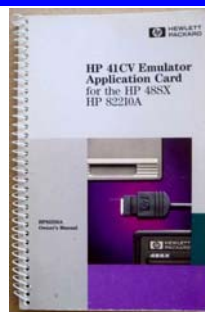
D18. Complete set of CHHU Chronicles including the special issue shown. *donated by Richard J. Nelson.* The *CHHU Chronicle* carried on when PPC was no longer member driven. V1N1 was the premier issue in October 1984. Each issue usually had a full sized cover photo of an HP calculator related product. The member letters are also included. The V2N7 issue is also shown with a message printed by an HP-71B program written by Joseph K. Horn. Can you read it? The last issue was V3N1 in January 1986 when the Business Consultant was announced.

D19. HP48SX ROM card that emulates the HP-41CV. QTY 3
Card and overlay by Richard J. Nelson. Does not include the manual. Also see D17.
This applications program has been reviewed by Stephen J. Thomas at:

http://www.hpmuseum.org/cgi-sys/cgiwrap/hpmuseum/archv014.cgi?read=53796

A copy of the review is included in the envelope with the card and overlay.

D20. HP-71 Basic Made Easy By Joseph K. Horn. *Donated by Richard J. Nelson.* 164 pp, 7" x 8-1/2", plastic comb bound.

"*HP-78 Basic made Easy* was written with <u>you</u> in mind. Its purpose is not to document every byte in the HP-71, but to give you just those facts and tips about the HP-71 that you can put to immediate use, secrets that the owner's Manual and Reference Manual didn't tell you. The book also has a collection of programs that show how to put these secrets to real-world use. If you have any questions that remain unanswered by this book, at the end you'll find a terrific offer: the HP-71 Answer man service, free of charge!"
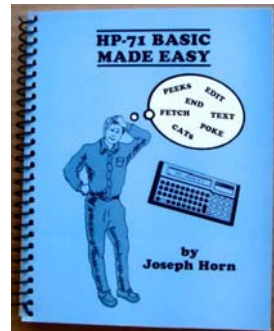
D21. HHC 91 Proceedings. QTY 3 *Donated by Richard J. Nelson.* 185pp 8-1/2" x 11" The HHC Committee was quite different back then, but the documentation of what was going on during 1990/91 is recorded. The cover shows the waveforms produced by an HP 48 Digitized TV IR Remote Control Signal as described by Dave Marsh on page 11. If you are interested in IR you may talk to Dave in person as he is registered to attend HHC 2009. The Proceedings Cover signal shown at the right is "Power on" from an Emerson model VT1920 TV VCR combo. The included program achieves a high speed (60 Khz) learning mode that also increases the speed and range of using the HP 48 calculator as a TV remote. It really works.
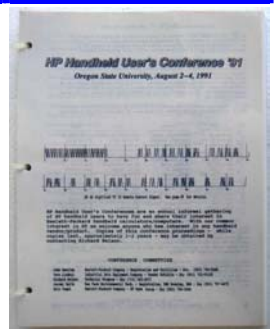
D22. HPCC 2002, London, Conference CD. QTY 2 *Donated by HPCC.* This conference is called the most documented conference because of the ten major documentation projects that were prepared for the Conference: (1) CD of the first 20 volumes of ```````, (2) CD of HHC 2000 & 2001, (3) CD of hpcalc.org, (4) Complete video of the conference, (5) hard copies of *Datafile* back issues, (6) 8x10 photos of all calculators produced to date, (7) A large Poster Display, (8) a 98 page proceedings, (9) the book *RCL 20,* and (10) the Conference CD as shown here.

III Calculator Documentation – D Continued

D23. HP-42 System ROM Text Dump by David White. *Donated by Richard J. Nelson.* The HP-41 had to die because of technology changes and the HP-42 was intended to be a compatible HP-41 replacement. The technical interest in HP-42 was very high and its feature of the debugger was used by David White to explore the operating system to better understand it.

It was a long and painful process to get the HP-42 to dump its ROM onto paper in a meaningful format. The ROM dump is 137 solid pages of memory location, content, and analysis for text content.

