FEB 11 1984

IND 41

1984

398. HP-41 FIFTH.
PPC CALCULATOR JOURNAL (US): V11 N2, 3/84, p.5-9.
...like language for the HP-41; the package
... The first one is an editor
...d one is an interpreter,
... to move files

424. DRAGON, DU HAUT DE TON DONJON NE VOIS-TU RIEN VENIR ?
L'ORDINATEUR INDIVIDUEL (FR): No.59, 5/84, p.156-159.
...ener un personnage qui vous représente
...t dangereux de Donjons &
...te une variété

136. ZAKREKENMACHINES EN DE WATERLEIDINGSINDUSTRIE.
H_2O (NL): 3/81, blz.67-70.
...ma's zijn beschreven om verschillende waterlei-
...te lossen: berekening van de spoelsnel-
...de weerstandscoëfficient in een
...omische diameter van een
...laging bij een putten-

34. KINEMATIK AUF DEM HP-41C.
CHIP (DE): Nr.3, 3/81, S.68.
Mit diesem Programm lassen sich sämtliche Problemstellungen über die gleichförmige beschleunigte Bewegung in der Kinematik lösen. Dabei hängen die fünf Variablen über Gleichungen zusammen, und von diesen Variablen ...
beliebig einzugeben.
HP-41 (175 Zeilen).

PPC • 77, rue du Cagire — 31100 TOULOUSE France

PPC-T 77 rue du Cagire
31100 Toulouse
France

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HP-41 (175 Zeilen).

PPC-T is the main french club taking into account the HP-41, the fairly popular hand-held computer of Hewlett-Packard.

PPC-T is proud to present IND 41, an index of HP-41 programs, prepared by R. Pulluart.

PPC-T is also editor of MICRO-REVUE, a french revue, referenced in this index, and is able to send any back issue all over the world. Prices and contents can be sent in exchange for 2 HP-41 magnetic cards.

Any comment concerning the shape of this book can be forwarded to us, the ones concerning the content of the index must be forwarded to R. Pulluart.

This index will be in the future updated at least every year.

Enjoy your **IND 41** !

PPC-T 77 rue du Cagire
31100 Toulouse
France

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PPC-T est le principal club français prenant en compte la HP-41, le très populaire ordinateur de poche de Hewlett-Packard.

PPC-T est fier de vous présenter IND 41, un index de programmes pour HP-41 préparé par R. Pulluart.

PPC-T est aussi éditeur de MICRO-REVUE, une revue française référencée dans cet index, et se trouve en mesure d'envoyer tous les anciens numéros dans le monde entier. Les prix et contenus peuvent vous être envoyés en échange de 2 cartes magnétiques de HP-41.

Tout commentaire sur la forme de ce livre doit nous être envoyé, ceux concernant le contenu doivent être envoyés à R. Pulluart.

Cet index sera dans le futur mis à jour au moins chaque année.

Nous vous laissons apprécier votre **IND 41** !

PPC-T 77 rue du Cagire
31100 Toulouse
France

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INDEX DE PROGRAMMES POUR HP-41 PROGRAM INDEX

EDITION 1984 — 1984 EDITION

R. PULLUARD

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- Classification utilisée . . . . . page CL
- Index de programmes . . . . . pages 0^A - 9.5^B
- Sources mentionnées . . . . . pages S1 - S2
- IND-41 en chiffres . . . . . page Y

Le plus grand soin a été apporté à l'établissement de ce recueil. Toutefois, l'auteur décline toute responsabilité quant aux conséquences d'erreurs qui s'y seraient glissées.

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- Introduction . . . . . pages A1 - A3
- Classification system used . . . . . page CL
- Program index . . . . . pages 0^A - 9.5^B
- Cited sources . . . . . pages S1 - S2
- IND-41 in numbers (in french only) . . . . . page Y

The greatest care has been taken in compiling this index. The author, however, cannot accept any liability for consequences of errors or mistakes which might have slipped through.

FR

INTRODUCTION

IND-41 est un index destiné aux utilisateurs de la calculatrice de poche HP-41, et se propose de répertorier les nombreux programmes publiés pour cette calculatrice dans diverses revues techniques, livres, et autres ouvrages. L'objectif de cet index est de faciliter le plus possible la recherche de programmes ou d'applications spécifiques dans la littérature disponible.

PRESENTATION.

Il s'agit, en fait, d'un recueil de "fiches", classées par sujet, selon un système qui sera décrit plus loin, chaque fiche étant consacrée à un programme, ou article, et comportant, dans l'ordre, les éléments suivants:

- un numéro d'ordre, suivi du titre de l'article, ou éventuellement du programme;
- le titre de la revue, ou de l'ouvrage, avec son pays d'origine (code à deux lettres), volume et numéro éventuels, ainsi que la date de parution, et numéros des pages contenant cet article (les livres proprement dits sont repérés par un losange, sous le numéro d'ordre de la fiche);
- un résumé de quelques lignes, ou un aperçu du programme, dans la même langue que l'article original;
- la mention du modèle auquel est destiné le programme (HP-41 peut signifier aussi bien HP-41C que -CV; l'indication HP-41CX est réservée aux programmes comportant des instructions propres à ce modèle); sur la même ligne est indiquée la longueur du programme, en "lignes", avec mention éventuelle d'emploi d'instructions synthétiques, et l'indication "=BARCODE=" dans les cas où une liste en code barre accompagne le programme;
- en bas de chaque fiche, enfin, sont indiqués tous les accessoires éventuellement nécessaires pour pouvoir utiliser le programme décrit.

GB

INTRODUCTION

IND-41 is a program index for users of the HP-41 pocket calculator: its aim is to give an overview of as many programs as possible among all those published in technical magazines and books. Finding a given program or application for the HP-41 should thus be much easier, and avoid getting lost in the heap of technical literature available these days.

INDEX DESCRIPTION.

This index is rather a collection of "cards", classified according to program subject or application, using a classification system which will be described later on. Each card related to a program or an article includes the following items, in the given order:

- a card number, along with the title of the article, or of the program itself;
- the name of the magazine, or title of the book, with its country of origin (two-letter code), its volume, issue number, its publication date (european style: d/m/y), and the page numbers where the article is to be found (books are marked by means of a diamond right beneath the card number);
- an abstract, a few lines long, in the same language as the one used in the original article;
- the HP-41 model for which the program has been written (HP-41 alone either means HP-41C or -CV; HP-41CX is only used for programs which make use of special -CX instructions); on the same line is given the length of the program, in program lines, with a special mention if synthetic instructions are used, and a "=BARCODE=" mention when a barcode listing of the program is published in the same magazine issue or the same book;
- at the bottom of each card are further given all peripherals and additional hardware needed to make use of the published program, each item being introduced by the symbol "+".

Les numéros d'ordre sont arbitraires, et ne correspondent qu'à l'ordre selon lequel les programmes ont été relevés, au hasard des rencontres et de découvertes; il n'y a aucun lien avec un ordre chronologique quelconque de publication des programmes eux-mêmes, et ces numéros n'ont d'autre but qu'une identification rapide et sans équivoque des programmes cités.

CLASSIFICATION DES FICHES.

Les fiches de ce recueil ont été réparties et regroupées en fonction du sujet traité, ou de l'application concernée, selon un système de classification décimale comprenant dix classes principales (numérotées de 0 à 9), la plupart subdivisées en sous-classes. Une liste complète de ces classes et sous-classes, soit quarante-six en tout pour cette édition, est fournie page "CL", chacune avec son titre.

Ce système n'est, et ne prétend, pas être parfait: conçu au départ pour des besoins personnels, il devrait néanmoins constituer un outil adéquat pour faciliter au mieux la recherche d'un programme ou d'une application déterminée. Toute fiche est répartie dans une classe unique: pour résoudre les cas où une fiche aurait dû être classée doublement, il a paru préférable de se limiter à des renvois vers la ou les classes appropriées.

MODE D'EMPLOI.

L'utilisation de cet index ne devrait présenter aucune difficulté. Les quelques conseils qui suivent vous permettront d'acquérir au plus vite la philosophie du système.

1-chercher page "CL" la classe dont le titre convient le mieux au sujet voulu, ou concerne le domaine de l'application désirée.

2-se reporter à la première page de cette classe (ou sous-classe), et chercher un programme satisfaisant, sur cette page, ou sur les suivantes, portant le même numéro de classe.

Card numbers are quite arbitrary and only give the order in which the programs have been indexed, according to their discovery, sometimes many months after being published (or even years!); there is no relationship between these numbers and the order in which the programs have been published, and their only use is to identify a given program, or "card", very quickly and accurately.

CARD CLASSIFICATION.

Cards in this collection have been grouped according to the subject or the application that each of them describes, using a decimal classification system. This system counts ten main classes (numbered from 0 to 9), most of them being subdivided in subclasses. A complete list of the classes and subclasses used is given on page "CL", which shows, for each of the forty-six classes used, a short but decriptive title.

This system is certainly not perfect, and doesn't claim to be so: first created for personal needs, it should however prove a useful tool, making the search of a given program or application a much easier task. Each program/card is sorted in only one class: the cases where a card should have been sorted in more than one class have been tentatively solved by references to the related class (or classes).

USER INSTRUCTIONS.

Using this index shouldn't offer any difficulty at all. The following notes will give you the means to understand its philosophy, and very quickly make the best use of it.

1-look up the class having the most appropriate title for your chosen subject, on page "CL", or the one pertaining to the technical field to which the chosen application is related.

2-once a class has been selected, go to the first page bearing its number and look it up (as well as the following pages having the same class number), until you find the article or program you were looking for...

3-si vous n'avez rien trouvé d'intéressant, revenez à la page "CL", et avec un peu de chance vous y trouverez une autre classe susceptible d'offrir le programme convoité.

4-si vous avez trouvé un ou plusieurs programmes intéressants, il ne vous reste plus qu'à rechercher les originaux, soit dans votre documentation personnelle, soit autour de vous, ou, en dernier ressort, en vous adressant directement à l'éditeur de la revue ou du livre dans lequel le programme a été publié. A cet effet, les pages "S" en fin de recueil vous donneront toutes les adresses utiles.

REMARQUES FINALES.

Cet index, pour aussi ambitieux qu'il puisse paraître, a manifestement ses limitations; il s'agit d'une oeuvre de solitaire, réalisée en partie grâce au soutien moral et enthousiaste de la section PPC de Delft, aux Pays-Bas(1), et il n'a nullement la prétention d'être parfait, ni complet! Les nombreuses erreurs qui le jalonnent sont essentiellement d'ordre typographiques et ne prêtent donc pas à conséquence: si toutefois vous avez des remarques ou des suggestions à faire, n'hésitez pas à me les adresser; elles permettront d'améliorer la prochaine édition d'"IND-41"!