D24. HHC 1986 Conference proceedings. QTY 3. *Donated by Richard J. Nelson.* Sponsored by the CHHU Washington D.C. Chapter, William M. Kolb (of *Curve Fitting For Programmable Calculators* fame). 70 pp, 8-1/2" x 11." The cover text reads, "This is an independent gathering of members of the user community, manufacturers, engineering personnel, commercial suppliers, and those interested in personal computing. This material is not intended to be formal 'papers' on the topics covered by the conference speakers. This informal procedure encourages the latest developments to presented."


D25. HP-48SX Overlay Kit. HP P/N 82220A. QTY 2. *Donated by Richard J. Nelson.* One of the most important features that HP offers on their high end calculators is customization with the ability to assign functions and programs to keys.

When you write your own programs or use programs provided by third parties the machine may become a completely different machine. The many dozens of new key functions need to be identified on the keyboard and this is best accomplished using a keyboard overlay. One lesson that HP has never learned is how to utilize both sides of the overlay. The user community has learned this lesson very well, however.

D26. HP-21 Applications Book. QTY 3. *Donated by Richard J. Nelson. 116 pp. 6" x 8-1/2."* This book is typical of the legacy documentation that HP used to provide for using their calculators. The HP-21 was introduced in February of 1975. It is reminiscent of the classical HP-35A and HP-45 A Math applications books. Perhaps HP felt guilty about the small size of the HP-21 (Pumpkin) 64 pp 4-1/2" x 6-1/2" Owner's Handbook and they wanted to provide additional examples on how to use the calculator. HP: "The HP-21 Applications Book give you a sample of the problem-solving capabilities of the HP-21 Scientific pocket Calculator. Hewlett-Packard has found that there are a number of solutions that calculator owners repeatedly seek within their specific application areas or fields of interest . . ."
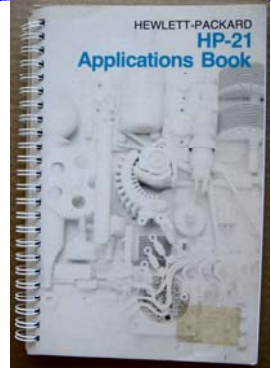
D27. Magnetic Card holders, Pkg of three. Empty card holder P/N 00097-13142. Includes 40 magnetic cards (added) each. *Donated by Richard J. Nelson.* These will be especially valuable when Geoff Quickfall shows us all how to get our magnetic card readers running again by replacing the gummed or rock hard card drive wheels with a modern silicon equivalent. Use your HP-41 repair packet supplied with your registration materials.

D28. HP-18C Applications Booklets. *Donated by Joseph K. Horn.* The three titles are;

Direct Sales Consultant, 45 pp. 5-1/2" x 8-3/4." 10 Topics, Appendix A is Memory
Marketing Consultant, 45 pp. 5-1/2" x 8-3/4." 15 Topics, Appendix A is Memory
Manufacturing Consultant, 51 pp. 5-1/2" x 8-3/4." 14 Topics, Appendix A is Memory
The books are similar presenting the Business Consultant (HP-18C) from a different perspective as each title describes. These are three of a series of eight booklets.

D29. HP-19C/HP-29C Applications Book. QTY 3. *Donated by Richard J. Nelson.* 164 pp, 6" x 8-1/2." This book is typical of the legacy documentation that HP used to provide. The calculators may have faded from our memory, but the basic formulas, drawings, descriptions, and RPN programs still apply to today's machines.

Sections (and number of programs) are: Algebra and Number Theory (5), Finances (3), Games 4), Medical (2), Navigation (3), Numerical Methods (2), Physical Sciences 3), Statistics (3), Stress Analysis (2), Surveying (2), and Trigonometry and Analytical Geometry (4). Thirty three programs.
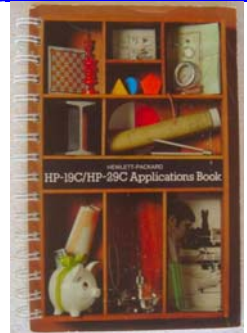
D30. HP 28C Programming Examples. QTY 3. *Donated by Richard J. Nelson.* 47 pp. 5" x 7-3/4." This is one of the last booklets produce by HP to support their products. Today the Internet is used for this purpose. HP describes it as follows. "This booklet, *HP-28C Programming Examples*, contains 19 programs for your HP-28C. these programs are useful and more importantly, they demonstrate a variety of programming techniques. You'll find a list of the techniques on page 6."