Une dernière chose: IND-41 ne fait pas (encore) l'objet d'un fichier enregistré.La question m'a déjà été posée, et je ne peux, à mon grand regret, y répondre que par la négative.

octobre 1984.

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PAYS-BAS

(1): PPC, voir diverses adresses page S2.

3-if you haven't been able to find anything satisfactory, go back to page "CL", and, with a bit of luck, you will find another class in which the wanted program could have been sorted.

4-if you have found one or several interesting programs, all that is left to do is to look up the original article, among your own magazines, or around you (friends, public library,...), or, as a last resort, by writing directly to the publisher. You will find all the addresses you need to that effect at the end of this index, on pages "S".

FINAL NOTES.

Though this index may seem to be an ambitious project, it has its own recognized limitations; it is no more than the work of a single individual, greatly helped by the enthusiasm shown by members of the PPC Chapter in Delft, in the Netherlands (1), and it doesn't claim to be perfect, nor exhaustive! Most of the many errors you might find among these pages are of a typographical nature and bear no consequences on the usefulness of the index itself: I would however be pleased to receive any remark, or suggestion, and will consider them so as to improve the next edition of "IND-41"!

One last item: there is (yet) no computer file corresponding to IND-41. This question has already been asked, and I must reluctantly answer negatively to any such request: IND-41 is nothing more than a manual program index.

October 1984.

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NETHERLANDS

(1): for PPC, see addresses on page S2.

0. GENERAL.
0.1 ARTS GRAPHIQUES - PHOTO (dessin sur imprimante, voir 3.31; sur table traçante, voir 3.4; sur écran vidéo, voir 3.5).
0.2 MUSIQUE (métronomes, voir 5).

1. MATHEMATIQUES.
1.1 ARITHMETIQUE.
1.11 FRACTIONS ET CALCULS FRACTIONNAIRES.
1.12 DIVISEURS - MULTIPLES - FACTEURS & NOMBRES PREMIERS.
1.2 MATRICES - SYSTEMES D'EQUATIONS.
1.3 DIFFERENTIATION - INTEGRATION.
1.4 CONVERSIONS (de base, d'unité, en chiffres romains, etc...).
1.41 CONVERSIONS DE BASES.
1.5 STATISTIQUES - COURBES APPROCHEES - GENERATEURS DE NOMBRES ALEATOIRES (interpolations polynomiales, voir 1.6).
1.6 CALCUL DE FONCTIONS - POLYNOMES.
1.61 CALCUL DES VALEURS NUMERIQUES DE FONCTIONS.
1.7 TRI (ainsi que mise en ordre alphabétique).

2. TECHNIQUES DE PROGRAMMATION.
2.1 GESTION DE MEMOIRE.
2.11 FICHIERS ASCII.
2.12 MEMOIRE AUXILIAIRE/ETENDUE (en général).
2.13 MEMOIRE TAMPON D'ENTREES/SORTIES (avec alarmes).
2.2 MANIPULATIONS DE CARACTERES (dans ou au moyen de fichiers ASCII, voir 2,11; mise en ordre alphabétique, voir 1.7).
2.3 PROGRAMMATION SYNTHETIQUE EN SOI (entrée d'instructions synthétiques, voir 3.1; gestion de mémoire par instructions synthétiques, voir 2.1).
2.4 ASSIGNATION DE TOUCHES.
2.5 INTERPRETEURS - AUTRES LANGAGES.

3. ENTREES/SORTIES (introduction de matrices, voir aussi 1.2).
3.1 ENTREES (en général).
3.2 AFFICHAGE.
3.3 IMPRIMANTE.
3.31 GRAPHISME SUR IMPRIMANTE (tables traçantes, voir 3.4)
3.4 TABLES TRAÇANTES.
3.5 INTERFACE VIDEO.

4. SCIENCES.

5. MESURE DU TEMPS (transferts d'alarmes, voir 2.3; évaluation de coûts en fonction du temps, voir aussi 8).
5.1 ALARMES - REVEILS - CARILLONS.

6. APPLICATIONS INDUSTRIELLES (autres qu'électrotechnique).
6.1 HYDROLOGIE.
6.2 INGENIERIE DU PETROLE.

7. ELECTROTECHNIQUE.
7.2 LIGNES DE TRANSMISSION.

8. FINANCES - ECONOMIE.

9. JEUX.
9.1 JEUX DE REFLEXION (jeux sur damiers, voir 9.2).
9.11 JEUX DE LETTRES OU DE CHIFFRES.
9.2 JEUX SUR DAMIER (symétriques, tels que dames, échecs, réversi, etc...).
9.3 JEUX DE ROLE - LABYRINTHES.
9.5 JEUX DE HASARD (Jakpot, roulette,...).

CL

0. GENERAL & MISCELLANEOUS.
0.1 GRAPHICAL ARTS - DRAFTING - PHOTOGRAPHY (drawing by means of a printer, see 3.31; by means of a plotter, see 3.4; on a screen, see 3.5).
0.2 MUSIC (metronomes, see 5).

1. MATHEMATICS.
1.1 ARITHMETIC - NUMBER THEORY.
1.11 FRACTIONS & FRACTIONAL CALCULATIONS.
1.12 DIVISORS - MULTIPLES - PRIME FACTORS & NUMBERS.
1.2 MATRICES - SIMULTANEOUS EQUATIONS.
1.3 DIFFERENTIAL & INTEGRAL CALCULUS.
1.4 CONVERSIONS (of all kind: number base, units, roman to or from arabic, etc...)
1.41 BASE CONVERSIONS.
1.5 STATISTICS - CURVE FITTING - RANDOM NUMBER GENERATORS (polynomial interpolation, see 1.6)
1.6 FUNCTIONS - POLYNOMIALS.
1.61 COMPUTING THE NUMERICAL VALUES OF FUNCTIONS.
1.7 SORTING (numerical as well as alphabetical).

2. PROGRAMMING TECHNIQUES.
2.1 MEMORY CONTROL.
2.11 ASCII FILES.
2.12 EXTENDED MEMORY (in general).
2.13 INPUT/OUTPUT BUFFERS (also time alarms).
2.2 ALPHA CHARACTERS MANIPULATIONS (in or by means of ASCII files, see 2.11; alphabetical sorting, see 1.7).
2.3 SYNTHETIC PROGRAMMING (i.e. making or decoding synthetic lines; input of synthetic instructions, see 3.1; memory control by means of synthetic instructions, see 2.1).
2.4 KEY ASSIGNMENTS.
2.5 INTERPRETERS - OTHER PROGRAMMING LANGUAGES.

3. INPUT/OUTPUT (for matrix input, see also 1.2)
3.1 INPUT (in general).
3.2 DISPLAY CONTROL.
3.3 PRINTER.
3.31 DRAWING AND PLOTTING USING A PRINTER (plotters, see 3.4).
3.4 PLOTTERS.
3.5 VIDEO INTERFACE.

4. SCIENCES (and pseudo-sciences as well).

5. TIME MEASUREMENT & RECKONING (transferring time alarms to and from I/O buffers, also see 2.3; evaluating costs with relation to time, see also 8).
5.1 ALARMS - ALARM CLOCKS - CHIMING CLOCKS, etc...

6. ENGINEERING & APPLIED SCIENCES (except electrical engineering).
6.1 HYDROLOGY - HYDRAULICS.
6.2 PETROLEUM ENGINEERING.

7. ELECTRICAL & ELECTRONIC ENGINEERING.
7.2 TRANSMISSION LINES.

8. BUSINESS & FINANCE.

9. GAMES.
9.1 MENTAL GAMES (i.e. games which involve at least in part some mental process; board games, see 9.2).
9.11 NUMBER & WORD GAMES.
9.2 BOARD GAMES (impartial, such as chess, draughts, Othello, etc...).
9.3 ADVENTURE GAMES - MAZES.
9.5 GAMES OF CHANCE.

4. EXERCEZ-VOUS A CHANGER DE BASE.
L'ORDINATEUR DE POCHE (FR): No.9, 11/82, p.75-76.

La machine propose une opération arithmétique et l'on doit lui fournir le bon résultat exprimé dans une base choisie au préalable.

HP-41 (129 lignes).

228. TOUCH-TONING.
PPC CALCULATOR JOURNAL (US): V10 N7, 8/83, p.22+25.

With this program one keystroke is enough to dial any telephone number, et least in the United States, using the Sprint or MCI networks.

HP-41 (43 lines)

+ HP-IL
+ 82166A GPIO Interface + Hardware.

96. CRITICAL PATH PLANNING.
PPC CALCULATOR JOURNAL (US): V9 N7, 11/82, p.58-61.

This article describes a program which allows the HP-41 to use the Critical Path Method in planning and scheduling a small project. Up to 99 activities may be entered with integer durations from 0 to 99. The calculated project length must be less than 999 to prevent erroneous results.

HP-41 (456 lines - synthetic)

+ PPC ROM.

239. POSITION FIXING ON THE A.M.G.
PPC CALCULATOR JOURNAL (US): V10 N8, 10/83, p.42-43.

This pair of complementary programs make computations on the A.M.G. (Australian Map Grid) a lot easier and quicker. "POS" is designed to compute a point position in Northing and Easting, starting from another point. "IPOS" is the inverse to "POS".

HP-41 (249 + 228 lines).

167. HP-41 HELPS BICYCLE RACE.
PPC CALCULATOR JOURNAL (US): V10 N5, 6/83, p.15-16.

This gear ratio plotting program graphically represents the "steps" between gears on a bicycle, so that one can find optimum ratios for various racing environments. The program can calculate 1-21 ratios utilizing 1-3 chainwheels and 1-7 cogs.

HP-41 (173 lines - synthetic)

+ PPC ROM
+ Printer.

241. MANHATTAN ADDRESS LOCATOR.
PPC CALCULATOR JOURNAL (US): V10 N8, 10/83, p.47.

Unlike most other places, Manhattan has its street addresses arranged with some logic. This makes it possible for an HP-41 program to identify the cross street when you supply the address.

HP-41 (146 lines - synthetic)

+ XFunctions Module.

258. QUAND UNE HP-41 VOUS TIENT LA JAMBE.
L'ORDINATEUR DE POCHE (FR): No.18, 11/83, p.28-29.

Le nom du programme est "SIGMUND"... et c'est le premier programme de psychanalyse par calculatrice de poche: pour lui parler, il suffit d'entrer un par un des mots de six caractères maximum, chacun suivi de R/S. Quand une phrase est complète, le programme l'analyse et fait ses commentaires...

HP-41 (594 lignes).

300. IMPROVED MORSE CODE ON THE HP-41.
PPC CALCULATOR JOURNAL (US): V10 N9, 11/83, p.11-12.

This program is an improvement on the one originally written by R. Nelson, as it uses the ATOX function available on the X-Functions Module. Strings of up to 24 characters can be sounded in Morse code, with a speed of between 8 and 9 words a minute.