"Before trying the examples in this booklet, please read "How to use this booklet" on page 7. It contains important information on the conventions observed in this booklet." The HP-28C was HP's first venture into symbolic mathematics.
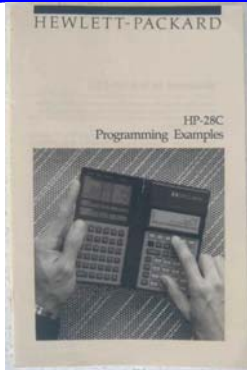
D31. Hewlett-Packard HP-19C/HP-29C Solutions Books – Complete Set of 10.
Donated by Richard J. Nelson. HP's Solution books provide about ten programs (actually 11.1 average) related to the title subject: Civil Engineering (10, 31 pp.), Electrical Engineering (10, 32 pp.), Finance (10, 35 pp.), Games (10, 36 pp.), Mathematics (12, 36 pp.), Mechanical Engineering (10, 39 pp.), Navigation (13, 45 pp.), Statistics (12, 37 pp.), Student Engineering (12, 41 pp.), Surveying (12, 41 pp.).

These Solution Books provide equations, drawings, instructions, and references that are applicable to today's RPN calculators.

IV BOOKS, General Interest – B (8)

B1. **The Ultimate Puzzle Book, H^2C^2** – 601 Challenging puzzles by Igloo Books Ltd, Cottage Farm Sywell, Northants NN6 OBJ, Puzzle compilation by Puzzle Press Ltd. www.puzzlepress.co.uk © 2008. 8-1/2" x 9-3/8", spiral bound, 2 Lb 5 oz., 640 pages. This book contains a wide variety of visual and word puzzles ranging from cross word types, code sequences, symbolic representations, missing sequences, word searches, keyword, shadows, Anacross, Around the clock, Hexagony, Sum Square, Word ladders, Arrow-words, Dice Section, etc. There are few, if any, numeric type puzzles.
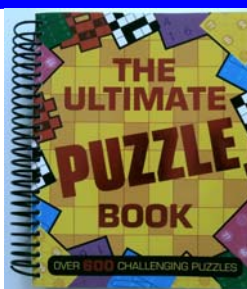
B2. **The Story of Archaeology in 50 Great Discoveries, H^2C^2** by Justin Pollard. Quercus, 21 Bloomsbury Square, London WC1A 2NS © 2007.. Their website is at www.quercusbooks.co.uk. ISBN-10: 1-84724-011-9, ISBN-13: 978-1-84724-011. Size 8-7/8" x 11-1/8". This book is a mixture of 60 text and 40% photos. 255 pages hard bound, 2 Lb 14 oz. With Contents and Index
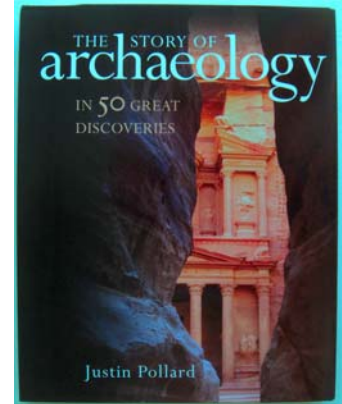
The Introduction covers 3.75 mya through 50,000 ya; 5,000 BC; AD 1; 300 AD; 2,000 AD. Written and illustrated in full color on every page, Justin Pollard presents Archaeology in an easy to read and follow manner from ancient time to the present. He uses his experience as a historian, television producer, and writer to make the subject exciting and interesting.