HP-41 (289 lines - synthetic)

+ XFunctions Module
+ Time Module.

364. A QUELLE HEURE EST LE PROCHAIN TRAIN?
L'ORDINATEUR DE POCHE (FR): No.8, 9/82, p.51-52.

Ce programme, avec un fichier alphanumérique en mémoire auxiliaire, permet de constituer un horaire de chemin de fer électronique, pour la recherche automatique de trains directs à des heures déterminées.

HP-41 (139 lignes)

+ Module XFonctions.

384. VOL.
PPC-T (FR): No.10, 3/84, p.63-64.

Programme de navigation pour trajet en avion (texte de l'article illisible, mais listing du programme tout à fait exploitable).

HP-41 (170 lignes).

386. UN REPERTOIRE DE POCHE.
L'ORDINATEUR DE POCHE (FR): No.22, 4/84, p.30-31.

Ce programme permet, au moyen de la mémoire étendue, d'établir de véritables fichiers électroniques, où chaque fiche comporte quatre rubriques distinctes. Il est ainsi possible de constituer de nouvelles fiches, de les rechercher, de les détruire, ou encore de les stocker sur cartes magnétiques.

HP-41 (51 lignes)

+ Module XFonctions.

400. TELEPHONE NUMBER-LETTER COMBINATIONS.
PPC CALCULATOR JOURNAL (US): V11 N2, 3/84, p.13.

This program displays/prints all letter combinations of a seven digit phone number. For example, you can dial "POPCORN" instead of 767-2676 (Time). This program generates the entire list of combinations for your favorite numbers.

HP-41 (149 lines)

+ XFunctions Module.

2. FOTOABEITEN MIT HP-41C.
CHIP (DE): Nr.12, 12/82, S.139-140.

Mit diesem Programm lässt sich exaktes Aufhellblitzen sowohl mit Computerblitzen als auch mit manuellen berechnen. Besonders nützlich erweist sich dieses Programm beim Aufhellblitzen mit Schlitzverschlusskameras zum Abstimmen der Einstellwerte untereinander.

HP-41 (119 Zeilen).

59. CONDENSED PHOTOLOG.
PPC CALCULATOR JOURNAL (US): V10 N1, 2/83, p.62-64.

This program will store technical information and comments of four to five 36 exposure film rolls. It has basically the same I/O as "HP-41 PHOTO LOG", however, the intermediate data storage is completely different.

HP-41 (277 lines)

+ XFunctions Module.

141. DES DESSINS EN PERSPECTIVE SUR VOTRE HP-41C.
L'ORDINATEUR INDIVIDUEL (FR): No.49, 6/83, p.189-193.

Connaissant les coordonnées dans l'espace d'un objet (ou d'un paysage) le programme "SITOR" permet d'en obtenir la représentation en perspective par positions à reporter sur une feuille de papier.

HP-41 (142 lignes).

229. AUTOMATIC EXPOSURE BRACKETING.
PPC CALCULATOR JOURNAL (US): V10 N7, 8/83, p.22-23+25.

If your photo camera has an electronic shutter (at least electronically controlled) this program can automatically shoot a series of exposure at different (slow) speeds - essentially time exposures at night.

HP-41 (64 lines)

+ HP-IL
+ 82166A GPIO Interface + Hardware
+ Time Module.

230. DARKROOM CONTROLLER.
PPC CALCULATOR JOURNAL (US): V10 N7, 8/83, p.23-25.

This program acts like a standard enlarger timer and remembers your initial time; it also allows you to modify that time, it computes correct exposure times when changing polycontrast filters, and it keeps track of and notifies audibly the status of prints in the fixer and the wash.

HP-41 (266 lines - synthetic)

+ HP-IL
+ GPIO Interface + Hardware
+ Time Module.

22. ROUTINE FOR TRANSPOSING MUSIC.
HP KEY NOTES (US): Vol.6 No.4, 12/82, p.13.

This routine is used when transposing music form one key to another according to the interval of half-steps specified (only once for successive notes). The white keys are represented by capital letters (A-G) and the black keys by the small letters that correspond to the flat note of that key.

HP-41 (62 lines).

107. AU CLAVIER DE VOTRE HP-41C TRANSPOSEZ LA MUSIQUE.
L'ORDINATEUR DE POCHE (FR): No.12, 4/83, p.61.

Il advient quelquefois que l'on ait à transposer les accords d'une partition musicale pour s'adapter à un autre instrument. Ces transpositions n'étant pas toujours faciles, ce programme peut s'avérer fort utile pour les effectuer.

HP-41 (126 lignes).

188. TONE TESTING, TIMING, AND TOOTLING.
PPC CALCULATOR JOURNAL (US): V10 N6, 7/83, p.12-13.

You can experiment with sequences of up to sixteen tones, or measure the exact tone durations (which seem to vary with every ROM revision). In the "tootling" mode, the HP-41 can compose a series of short melodies, each consisting of 16 random tones, and play them.

HP-41 (148 lines - synthetic) =BARCODE=

+ PPC ROM (or: XFunctions Module).

3.KOMPLEXE OPERATIONEN.
CHIP (DE): Nr.11, 11/82, S.143-148.

Mit diesem Programm ist man mit Hilfe des HP-41C in der Lage, mit komplexen Grössen zu arbeiten. Es bietet wahlweise Ein- und Ausgabe in Exponential- oder Komponentenform sowie praktisch alle mathematischen Funktionen (auch elektrotechnischen Funktionen).

HP-41 (725 Zeilen).

49.KOMPLEXE ZAHLEN.
CHIP (DE): Nr.4, 4/81, S.55-56.

Dieses Programm ermöglicht Rechenoperationen 1., 2. und 3. Stufe sowie die Berechnung beliebiger Logarithmen zu jeder beliebigen Basis. Die gegebenen komplexen Zahlen (A und B) müssen in der Form: Z = a+bi vorliegen.

HP-41 (138 Zeilen).

78.COMPLEX NUMBERS.
PPC CALCULATOR JOURNAL (US): V9 N7, 11/82, p.9.

This program includes 14 commonly used complex number functions. It only uses the stack, preserves the Z and T registers for one number functions, and preserves the last complex number entered for two number functions.

HP-41 (198 lines).

322.GENERATEUR DE FORMULES TRIGONOMETRIQUES.
L'ORDINATEUR INDIVIDUEL (FR): No.56, 2/84, p.228.

Ce programme offre quatre fonctions groupées en deux familles. D'une part deux fonctions qui servent à exprimer les puissances de cos x et sin x en fonction de cos nx et de sin nx. D'autre part deux fonctions qui font l'inverse.

HP-41 (195 lignes).

323.POWERS.
COMPUTING TODAY (GB): 2/82, p.67.

This program requires very little space in the machine, runs quite fast, and will test any input number to see if it is the power of any other number. All real numbers are accomodated.

HP-41 (92 lines).

331.CONSTANT ARITHMETIC (Beginner's Corner).
DATAFILE (GB): V.2 N.4, 9/83, p.4-5.

This program enables you to enter a constant and subsequently use it for any number of arithmetic functions, just like constant arithmetic with much simpler calculators.

HP-41 (35 lines).

338. INVERSION DE DEUX DECIMALES (Misez p'tit: op'timisez!)
L'ORDINATEUR DE POCHE (FR): No.21, 3/84, p.21-22.

Trois petits programmes optimisés permettant de permuter les deux premières décimales d'un nombre compris entre 0 et 1, c'est-à-dire fournir, à partir de 0,14159 par exemple, le résultat: 0,41159 .

HP-41 (13 ou 16 ou 14 lignes)

+ Module XFonctions pour version 3.

348. GEBRUIK VAN DE ALPHA-REGISTER HP-41C.
HCCNIEUWSBRIEF (NL): Nr.40, 6/82, blz.38.

Dit programma berekent de fout in een gegeven formule wanneer alle variabelen met hun respectievelijke absolute fout bekend zijn. De truc zit in het gebruik van de M-, N-, O-, en P-registers.

HP-41 (93 regels + formule - synthetisch).

350. CHANGER SES COORDONNEES EN 5 OCTETS.
L'ORDINATEUR INDIVIDUEL (FR): No.38, 6/82, p.250.

Deux tout petits programmes pour changer les coordonnées d'un point dans l'espace, du système cartésien en coordonnées polaires et inversement.

HP-41 (5 + 5 lignes).

9.GRANDES FACTORIELLES AVEC LA HP-41.
L'ORDINATEUR DE POCHE (FR): No.10, 1/83, p.68-69.

L'algorithme de calcul utilisé permet, non seulement de dépasser la limite de 69 habituelle pour le calcul de factorielles sur HP-41, mais aussi d'obtenir tous les chiffres imprimés par lignes de 24 caractères, ou 32 caractères si on utilise l'interface vidéo.

HP-41 (122 lignes - synthétique)

+ Imprimante (ou Interface Vidéo).

12."FAC" ROUTINE.
HP KEY NOTES (US): Vol.6 No.4, 12/82, p.10.

This program, adapted from an HP-67 routine, computes factorials of numbers larger than 69.

HP-41 (36 lines).

87.MAGIC SQUARES.
PPC CALCULATOR JOURNAL (US): V9 N7, 11/82, p.26.

This program generates Magic Squares with an odd dimension larger than 3, and there is no upper limit (as far as the HP-41 can show and compute the numbers: max. 10-digit numbers are possible). The print routine however can only do its job well if the dimension doesn't exceed 9.

HP-41 (174 lines).

178.UTILITAIRES POUR HP-41.
L'ORDINATEUR INDIVIDUEL (FR): No.50, 7/83, p.214.

Deux petits programmes. Le premier permet de multiplier deux nombres de dix chiffres, avec résultat à vingt chiffres . Le second permet de retrouver de manière rapide la fraction rationnelle associée à un nombre décimal.

HP-41 (71 + 61 lignes).

182.MISEZ P'TIT: OP'TIMISEZ!
L'ORDINATEUR DE POCHE (FR): No.16, 9/83, p.28-29.

Cinq programmes minimaux pour calculer arrangements et/ou combinaisons, en analyse combinatoire.

HP-41 (de 13 à 15 lignes / programme).

259.PROGRAMME FACTORIELLES (Misez p'tit: op'timisez!).
L'ORDINATEUR DE POCHE (FR): No.18, 11/83, p.42.

Deux petits programmes pour calculer les factorielles de nombres plus grands que 69. Le deuxième utilise une instruction synthétique, mais fournit une plus grande précision.

HP-41 (21 + 28 lignes).

274. LE RECORD EST TOMBE, VIVE LE RECORD!
L'ORDINATEUR DE POCHE (FR): No.19, 12/83, p.23.

Le record, c'est celui du programme optimal pour calculer le nombre d'arrangements et de combinaisons de n éléments pris p à p, qui améliore les résultats obtenus et publiés dans l'Ordinateur de Poche no.16. Ce programme n'occupe que 11 octets, sans label ni END.

HP-41 (12 lignes).

279. ULAM'S CONJECTURE.
PPC CALCULATOR JOURNAL (US): V9 N6, 9/82, p.24.

The program "UC" will compute the sequence of results following the rule of Ulam's Conjecture, view all results and finally show the original number and the amount of cycles it took to reach 1.

HP-41 (52 lines).

349. LA PYRAMIDE DES NOMBRES.
L'ORDINATEUR INDIVIDUEL (FR): No.38, 6/82, p.165-167.

Le but du programme est de construire une pyramide à l'aide des N premiers nombres, sachant que tout nombre d'une rangée inférieure doit être le résultat de la soustraction des deux nombres qui le surplombent (la base, ou plus grande rangée, est alors placée en haut).

HP-41 (191 lignes).

354. LES CARRES DITS MAGIQUES SUR HP-41 ET HP-65.
L'ORDINATEUR DE POCHE (FR): No.6, 5/82, p.37-38.

Un algorithme particulier permet de remplir des carrés magiques en utilisant un minimum de registres mémoire.

HP-41 (52 lignes).

358. SEQUENCES OF STRICTLY INCREASING DIGITS.
DATAFILE (GB): V.2 N.5, 11/83, p.6.

Programme SSID delivers all possible sequences of non-zero digits in which each digit is greater than its predecessor. There are 512 such sequences.

HP-41 (56 lines).

360. PERMUTATIONS.
DATAFILE (GB): V.2 N.5, 11/83, p.22.

Program PERMS generates all permutations of the digits 1 to n, with n greater than 2. It takes one minute to run through all perms as n = 4, and 500 years if n = 13 !... Other objects can be permutated by defining a correspondence between the digits and the desired objects.

HP-41 (70 lines)

+ XFunctions Module.

373. DUBBELE NAUWKEURIGHEID OP DE HP-41.
DE SOFTWARE (BE): Nr.2, 3/84, blz.65-67.

Dit programma voert drie bewerkingen uit: het berekenen van a.b (mod n) in dubbele nauwkeurigheid; het berekenen van a*b (mod n); en het zoeken van getallen van "van Mersenne", dit zijn priemgetallen p waarbij $M_p = 2*p - 1$ ook een priemgetal is.

HP-41 (229 regels).

71. BRUCHRECHNEN MIT HP-41C.
CHIP (DE): Nr.11, 11/81, S.55-56.

Mit Hilfe dieses Programm bereitet es keine Schwierigkeiten, alle vier Grundrechenarten mit Brüchen durchzuführen. Werden die vier Alpha-Label (Zeilen 1, 3, 9, und 11) den vier Tasten "-", "+", "x", und "/" zugeordnet, ist die Bedienung des Programms ähnlich des bei Rechnungen ohne ein Programm.

HP-41 (57 Zeilen).

77. PILE RATIONNELLE SUR HP-41C.
L'ORDINATEUR DE POCHE (FR): No.12, 4/83, p.47-48.

Ce programme simule une véritable pile opérationnelle capable de traiter les fractions comme des nombres. L'emploi du programme, ou plutôt des programmes, obéissant aux règles de la notation polonaise inverse de la HP-41, ne se distingue que par l'introduction des données.

HP-41 (322 lignes).

250. SIMPLIFICATION DE FRACTIONS - HP41C.
L'ORDINATEUR INDIVIDUEL (FR): No.25, 3/81, p.136.

Programme de simplification de fractions à partir de l'algorithme d'Euclide. Aucune mémoire autre que la pile opérationnelle n'est utilisée, et le réultat est obtenu en 3 secondes.

HP-41 (31 lignes).

266. FRACTIONS.
DATAFILE (GB): V.2 N.2, 5/83, p.15-16.

This program allows you to work in fractions. The following functions are available: + , - , * , / , STO , RCL , and CLX all of which are assigned to their relevant keys. Number entry is in RPN and a level 2 stack is used.

HP-41 (191 lines)

(PSIZE and SIZE? of XFunctions Module used but not compulsory).

316. REN = RECIPROCAL EGYPTIAN NOTATION.
PPC CALCULATOR JOURNAL (US): V10 N10, 12/83, p.30-31.

It was the custom of ancient Egyptians to express the value of a proper fraction as the sum of the reciprocals of integers (Rhind papyrus, 2000 B.C.). The program "EGYPT" will calculate the denominators d of such a series.

HP-41 (117 lines).

409. FRACTION ARITHMETICS.
PPC CALCULATOR JOURNAL (US): V11 N2, 3/84, p.32.

This program makes the use of "FR" in the PPC ROM easier. It enables you to add, subtract, multiply, divide, reduce fractions, or find the greatest common divider of two numbers.

HP-41 (22 lines)

+ PPC ROM
+ XFunctions Module.

30. GGT-KGV MIT DEM HP-41C.
CHIP (DE): Nr.4, 4/80, S.44.

Das Programm berechnet den grössten gemeinsamen Teiler (GGT) zweier Zahlen mit Hilfe des Euklidschen Algorithmus. Das kleinste gemeinsame Vielfache (KGV) der beiden Zahlen wird berechnet, indem die kleinere Zahl durch den GGT geteilt wird und die grössere mit dem Ergebnis der Division multipliziert wird.

HP-41 (24 Zeilen).

294. FERMAT TEST FOR LARGE PRIMES.
DATAFILE (GB): V.2 N.3, 6/83, p.9-10.

The Fermat method for testing large primes is far quicker than factor searching, and it can be used for huge numbers for which factor searching would be quite impracticable. This program is based on an article in Scientific American (Dec. 1982) by Carl Pomerance.

HP-41 (118 lines).

69. NOMBRES PREMIERS.
L'ORDINATEUR DE POCHE (FR): No.1, 4/81, p.54.

Appliquant le théorème de Fermat, ce programme permet, en quelques secondes, de savoir si un nombre n'est pas premier. Cette méthode ne permet toutefois pas d'affirmer si un nombre estimé "non composé" est vraiment premier...

HP-41 (97 lignes).

325. REVOICI LES FACTEURS MAIS SUR HP41C.
L'ORDINATEUR DE POCHE (FR): No.5, 3/82, p.68-69.

Méthode et programme permettant de décomposer en facteurs premier tout nombre supérieur à dix.

HP-41 (82 lignes).

150. HP-41 NT (NUMBER THEORY).
PPC CALCULATOR JOURNAL (US): V10 N4, 5/83, p.18-22.

NT is a program that provides some basic number theory operations, such as greatest common divisor, least common multiple, congruences, etc... Ten different functions are provided.

HP-41 (217 lines - synthetic)

+ PPC ROM.

417. PREMIER OU NON? (Misez p'tit: op'timisez!)
L'ORDINATEUR DE POCHE (FR): No.23, 5/84, p.48.

Ce petit programme de 16 octets seulement (sans label ni END) permet de déterminer si un nombre est premier ou non. Il lui faut par exemple 28,92 secondes pour affirmer que 65537 est bien premier.

HP-41 (17 lignes).

24. LINEAR EQUATIONS SOLVING ROUTINE.
HP KEY NOTES (US): Vol.6 No.4, 12/82, p.13.

This short and efficient routine solves n simultaneous equations, using the Gauss-Jordan method.

HP-41 (59 lines).

86. MATRIX LEAST SQUARES.
PPC CALCULATOR JOURNAL (US): V9 N7, 11/82, p.22-26.

Most articles on curve fitting deal with two parameters problems, which are simple cases of a more general matrix least squares method. This is a more general program for P parameters, N experiments, and F factor levels. The maximum size is determined by: $S = 14 + P^2 + P + 2N$.

HP-41 (670 lines).

44. CHOLESKI EQUATION SOLUTION.
PPC CALCULATOR JOURNAL (US): V9 N8, 12/82, p.10-11.

Program "MC6" solves for the elements of X in the system $A.X = C$, in which only the elements near the diagonal of the coefficient matrix are non-zero, and these are symmetrical about the diagonal. A much larger number of equations can be solved than by using more classical solutions.

HP-41 (376 lines)

+ PPC ROM

91. MATRIX PRODUCT.
PPC CALCULATOR JOURNAL (US): V9 N7, 11/82, p.37.

The short routine "MATP" uses the PPC ROM to obtain matrix products. If A and B are square matrices, it has the option of creating a new C matrix or overwriting the C matrix onto the A matrix. This feature is useful in conserving memory.

HP-41 (60 lines - synthetic)

+ PPC ROM.

51. SOLUTIONS OF COMPLEX EQUATION.
PPC CALCULATOR JOURNAL (US): V10 N1, 2/83, p.20-22.

The routine CMIO which is analogous to the matrix input/-output routine MIO (PPC ROM) has been developed to input and output complex matrix elements. A set of up to 7 linear equations can be solved, using this routine.

HP-41 (195 lines + "RRM" routine)

+ PPC ROM.

131. HP-41 NON-LINEAR SIMULTANEOUS EQUATIONS.
PPC CALCULATOR JOURNAL (US): V10 N3, 4/83, p.31-33.

Program "NL" is capable of solving up to 10 simultaneous non-linear equations using the Raphson-Newton iterative method of successive approximations. The number of equations is dependant upon the size of the machine.

HP-41 (203 lines)

+ PPC ROM.

181. POLYNOMIAL REGRESSION ON A POCKET CALCULATOR.
CHEMICAL ENGINEERING (US): 4/10/82, p.121-124.

This implementation of the polynomial-regression algorithm consists of three parts. One to handle data input, calculation of sums in the matrix... The second part solves the matrix. And the last part formats all numbers displayed and printed by the program.

HP-41 (415 lines).

240. NON-LINEAR SIMULTANEOUS EQUATIONS.
PPC CALCULATOR JOURNAL (US): V10 N8, 10/83, p.43-45.

Program NONL is capable of solving up to 10 simultaneous non-linear equations using the method of minimizing the sum of the squares of the function values. Convergence is slower than with the Newton-Raphson method, but the PPC ROM is not needed, and only 16 storage registers are used.

HP-41 (117 lines).

284. EIGENVALUES/VECTORS OF 3RD-ORDER SYSTEMS.
◇ USERS' LIBRARY SOLUTIONS: HIGH-LEVEL MATH (US): Hewlett-Packard p.6-13.

For a given 3rd order matrix with distinct real eigenvalues the program calculates the eigenvalues and eigenvectors. The pwer method is used for the first, and the deflation method for the other two.

HP-41 (281 lines) =BARCODE= .

285. EIGENVALUES FOR 3RD ORDER SYSTEM.
◇ USERS' LIBRARY SOLUTIONS: HIGH-LEVEL MATH (US): Hewlett-Packard p.14-20.

This program determines the eigenvalues of a 3rd order system by solving the cubic equation: $\det(\lambda I - A) = 0$ by using the exact formula.