B3. **Modern Military Aircraft Anatomy, H^2C^2**. Technical Drawings of 118 Aircraft 1945 to the present day Edited by Paul E. Eden and Soph Moeng. 8-7/8" x 11-5/8", 256 pages, soft bound, 2 Lb. 4 oz. First edition 2007, © 2007, reprinted 2009, published by Amber Books Ltd., Bradley's Close, 74-77 White Lion Street, London N1 9PF, UK, www.amberbooks.co.uk,
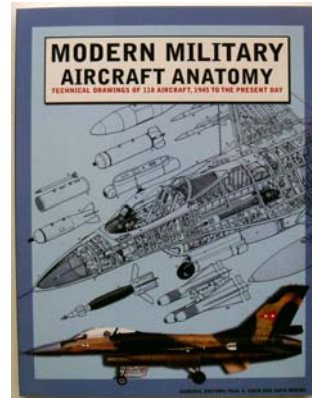
The aircraft are divided into Bombers, Fighters, Helicopters, Naval Aircraft, Reconnaissance Aircraft, Trainers, and Transport and Tanker Aircraft.

Any particular aircraft may be found in the index. Includes full-color artworks of key aircraft. Full specifications include dimensions, power plant, weight, performance, and armament.

B4. **The Complete Guide to Rocks & Minerals, H^2C^2**. How to find, identify and collect the world's most fascinating specimens, featuring over 800 stunning photographs and artworks by John Farndon. 9-1/4" x 11-7/8", 256 pages, softbound, 2 Lb 14 oz. © Anness Publishing Ltd. 2006, 2009. Hermes House, 88-89 Blackfriars Road, London SE1 8HA. ISBN-13: 978-1-84477-672-6.
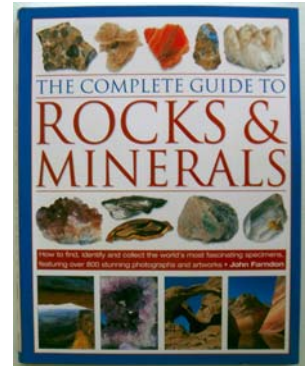
This book is a visual guide for the amateur geologist on how to extract samples safely. clean, and store specimens, and build a unique and colorful collection. Instructions also include a step-by-step instruction on simple home testing techniques to gage color, harness, cleavage, luster, tenacity, transparency, and other features.

B5. **Days That Changed The World, The 50 Defining Events of World History, H^2C^2,** by Hywel Williams. 7-1/2" x 10-7/8", 208 pages, hardbound, 1 Lb 15 oz. Quercus, 21 Bloomsbury Square, London WC1A 2NS © 2006.. Their website is at www.quercusbooks.co.uk. ISBN 1 905204 38 8.
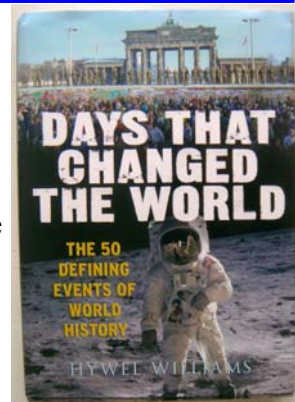
These are the events that changed the course of history forever. The men and women who stood at the crossroads destiny are described. These vents also include the battles, decisions, and discoveries that made us what we are today.

The 50 events cover nearly 2,500 years and each chapter describes the events of one earth-shattering day, its historical background, and its world changing consequences.

B6. Images of The Beatles, H^2C^2, by Tim Hill. 10-7/8" square, 3 Lb. 14 oz., 256 pages. © Parragon, Queen Street House, 4 Queen Street, Bath, BA1 IHE, UK. ISBN 978-1-4054-8048-2.

The hundreds of black and white photographs in this book are from the archives of the *Daily Mail*.

No icon of pop music before or since can be said to have been so influential on a generation as the Beatles were on the "Swinging Sixties."