HP-41 (279 lines) =BARCODE= .

337. HP-41 MATRIX OPERATIONS.
DATAFILE (GB): V.2 N.4, 9/83, p.20-23.

This set of programs covers all the basic aspects of matrix operations: store, recall, multiply, transpose, invert, read,etc... (Note: the article is all mixed up; text should be read: p.20 , 23 , 22; program listing is in the order: p.22-21!).

HP-41 (896 lines - synthetic)

+ XFunctions Module.

353. MATRIX OPERATIONS ON THE HP-41.
PPC CALCULATOR JOURNAL (US): V9 N5, 8/82, p.17-18.

Two programs are given. The first one does both matrix input and output. The second program does matrix multiplication. A third useful program to create control words of the form bbb.eeeiii is also given for use with matrices.

HP-41 (55 + 54 + 11 lines)

+ PPC ROM.

396. FURTHER MATRIX OPERATIONS.
DATAFILE (GB): V.3 N.1, 1/84, p.17-18.

This programme deals with the solution of simultaneous equations, expressed in matrix form. It requires three previously documented programs (given in DATAFILE V.2 N.4).

HP-41 (96 lines + external routines)

+ XFunctions Module.

433. CHARACTERISTIC EQUATION OF A 4x4 MATRIX.
◇ USERS' LIBRARY SOLUTIONS: HIGH-LEVEL MATH (US): Hewlett-Packard, p.46-52.

Calculates the coefficients to the characteristic equation of a 4x4 matrix.

HP-41 (271 lines) =BARCODE= .

434. 4x4 MATRIX OPERATIONS.
◇ USERS' LIBRARY SOLUTIONS: HIGH-LEVEL MATH (US): Hewlett-Packard, p.53-65.

This program allows the calculations of the determinant and inverse of a 4x4 matrix, and the solution of a system of simultaneous equations in four unknowns. The method used is that of Gaussian elimination with partial pivoting.

HP-41 (428 lines) =BARCODE= .

36. L'INTEGRATION NUMERIQUE DE GAUSS.
L'ORDINATEUR DE POCHE (FR): No.11, 3/83, p.48-50.

La méthode de Gauss approche l'intégrale par une sommation sur l'intervalle choisi. Il faut que la fonction à intégrer soit partout définie sur cet intervalle, et que, dans le cas infini, son intégrale converge.

HP-41 (126 lignes).

70. NUMERIEKE INTEGRATIE.
HCC NIEUWSBRIEF (NL): Nr.33, 10/81, blz.31+34.

Numeriek integreren wordt in de techniek veel toegepast daar er veel belangrijke elementaire functies zijn die analytisch niet te integreren zijn. Het NUMerieke INTegratie programma werkt volgens de halve toename methode. De gebruiker dient voor zichzelf de nauwkeurogheid vast te stellen.

HP-41 (76 regels).

73. INTEGRATION MIT DEM HP-41C.
CHIP (DE): Nr.4, 4/82, S.11.

Bei der hier verwendeten Simpson-Regel zur näherungswiesen zahlmässigen Berechnung eines bestimmten Integrals wird das Intervall (a,b) zwischen der oberen und unteren Integrationsgrenze in n Teilintervallen der Länge h = (b-a)/n geteilt.

HP-41 (72 Zeilen).

267. CALCULATE AREA UNDER A CURVE & ITS CENTROID POSITION.
DATAFILE (GB): V.2 N.2, 5/83, p.16.

Simpson's Rules for integration are commonly used in calculations involving ship forms where a mathematical definition is seldom practicable. This program combines Simpson's First Rule with the so-called (5, 8, -1) Rule. The calculation is exact for 2nd degree polynomials.

HP-41 (126 lines).

287. SIXTEEN-POINT GAUSSIAN QUADRATURE.
◇ USERS' LIBRARY SOLUTIONS: HIGH-LEVEL MATH (US): Hewlett-Packard p.27-33.

This program will compute approximations for integrals over finite or infinite intervals by the sixteen-point Gauss-Legendre quadrature method. The function f(x) must be known and keyed into the program under another label.

HP-41 (102 lines) =BARCODE= .

305. TRAPEZOIDAL INTEGRATION.
PPC CALCULATOR JOURNAL (US): V10 N9, 11/83, p.31.

This routine is a quick and not so dirty trapezoidal integration program that integrates the area under a curve or a set of graph points as you enter the points. This program is quite "user friendly" and very easy to use.

HP-41 (55 lines)
+ Printer.

344. NUMERIEKE DIFFERENTIATIE.
HCCNIEUWSBRIEF (NL): Nr.32, 9/81, blz.37.

Dit programma berekent de afgeleide van een functie f(x) op elk willekeurig punt door het gebruik van de halve toename methode.

HP-41 (66 + "functie" regels).

347. NUMERIEKE DIFFERENTIEREN.
HCCNIEUWSBRIEF (NL): Nr.39, 5/82, blz.41+43.

Het programma "NUMDV" is zo samengesteld dat zowel eerste- als tweede orde differentialen kunnen worden opgelost. De gebruikte methode is de 4de orde Runge-Kutta methode die betrouwbaar is en redelijk nauwkeurig.

HP-41 (133 + "functie" regels).

378. IN (1).
PPC-T (FR): No.10, 3/84, p.53.

Programme pour calculer une intégrale par la méthode de Simpson, très court et ne nécessitant aucun registre de stockage. La seule restriction est que le calcul de la fonction elle-même n'utilise que les registres X, Y, et Z de la pile opérationnelle.

HP-41 (44 lignes - synthétique).

379. IN (2).
PPC-T (FR): No.10, 3/84, p.54.

Nouveau programme de calcul d'intégrale, celui-ci n'utilisant que deux registres de données. La fonction à intégrer doit être introduite sous forme de sous-programme indépendant.

HP-41 (55 lignes - synthétique)

+ Module XFonctions.

441. ITG, SVE, IDV.
PPC CALCULATOR JOURNAL (US): V11 N3, 4/84, p.11-12.

These programs are prompting versions of the PPC ROM math-functions IG (integrate), SV (solve) and FD (first derivative). They are useful if you do not remember what to store in which register.

HP-41 (74 lines)

+ PPC ROM
+ Time Module.

54. RULER STYLE FRACTION CONVERSION.
PPC CALCULATOR JOURNAL (US): V10 N1, 2/83, p.41-42.

This program expresses any number as a fraction to the nearest half, quarter, eigth or sixteenth, like the markings on a ruler. It is mostly convenient when scaling layouts up and down, using inches.

HP-41 (76 lines)

+ PPC ROM.

55. HP-41 8-BIT SIMULATION ROUTINES.
PPC CALCULATOR JOURNAL (US): V10 N1, 2/83, p.42-43.

These eight routines can be used to simulate the logical operations AND, INCLUSIVE OR, EXCLUSIVE OR, SHIFT, ROTATE, NOT, and conversions between decimal and hexadecimal bases.

HP-41 (224 lines)

+ XFunctions Module.

210. DECIMAL TO ROMAN NUMERALS CONVERTER (COMPETITION SPOT).
DATAFILE (GB): V2 N1, p.28.

This is a tentative shortest programme to convert decimals to Roman numerals, up to a maximum value of 3999.

HP-41 (60 lines)

+ XFunctions Module.

223. CONVERSION DES UNITES BIOLOGIQUES.
L'ORDINATEUR DE POCHE (FR): No.4, p.61.

Si le résultat de certaines analyses était, jusqu'à une date récente, exprimé sous forme de poids par volume, on utilise de plus en plus les nouvelles unités S.I. (en micromoles par litre). Ce programme permet d'obtenir très facilement la conversion des 15 éléments les plus fréquents

HP-41 (112 lignes).

232. HP-41 8-BIT SIMULATION ROUTINES.
PPC CALCULATOR JOURNAL (US): V10 N8, 10/83, p.2-3.

These routines are a complement on those already described in another article (see program card no.55). The new shift and rotate functions given here take into account the state of the carry flag, as in the 6502 microprocessor

HP-41 (71 lines)

+ XFunctions Module.

245. LOGICAL OPERATIONS.
PPC CALCULATOR JOURNAL (US): V10 N8, 10/83, p.53-55.

This set of programs performs logical operations (AND, OR, XOR, NOT,...) on decimal numbers on the stack. Using conversion routines it is as easy to handle numbers in bases other than decimal.

HP-41 (172 lines - synthetic)

+ PPC ROM (not compulsory).

262. ARABIC - ROMAN - ARABIC.
DATAFILE (GB): Vol.2 N.2, 5/83, p.3-5.

With this program it becomes possible to convert large Arabic numerals to their Roman counterparts, or the converse. The rules used for Roman numerals are those given in Webster's Third New International Dictionary.

HP-41 (396 lines - synthetic)

+ PPC ROM (two routines used: listings given).

318. 2,268 LENGTH CONVERSIONS.
PPC CALCULATOR JOURNAL (US): V10 N10, 12/83, p.32-33.

This is an adaptation of an old HP-67 program which puts 2,268 length unit cinversions on the top row of keys (A-E). The trick to so many functions on so few keys lies in the redefinition of the "E" key as another shift key.

HP-41 (161 lines - synthetic) =BARCODE= .

380. ARABES.
PPC-T (FR): No.10, 3/84, p.55-56.

Programme pour convertir tout nombre arabe, inférieur à 4000 en son équivalent romain. Ce programme exploite au maximum les possibilités de la pile et de la programmation synthétique.

HP-41 (76 lignes - synthétique)

+ Module XFonctions.

403. HP-41 FRACTIONS.
PPC CALCULATOR JOURNAL (US): V11 N2, 3/84, p.18-19.

Program F>D converts fractions to the decimal equivalent, and D>F converts decimal numbers to British units, i.e. feet-inches and fractions.

HP-41 (61 + 72 lines).

408. DEGREES TO RADIANS CONVERSION.
PPC CALCULATOR JOURNAL (US): V11 N2, 3/84, p.32.

This short program converts degrees to radians using the "DF" routine in the PPC ROM. The output is given in fractions of PI.

HP-41 (11 lines)

+ PPC ROM.

442. FRACTION TO ROOT.
PPC CALCULATOR JOURNAL (US): V11 N3, 4/84, p.12.

This program will approximate a number in X with a square root; for instance o.707 (in FIX 2 mode) will give $\frac{1}{2}\sqrt{2}$. Runtime and accuracy are dependant on display status.

HP-41 (138 lines - synthetic).

43."HX" AND "DX" ROUTINES.
PPC CALCULATOR JOURNAL (US): V9 N8, 12/82, p.5.

Two short programs dealing with HEX-DEC conversions. "HX" gives the decimal equivalent of an hex number in alpha register, while "DX" allows the inverse conversion.

HP-41 (25 + 29 lines)

+ XFunctions Module.

161.HEX TO DECIMAL AND DECIMAL TO HEX.
PPC CALCULATOR JOURNAL (US): V10 N5, 6/83, p.7.

Two very short routines convert hexadecimal digits in the alpha register to their decimal equivalent in the X register, or the converse.

HP-41 (10 + 10 lines)

+ XFunctions Module.

99."BITS" ROUTINE.
PPC CALCULATOR JOURNAL (US): V10 N2, 3/83, p.10.

This little program is handy for finding a decimal equivalent for a binary number of up to 34 digits and approximations for up to 300 digits. Digits are entered one at a time, and the answer is given in X.

HP-41 (21 lines).

368.HP-16C EMULATOR.
PPC CALCULATOR JOURNAL (US): V11 N1, 1/84, p.25-27.

This program emulates the basic functions of the HP-16C: it offers variable word length of 0-32 bits, signed and unsigned notation, carry and overflow flags, and quick conversion between hexadecimal, decimal, octal, and binary (up to 10 bits).

HP-41 (220 lines)

+ XFunctions Module
+ HP-IL Development Module.

126.DECIMAL TO BASE CONVERSION.
PPC CALCULATOR JOURNAL (US): V10 N3, 4/83, p.27.

This routine is used like the PPC ROM "TB" routine. It makes efficient use of the stack and is good to 13 alpha characters.

HP-41 (31 lines - synthetic)

+ PPC ROM.

436.FAST INTEGER BINARY TO DECIMAL CONVERSIONS.
PPC CALCULATOR JOURNAL (US): V11 N3, 4/84, p.8-9.

The MODULO function permits some marvelous, fast digit manipulations. These two routines use a relation known to computer programmers whereby a three-digit decimal integer composed of 1's and 0's can be converted to octal, using (BBB) MOD 8 .

HP-41 (37 + 21 lines).

446. HEX - DEC CONVERSIE.
HCC NIEUWSBRIEF (NL): Nr.61, 6/84, blz.96.

Programma om gemakkelijk HEX getallen om te zetten in decimale getallen, en omgekeerd, of ook twee HEX getallen op te tellen. Getallen tot $ FFFF FFFF kunnen worden omgezet.

HP-41 (116 regels - synthetisch).

5. QUAND LES AIGUILLES TOMBENT SUR LE PARQUET.
L'ORDINATEUR DE POCHE (FR): No.9, 11/82, p.29-30.

Ce programme simule le jet d'aiguilles sur un parquet à lames parallèles. Le nombre d'aiguilles qui coupent une rainure par rapport au nombre d'aiguilles jetées en tout permet, après plusieurs essais, d'obtenir un résultat tendant vers la valeur 2/PI.

HP-41 (45 lignes).

61. HP-41C GENERATES A PSEUDORANDOM SEQUENCE.
ELECTRONICS (US): 19/5/81, p.171.

In much the same way as a shift register whose output bit is exclusive-ored with a selected bit fed back as input, this program will generate a pseudorandom binary sequence ranging in length from 3 to 1023 bits.

HP-41 (115 lines).

101. LEAST SQUARES REGRESSION TO DEGREE 8 - RECAST.
PPC CALCULATOR JOURNAL (US): V10 N2, 3/83, p.15-17.

Set of programs for least squares polynomial curve fitting for equally spaced data. In fact two programs: a data entry program, and a processing program. They are similar to programs written in PPCJ V8 N4, p.20 , but use less memory space and execute faster.

HP-41 (547 + 262 lines - synthetic)

+ PPC ROM.

104. CV+ CURVE FITTING WITH STATISTICAL INFERENCE.
PPC CALCULATOR JOURNAL (US): V10 N2, 3/83, p.21-22.

CV+ calculates approximations to the t and F distributions so that acceptable confidence intervals and P-values are directly estimated wothout the need for statistical tables. For models other than the linear model, either log or exponential transforms are used.

HP-41 (384 lines)

+ PPC ROM.

143. NONLINEAR REGRESSION ON A POCKET CALCULATOR.
CHEMICAL ENGINEERING (US): 23/8/82, p.83-89.

This program fits data to a user-defined function of several parameters, using a Gauss-Newton nonlinear-regression analysis. Routine INPUT allocates storage registers, handles data input... SOLVE forms partial derivatives, sums squares and products, SYMLI solves symmetrical linear systems.

HP-41 (777 lines / 4 routines).

247. CURVE FITTING - AT SIGHT? EXTENDED.
PPC CALCULATOR JOURNAL (US): V10 N8, 10/83, p.56-57.

If straight line curve fitting is already well known, it is usually more difficult to account for errors in x and y data. This program gives the best straight line according to different cases, whether x or y or both are in error.

HP-41 (218 lines)

+ Printer.

345. HET GEWOGEN GEMIDDELDE.
HCCNIEUWSBRIEF (NL): Nr.38, 4/82, blz.52.

De beide programma's "X" en "XS" berekenen het gewogen gemiddelde en de daarin optredende fout van een enkelvoudige dataset met een gegeven variatie. "XS" maakt geen gebruik van de synthetische functies.

HP-41 (21 regels of 19 regels - synthetisch).

362. POLYNOMIAL BEST FIT.
DATAFILE (GB): V.2 N.5, 11/83, p.24.

This program allows you to find the best polynomial to fit a given set of data, up to order 14, provided the order n is at least one less than the number of data pairs you are going to use.

HP-41 (348 lines - synthetic)

+ PPC ROM
+ XFunctions Module.

369. GENERALIZED POLYNOMIAL BEST FIT.
PPC CALCULATOR JOURNAL (US): V11 N1, 1/84, p.30-31.

This program determines the best fit for the generalized polynomial: $Y = a.X^r + b.X^s + c.X^t$
where r, s, t may have non-integer values (X must always be positive), and the best fit is obtained by regression analysis.

HP-41 (324 lines)

+ PPC ROM.

382. ALEA.
PPC-T (FR): No.10, 3/84, p.58-60.

Emploi du module horloge pour générer des nombres aléatoires. La partie fractionnaire du résultat fourni par la fonction TIME est utilisée, en inversant les chiffres des secondes et des minutes.

HP-41 (24 lignes - synthétique)

+ Module Horloge.

146. EQUATION DU SECOND DEGRE.
L'ORDINATEUR DE POCHE (FR): No.15, 7/83, p.83.

Programme qui semble minimal pour fournir les deux racines réelles d'une équation du second degré, les résultats étant obtenus en X et en Y. Le programme ne requiert d'autre part aucun registre de données.

HP-41 (13 lignes).

204. BAIRSTOW'S METHOD.
DATAFILE (GB): V2 N1, p.8-10.

Bairstow's method is considered to be one of the best systems for solving equations of degree higher than four. With this program, you can solve an equation of the 250th degree! However be prepared for a long wait for high order equations. Gives complex solutions.

HP-41 (231 lines) =BARCODE= .

286. CHEBYSHEV, LEGENDRE, HERMITE AND LAGUERRE POLYNOMIALS.
◇ USERS' LIBRARY SOLUTIONS: HIGH-LEVEL MATH (US): Hewlett-Packard p.21-26.

All these polynomials are calculated by using recurrence equations.

HP-41 (202 lines) =BARCODE= .

340. INTERPOLATION PROGRAM RUNS ON HP41.
EDN (US): 13/10/83, p.267-268.

This program, based on Lagrange's interpolation polynomial, provides better accuracy than simple linear interpolation. Up to five pairs of input points can thus be interpolated.

HP-41 (145 lines).

342. VERGELIJKINGEN OPLOSSEN.
HCCNIEUWSBRIEF (NL): Nr.31, 8/81, blz.47.

De gebruikte methode (namelijk met behulp van partiële substitutie) is zeer geschikt voor instabiele oscillerende situaties. De programmeur kan zelf de convergentie orde zo instellen opdat een stabiele convergentie wordt verkregen.

HP-41 (53 + (functie) regels).

414. HET OPLOSSEN VAN 1-3^{e} GRAADSVERGELIJKINGEN.
HCCNIEUWSBRIEF (NL): Nr.60, 5/84, blz.97.

Het programma berekent een 1e, 2e, of 3e graads-kromme door een viertal punten, al naar geleng van de gegevens. Het komt in feite neer op de oplossing van vier vergelijkingen met vier onbekenden.

HP-41 (348 regels).

416. TOUJOURS PLUS! (Misez p'tit: op'timisez!)
L'ORDINATEUR DE POCHE (FR): No.23, 5/84, p.47-48.

Programme optimal pour obtenir les racines réelles et complexes d'une équation du second degré. Si les racines sont réelles, le drapeau 01 est désarmé; si elles sont complexes, il est alors armé et visible sur l'affichage.

HP-41 (25 lignes).

429. CALCULATOR EASES EMPIRICAL EQUATIONS.
OIL & GAS JOURNAL (US): 27/2/84, p.97+98+103-104.

If an empirical equation for predicting a physical property is known, the Chebyshev economization permits a simpler polynomial approximation. To accelerate the procedure, three simple HP-41 calculator programs have been developed and are presented here, with a numerical example.

HP-41 (54 + 60 + 60 lines).

445. PLAYING WITH POLYNOMIALS.
PPC CALCULATOR JOURNAL (US): V11 N3, 4/84, p.29-32.

This is a program to manipulate polynomials or finite power series. Polynomials are stored on a stack (max. number: 9). Operators act on the top of the stack, on the top two, or on the top and an arbitrary other member of the stack.

HP-41 (541 lines - synthetic) =BARCODE=

+ XFunctions Module
+ PPC ROM.

18. "Y↑X" ROUTINE.
HP KEY NOTES (US): Vol.6 No.4, 12/82, p.12.

For calculating large exponents, such as 41↑67, this routine is based on the formula Y↑X = 10↑(Y.LOG X). It works just like the Y↑X function, except that X is not stored in LASTX. The resulting mantissa will be in the X register, and the respective exponent in the Y register.

HP-41 (9 lines).

75. UN ALGORITHME AMELIORE POUR CALCULER LA FONCTION GAMMA.
L'ORDINATEUR DE POCHE (FR): No.12, 4/83, p.24.

La méthode utilisée ici n'est pas nouvelle, mais grâce à une petite astuce mathématique, elle conduit à des résultats nettement meilleurs. La formule traditionnelle de Stirling est adaptée de façon à ce que pour les petits arguments les résultats restent d'une excellente précision.

HP-41 (70 lignes).

221. CALCULATOR PLOTS TIME RESPONSE OF INVERSE LAPLACE TRANSFORM.
ELECTRONICS (US): 14/7/81, p.149.

Using the Gaver algorithm to approximate the time-domain representation of a Laplace transfer function, this program solves the inverse Laplace transform and displays the result on the calculator's printer/mini-plotter.

HP-41 (64 lines)

+ Printer.