B7. Human Body A visual Guide, H^2C^2, by Beverly McMillan. 9-1/2" square. 3 LB. 2 oz., 304 pages, © 2006 Weldon Owen Inc. 61 Victoria Street, McMahons point, Sydney, NSW 2060, Australia. ISBN-13: 978-1-55407-188-3

This practical 500 photo reference shows how the senses provide information about the world, how nerves and hormones allow body parts to communicate, how respiration and blood circulation move substances through the body, how the digestive and urinary systems nourish and cleanse the blood, and how reproduction ensures our survival.
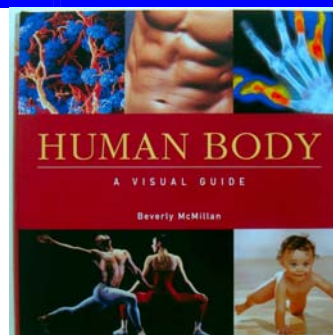
B8 I Ching "Book" Collection. *Donated by Richard J. Nelson* Wikipedia describes I Ching as follows. The *I Ching* (Wade-Giles), "Yì Jīng" (Pinyin), Classic of Changes or Book of Changes; also called Zhouyi, is one of the oldest of the Chinese classic texts. The book contains a divination system comparable to Western geomancy or the West African Ifá system. In Western cultures and modern East Asia, it is still widely used for this purpose.

In Western culture I Ching is often thought of as a parlor game.

V Electronics – E (6)

E1. Electronic Insect Zapper, H^2C^2, controls pesky bugs without the use of poisons. Requires two D cells not included. A high voltage (1,500 VDC) is applied to the grid when the button is pressed to zap insects. Even if you don't have insects to kill the DC-DC 3V to 1,500V module is a handy DC supply for all kinds of uses. Charge a capacitor and discharge it with a big BANG! Blow holes through paper. Test insulation and demonstrate electrostatics. Use with brain fully engaged. Harbor Freight #40122.

E2.   Two pack 3-1/2 Digit 7 Function Multi-Tester. H^2C^2. Two of these are included so you may monitor two circuit values at one time. These have been tested against a laboratory standard and are quite accurate. The primary negative feature is that the meter does not have an auto shut off. Forget to turn it off and your 9V battery is quickly DEAD. Use to charge your car battery – up to 10 Amps – and monitor the charging voltage at the same time. The AC ranges don't go very low, but the DC volts and current do. Even the resistance range is respectable.

DC Amperes: 200μA, 2000 μA, 20mA, 200 mA, 10A
Resistance; 200, 2000, 20K, 200K, 2M ohms.
DC Voltage: 200mV, 2V, 20V, 200V, 1KB.
AC Voltage: $200V_{RMS}$, $750V_{RMS}$.

V Electronics – E Continued

E3. **Heat Gun**. H^2C^2. This handy item is similar to a hair dryer, but is usually much hotter and is intended for industrial use. With 2 temperatures it is used to dry items, remove labels, or burn off paint or varnish. The most common use in electronics, however, is for electrical insulation and wire color coding. You use heat shrink tubing which will shrink to 1/2 of its starting diameter. A diameter of 1/2 inch will shrink down to 1/4 inch. Twenty nine feet total of red, white, & black heat shrink tubing is also included. Use heat shrink tubing to fix a broken glasses frame, hold items together so they won't move, repair a broken plunger shaft, etc. The tubing is strong and you will find it has many many uses.

E4. Component HD Video Cables. D*onated by Gene Wright.* ASKA C5R-6G.

These cables are always needed to connect the various components of an entertainment system. They are color coded to match the standard connectors commonly found on TV's, Amplifiers, cameras, DVD players, etc. These cables use RCA phono connectors.

E5. USB A to USB B Cable. D*onated by Gene Wright.*

Standard USB connectors are usually of two types. The largest size is "A" as shown in the figure at the right (lower left end). The "A" size is for a desk top computer and the "B" size is smaller for devices such as cameras and other portable accessories.

E6. Belkin 54g Wireless Router. *Donated by Gene Wright.* Specs.
- **Connectivity Technology** Wired , Wireless
- **Integrated Switch** 4-port switch
- **Frequency Band** 2.4 GHz
- **Line Coding Format** CCK , BPSK , QPSK , DBPSK , DQPSK
- **Data Link Protocol** Ethernet , IEEE 802.11b , IEEE 802.11g , Fast Ethernet
- **Spread Spectrum Method** DSSS , OFDM
- **Switching Protocol** Ethernet
- **Remote Management Protocol** HTTP
- **Status Indicators** Power , Link OK , Link activity
- **Features** NAT support , Firewall protection , Stateful Packet Inspection (SPI)
- **Compliant Standards** IEEE 802.11b , IEEE 802.11g , Wi-Fi CERTIFIED

VI Miscellaneous – M (22)

M1. HP 48SX Cup. QTY 4 Donated by *Jim Carter* of American Horse Products. These have been in storage for ten years and are brand new. Jim no longer operates EduCALC, but he gave Richard these for our HHC Conferences. They are becoming a collector's item. The HP 48SX was a mind boggling product with the X designating expandable. Jim had a series of HP cups made to sell to HP hand-held enthusiasts. Also see the Omnigo 100 cup as **M5** below.

VI Miscellaneous – M Continued

M2. HP Solve Equation Library Card for the HP 48SX. QTY 4 Donated by *Richard J. Nelson and Jim Carter*. Jim gave these to RJN in 1998 saying that he may "use" them after he sold all that Jim had. His inventory burned with his home in 2007. These are new in original boxes. Useable in the HP48GX **IF** you don't access functions that exist in the GX, otherwise a **severe** "crash" will result. Many programmers consider extracting the Tetris game from the library as a supreme challenge because HP had a legally "tight" contract with the authors and they especially organized the code to defeat "hacking." Includes 82211B Epson ROM card, excellent Owner's Manual, and accessories brochure for the HP 48 "Family."

M3. Tape Measure. *Donated by Richard J. Nelson.* **QTY 2**. This tape measure is unusual in that the markings are very practical for the full length of the tape. Some tape measures show a short length with fine markings and then only provide course markings for the remainder of the tape. The scale of this tape measure shows fine markings of 1/32" for the first foot and 1/16" for the remainder of the tape. The fractions of an inch are shown on the bottom and these provide a reference mark on the scale. See the figures below.

M4. HP Memory Pack H^{2}C^2 QTY 3. This is a collection of HP memorabilia. In memory of the HP-41 is an HP-41 key chain seen in the box. HP celebrated fifty years with gray coaster in the lower right. Two RPN booklets and two HP CVD 10th anniversary pins are shown in the center left. The most recent is the IEEE Celebration invitation (to HP Labs) celebrating the 35 anniversary of the HP-35A.

Classical literature brochures describing the HP 95LX (first PC in today's terms), 20 pp, 3/91; similar version, 20pp 1/92; Palmtop wireless email flyer, Calculator Comparison booklet (TI/Sharp/HP) with feature tables, 8 pp, dated Spring 1979 from Application Calculators inc; Hewlett-Packard Personal Calculator Digest volume six 1980, 36 pp, featuring the introduction of the HP-41C.

M5. HP OMNIGO 100 Cup. QTY 6 Donated by *Jim Carter* of American Horse Products. These have been in storage for ten years and are brand new. Jim no longer operates EduCALC, but he gave Richard these for our HHC Conferences. They are becoming a collector's item. The Omnigo 100 was a lower cost palmtop, more user friendly, and was especially designed for those users who didn't care about DOS. This cup holds the heat better than the ceramic cup shown in M1.

M6. Panduit Nylon 5.3" Cable Ties 0.135" wide, 40 lbs. Box of 1,000. QTY 2 *Donated by Richard J. Nelson.* Bundle items with rubber bands and they disintegrate in less than two years. Instead use cable ties. These may be chained and reused if you have a long nose plier. They stretch and will hold a bundle of wires or cables in place 20 times longer than any rubber band. Having 1,000 of these around will allow you to use them when ever needed.

M7. EduCALC OMNIGO 100 plastic cup. *Donated by Joseph K. Horn.* This is one of a series of EduCALC cups that highlight Hewlett-Packard hand held products. This one, like **M5,** but unlike **M1**, is light weight and will keep what is hot a bit longer. The handle fits nicely in the hand and like **M5** is 8 – 9 fluid ounces depending on how steady is your hand. M1 is about ½ oz. larger.