283. SINE COSINE EXPONENTIAL INTEGRALS.
◇ USERS' LIBRARY SOLUTIONS: HIGH-LEVEL MATH (US): Hewlett-Packard p.1-5.

This program calculates Si(x) , Ci(x) , and Ei(x).

HP-41 (78 lines) =BARCODE= .

313. LOG GAMMA AND GAMMA (LARGE ARGUMENTS).
PPC CALCULATOR JOURNAL (US): V10 N10, 12/83, p.20.

This program gives LOG(ABS(GAMMA(X))) with the sign of gamma, and GAMMA(X) , by means of an extended 10↑X function for a very large range of the argument (positive as well as negative).

HP-41 (92 lines).

381. GAM + .
PPC-T (FR): No.10, 3/84, p.56-58.

Programme calculant la fonction Gamma selon la formule de Stirling, la précision étant de quatre chiffres après la virgule pour n inférieur à 14.
Note: listing erroné, celui qui accompagne l'article n'est pas le bon.

HP-41 (135 lignes - synthétique).

426. GAMMA FUNCTION.

◇ USERS' LIBRARY SOLUTIONS: HIGH-LEVEL MATH (US): Hewlett-Packard, p.34-37.

This program approximates the value of the gamma function, using a polynomial approximation for an argument between 1 and 2 (X must be a value between 1 and 70).

HP-41 (60 lines) =BARCODE= .

427. BESSEL FUNCTIONS, ERROR FUNCTION.

◇ USERS' LIBRARY SOLUTIONS: HIGH-LEVEL MATH (US): Hewlett-Packard, p.38-45.

The first routine computes the Bessel function Jn(x) and In(x), where n is a positive integer greater than zero. The second routine finds the Error function and complementary error function for positive arguments.

HP-41 (228 lines) =BARCODE= .

28. SORTING ROUTINE.
HP KEY NOTES (US): Vol.6 No.4, 12/82, p.14.

Key-in the block of data registers to be sorted using the format bbb,eee , where bbb is the begin address (greater than 2) and eee is the end address. The method used by this routine is the bubble sort, traditionally chosen for use on computers, because of its speed.

HP-41 (24 lines).

31. SORTIEREN MIT HP-41C.
CHIP (DE): Nr.5, 5/80, S.66.

Dieses Programm sortiert Daten in den Speicherregistern des HP-41C, wobei die Anzahl der zu sortieren Daten nur durch den Speicherausbau begrenzt ist (max. 231).

HP-41 (80 Zeilen).

263. INSERTION SORTING (EFM/EM).
DATAFILE (GB): V.2 N.2, 5/83, p.5-6.

This program is basically an implementation of the insertion sorting method using binary-search techniques. When sorting larger blocks of registers it runs quite a bit faster than a bubble-sort.

HP-41 (68 lines - synthetic)

+ XFunctions Module.

302. HP-41CX SHORT ALPHA SORT.
PPC CALCULATOR JOURNAL (US): V10 N9, 11/83, p.27.

This alphabetical sorting program is not intended to be fast or even useful, and the method is an oddball bubble sort. It is a very short program, written as an application to get used to the "X?NN" comparisons of the -CX.

HP-41CX (13 lines).

308. ANOTHER CX SHORT SORT.
PPC CALCULATOR JOURNAL (US): V10 N10, 12/83, p.7.

"SX" uses the CX function X>NN? Therefore numeric data and alpha data will be sorted with only one short program. Only the stack registers are used. LastX and alpha registers are left unchanged.

HP-41CX (16 lines) =BARCODE= .

309. NEW MINI SORT PROGRAM.
PPC CALCULATOR JOURNAL (US): V10 N10, 12/83, p.7-8.

This program is not as fast as the PPC ROM "S2" program, but it is as short as possible. Only register a and the stack registers are used, no data- and alpha-registers.

HP-41 (19 lines - synthetic) =BARCODE= .

314. CX QUICKSORT.
PPC CALCULATOR JOURNAL (US): V10 N10, 12/83, p.21.

Using the new features of the HP-41CX, this program sorts numeric as well as alpha and mixed data. It uses the quick-sort algorithm devised by C.A.R. Hoare.

HP-41CX (129 lines - synthetic).

333. ALPHABETIC SORTING OF ASCII FILES.
DATAFILE (GB): V.2 N.4, 9/83, p.6.

This program works by converting the first six characters of each record to a decimal number and storing these in ordinary data registers. It then does an insertion sort on the numbers, and each time it makes an insertion, it does the same to the records in the file.

HP-41 (123 lines)

+ XFunctions Module.

394. SORTING OF ASCII FILES.
DATAFILE (GB): V.3 N.1, 1/84, p.7-10.

Six different programmes for sorting ASCII files are given and their results (running time) are compared. They range from 3 min. to 1 hr 47 min. Sorting by counting gives the best running times but has severe limitations.

HP-41 (196, 118, 120, 145, 149, & 134 lines - synthetic)

+ XFunctions Module.

27. GUARD ROUTINE.
HP KEY NOTES (US): Vol.6 No.4, 12/82, p.14.

The HP-41 is turned off by executing a "Z" routine. To turn it on again the user must key in the current day of week within a short time after pressing the ON key, or the HP-41 will not remain on. The time interval can be adapted (the one suggested allows for 4 seconds).

HP-41 (10 + 6 lines)

+ Time Module.

60. PASSWORD ÜBER ZUFALLSZAHL.
CHIP (DE): Nr.2, 2/83, S.96-97.

Beim Einschalten des HP-41 wird der Benutzer zur Eingabe eines Passwords aufgefordet. Im Display erscheint dazu eine 4stellige Zufallszahl, die der Benutzer nach einem bestimmten Algorithmus umformen muss. Bei falscher oder keiner Eingabe wird der Rechner abgeschaltet.

HP-41 (53 + 14 Zeilen).

84. HP-IL MONITOR ROM BIT LEVEL CONTROL.
PPC CALCULATOR JOURNAL (US): V9 N7, 11/82, p.17-18.

The IL-Monitor EPROM (PPC EPROM No.5) allows access to the very basic IL-language, enabling its user to get much more out of his expensive IL-devices. Five routines using this EPROM are given: "GETREC", "NEWM?", "AVIEWBF", "VIEWDIR", and "VIEWREC".

HP-41 (72 lines)

+ HP-IL
+ HP-IL Monitor ROM.

103. HP-41 COMMUNICATIONS PACKAGE.
PPC CALCULATOR JOURNAL (US): V10 N2, 3/83, p.20.

Set of programs for exchanging files, both numeric (HP-41 data files) and string (HP-41 ASCII files), between HP-41 extended memory and series 80 mass storage using the 82938 Series 80 HP-IL interface. The set comprises 5 HP-41 programs, and one in BASIC.

HP-41 (98 lines total)

+ XFunctions Module
+ HP-IL + HP-82938 interface.

127. IDEAS ON CLEARING FLAG 55.
PPC CALCULATOR JOURNAL (US): V10 N3, 4/83, p.27.

Four different routines to do the same thing, i.e. clear flag 55, but using different means: PPC ROM, or XFunctions Module, or no extra module at all (but a lot of synthetics)

HP-41 (3 + 5 + 11 + 12 lines - synthetic)

+ PPC ROM (optional)
+ XFunctions Module (optional).

206. THE HP-41 GOES 67/97.
DATAFILE (GB): V2 N1, p.13-18.

This set of routines enables you to simulate the "7..." routines of the HP-67/97 without using the cardreader. None of the routines uses any data registers, but in some cases the SIZE should be 026, just because of the very purpose of these routines.

HP-41 (237 lines - synthetic) =BARCODE= .

236. PREVENT ACCIDENTAL DISRUPTION OF YOUR ALARMS.
PPC CALCULATOR JOURNAL (US): V10 N8, 10/83, p.31.

This routine warns you that the routine to be executed might disrupt your alarms. It can especially be sued for dangerous routines in the PPC ROM , or in RAM.

HP-41 (17 lines - synthetic).

270. FLAG CONTROL AGAIN.
DATAFILE (GB): V.2 N.2, 5/83, p.18.

This little routine can handle up to 30 flags at a time, but only operates on those flags that are "user" controllable as per HP specs.

HP-41 (22 lines - synthetic).

329. FLAGS UNLIMITED (ALMOST).
DATAFILE (GB): V.2 N.4, 9/83, p.3.

The objective of this routine is to maintain the maximum amount of "flag" information (independant of the HP-41 system flags) in a group of specified, consecutive calcutor registers.

HP-41 (68 lines).

351. EN QUEL ETAT SONT LES DRAPEAUX DE MA HP41?
L'ORDINATEUR INDIVIDUEL (FR): No.38, 6/82, p.250.

Ce petit programme donne l'état des drapeaux utilitaires 05 à 28 (le 29 est mis à zéro par le programme). Il n'utilise aucun registre de données.

HP-41 (16 lignes).

393. HP-41 & HP-75 PASSWORDS.
DATAFILE (GB): V.3 N.1, 1/84, p.5-6.

The HP-41 has no means of suppressing the display. In the ordinary course of things, then, passwords will be visible to the looker-over-your-shoulder and thus fairly vulnerable. This program uses the GETKEY command from the XF module to provide suppressed password operation.

HP-41 (131 lines)

+ XFunctions Module.

14. "BYTES" ROUTINE.
HP KEY NOTES (US): Vol.6 No.4, 12/82, p.11.

A quick and useful routine for finding the number of bytes in a program. It illustrates a few uses of the X-Functions module.

HP-41 (30 lines)

+ XFunctions Module.

23. PACK TIME ROUTINE.
HP KEY NOTES (US): Vol.6 No.4, 12/82, p.13.

The Time Module is very handy for saving the current time and date. Normally, two registers are needed for that. But by making use of two other Time Module functions, the data can be packed into one register, and later expanded again in to registers.

HP-41 (23 lines)

+ Time Module.

92. BYTE COUNTING AND THE HP-41C/CV.
PPC CALCULATOR JOURNAL (US): V9 N7, 11/82, p.38-39.

The "BCX" (Byte Count - eXtended functions) program is a very fast byte counter which utilizes the RCLPT function in the Extended Functions Module.

HP-41 (22 lines) =BARCODE=

+ XFunctions Module.

109. LA RESURRECTION D'UNE MEMOIRE MORTE.
L'ORDINATEUR INDIVIDUEL (FR): No.47, 4/83, p.180-182.

Trois programmes (un principal et deux sous-programmes) permettant de lire le contenu de toute position dans la mémoire morte de la HP-41 ou de tout module/périphérique. Les deux sous-programmes ne sont que des routines de conversion décimal-hexadécimal et vice-versa.

HP-41 (151 lignes - synthétique).

122. FTCOPY (File Type COPY).
PPC CALCULATOR JOURNAL (US): V10 N3, 4/83, p.26.

Copies files of a specified type only from the master drive with the address 1 to the slave drive at address 2. A second routine ("MCP": Mass Copy Packed) copies all files in the minimum number of records possible.

HP-41 (25 + 13 lines)

+ HP-IL
+ 2 Cassette Drives
+ Extended I/O Module.

174. SAVING COMPILED ADDRESSES.
PPC CALCULATOR JOURNAL (US): V10 N5, 6/83, p.31-32.

This set of routines is based on the HP-IL Development Module, and offers various functions on or about absolute addresses in the HP-41 RAM, displacement of curtain, etc...

HP-41 (272 lines - synthetic)

+ XFunctions Module
+ HP-IL Development Module.

175. ROM ROUTINES REVISITED.
PPC CALCULATOR JOURNAL (US): V10 N5, 6/83, p.32.

"C??" is a standard curtain finder. "E??" is a standard .END. finder, and "CU?" is a curtain mover with a difference: it tells you where you have ended up. By making use of the HP-IL Development Module, these three routines leave the alpha register as found.

HP-41 (17 + 36 + 17 lines - synthetic)

+ HP-IL Development Module.

242. NUMBER COMPRESSION/EXPANSION.
PPC CALCULATOR JOURNAL (US): V10 N8, 10/83, p.49-50.

These two routines allow the user to store two numbers in a single data register, and later decode them. Numbers longer than 5 digits will be truncated, but this does not affect the exponent. CN encodes two numbers as an alpha string in X, and EN decodes it back into two numbers.

HP-41 (112 lines - synthetic)

+ XFunctions Module.

246. AUTOMATED DATA PACKING AND UNPACKING.
PPC CALCULATOR JOURNAL (US): V10 N8, 10/83, p.55.

These programs ("CRN" and "UCRN" for CRuNch and UnCRuNch data) automate the process of packing and unpacking data to make the best possible use of space on magnetic cards. the only restriction to these routines is that data must consist of integers in the range of Ø to 99999 inclusive.

HP-41 (197 + 87 lines)

+ PPC ROM
+ Cardreader.

277. ".END." FINDER.
PPC CALCULATOR JOURNAL (US): V9 N6, 9/82, p.3.

A previous routine to find the .END. failed if either byte Ø or 1 of register c was null. This new program provides for these possibilities.

HP-41 (110 lines - synthetic)

+ XFunctions Module.

289. TAPE OR EM DATA FILE SYSTEM.
DATAFILE (GB): V.2 N.3, 6/83, p.3-4+18-19.

This set of "menu driven" routines is designed to exploit the capabilities of the cassette deck and the EFM by organising data into user named files, each containing a matrix of R rows by C columns. These routines may be adapted to operate as a "visicalc" type system.

HP-41 (278 lines)

+ XFunctions Module
+ HP-IL / Cassette Drive.

306. DETERMINEZ LE "SIZE" (Misez p'tit: op'timisez!),
L'ORDINATEUR DE POCHE (FR): No.20, 1/84, p.23-24.

Deux petits programmes assez rapides pour déterminer la taille de la mémoire des données, lorsqu'on ne dispose pas du module X-Fonctions.

HP-41 (18 ou 21 lignes).

312. HP-82161A CASSETTE DIRECTORY BACKUP.
PPC CALCULATOR JOURNAL (US): V10 N10, 12/83, p.9-11.

This is a set of three programs that use the HP-IL Development Module to create a back-up directory that may be used if the main directory becomes unuseable, and includes utilities to view, print and edit records, restore purged files, copy or repair damaged tapes, etc...

HP-41 (666 lines)

+ HP-IL / Digital Cassette Drive
+ HP-IL Development Module.

371. EXTENDED I/O AND THE CASSETTE DRIVE.
PPC CALCUTOR JOURNAL (US): V11 N1, 1/84, p.59-60.

This program consists of two parts: GET DIR , and FIX DIR. The first one will print the contents of the cassette directory in readable format. When a problem occurs with this directory, FIX DIR is used to restore the lost information using the data GET DIR generated.

HP-41 (316 lines)

+ HP-IL / Cassette Drive
+ Extended I/O Module.

377. SIZE.
PPC-T (FR): No.10, 3/84, p.41.

Nouvelle version d'un programme destiné à fournir le nombre de registres de données fixé par le dernier "SIZE" éxécuté.

HP-41 (10 lignes).

85. ASCII-FILES ON MAGNETIC CARDS.
PPC CALCULATOR JOURNAL (US): V9 N7, 11/82, p.19.

The routine "AS-R" copies an ASCII-file to specified data registers in main RAM, and "R-AS" does the opposite. There is then no problem to write or read ASCII-files with the 82104A magnetic cardreader, using WDTAX and RDTAX.

HP-41 (28 + 29 lines)

+ XFunctions Module.

148. STORING ASCII FILES ONTO MAGNETIC CARDS.
PPC CALCULATOR JOURNAL (US): V10 N4, 5/83, p.4-5.

Two small routines to easily store a named ASCII file from Xmemory onto magnetic cards, and to retrieve such a file from cards.

HP-41 (39 + 41 lines)

+ XFunctions Module
+ Cardreader.

98. ASCII FILES TO/FROM MAIN.
PPC CALCULATOR JOURNAL (US): V9 N7, 11/82, p.64.

"AS*M" moves any ASCII file named in the alpha register to main memory, where it is stored in packed form. "M*AS" is the inverse. It takes a packed file in main memory and transfers it back to the ASCII file named in the alpha register.

HP-41 (173 lines)

+ XFunctions Module.

211. ASCII-FILES TO CARD.
DATAFILE (GB): V2 N1, p.35+37.

Two routines enable you to convert ASCII files into data files or the converse, thus making it possible to easily save those files on magnetic cards or to retrieve them from cards.

HP-41 (84 + 53 lines - synthetic) =BARCODE=

+ PPC ROM
+ XFunctions Module.

124. ASCII FILE ROUTINES.
PPC CALCULATOR JOURNAL (US): V10 N3, 4/83, p.26.

These four routines enhance the possibilities of the X-Memory Module. The first, "COPFLAS", copies an ASCII file; "RENFLAS" changes the name of an ASCII file; "RESFLAS" changes the size of an ASCII file; the last one, "FREE?", determines the number of unused registers in an ASCII file.

HP-41 (92 lines - synthetic)

+ XFunctions/Memory Module.

261. SAUVEGARDE DE FICHIERS ASCII.
L'ORDINATEUR INDIVIDUEL (FR): No.53, 11/83, p.321.

Ce programme lève la lourde contrainte pesant sur tous ceux qui utilisent des fichiers ASCII, sachant qu'ils peuvent être perdus par une simple fausse maneuvre. Le but est d'en registrer le premier fichier de la mémoire étendue sur cartes magnétiques.

HP-41 (60 lignes - synthétique)

+ Module XFonctions
+ Lecteur de Cartes.

269. NEW ASCII FILE CREATION/CHANGING.
DATAFILE (GB): V.2 N.2, 5/83, p.18.

This program provides the means to modify the structure of a named ASCII file by copying its contents to a newly created file, changing the name and changing the file size. Synthetic programming is not used.

HP-41 (97 lines)

+ XFunctions Module.

271. NEWS FROM THE FROZEN NORTH: MEET ED, YOUR FRIENDLY INTERACTIVE EDITOR.
DATAFILE (GB): V.2 N.2, 5/83, p.23-26.

"ED" is a program designed to help you to edit text (ASCII) files without the need to memorise which function does what and how. It redefines the keyboard, as long as it is running.

HP-41 (783 lines - synthetic)

+ XFunctions Module.

295. SMALL TEXT EDITOR (Newcomers Corner).
DATAFILE (GB): V.2 N.3, 6/83, p.10.

Four little programs with which you can write lines in extended memory, later read these lines, add lines of text, and erase lines of text.

HP-41 (41 lines)

+ XFunctions Module.

301. EASY 41CX TEXT FILE RESIZING.
PPC CALCULATOR JOURNAL (US): V10 N9, 11/83, p.25.

These two programs, making use of the RESiZe FiLe function on the HP-41CX, enable you to work on a maximum text file, and then to resize it to minimum size as to leave as much room as possible for other files in E.M.

HP-41CX (23 lines).

311. MORE HP-41CX PACKING ASCII FILES.
PPC CALCULATOR JOURNAL (US): V10 N10, 12/83, p.9.

With this program you can create an ASCII file with the greatest possible size, and when your file is complete you only have to do XEQ"PA", and the file will only have the size that is necessary.

HP-41CX (12 lines) =BARCODE= .

330. ASCII RECORD TO REGISTER MOVES.
DATAFILE (GB): V.2 N.4, 9/83, p.3.

The objective of this little programme is to transfer a set of numeric data from an ASCII record and place it into a specified consecutive group of calculator registers

HP-41 (22 lines)

+ XFunctions Module.

421. RENAME.
PPC-T (FR): No.11, 5/84, p.48-49.

Programme pour changer le nom d'un fichier en mémoire étendue.

HP-41 (108 lignes - synthétique)

+ Module XFonctions.

422. FICHIERS ASCII.
PPC-T (FR): No.11, 5/84, p.49-51.

Deux programmes: l'un pour alouter un fichier A à un fichier B (il peut en fait s'agir d'un changement de nom, d'un compactage, d'un retaillage, etc...); l'autre calcule la place libre restant dans un fichier.

HP-41 (83 + 40 lignes - synthétique)

+ Module XFonctions.

425. SAUVEGARDE "CLASSIQUE" DE FICHIERS ASCII.
L'ORDINATEUR INDIVIDUEL (FR): No.59, 5/84, p.253.

Pour les réfractaires à la programmation synthétique, ce programme permet la sauvegarde sur cartes magnétiques de fichiers ASCII. Un des avantages est que ce programme peut agir sur n'importe quel fichier, et non plus simplement sur le premier.

HP-41 (138 lignes)

+ Module XFonctions
+ Lecteur de cartes magnétiques.

444. ASCII FILE MAINTENANCE ROUTINES.
PPC CALCULATOR JOURNAL (US): V11 N3, 4/84, p.25-27.

This program contains six interrelated routines which permit HP-41C & HP-41CV owners to make the best use of their XMEM without the benefit of the HP-41CX functions (in particular RESZFL and ASROOM).

HP-41 (200 lines) =BARCODE=

+ XFunctions Module.

128. SYNTHETIC RTN INTO EXTENDED MEMORY.
PPC CALCULATOR JOURNAL (US): V10 N3, 4/83, p.29.

This routine is designed to aid HP-41 users who like to run programs stored in XMemory. It can either be stored in XM under a local label within the program, or under a global label somewhere in main memory. XEQ's can be used without restrictions; however, all RTN's must be replaced by GTO's.

HP-41 (41 lines - synthetic)

+ XFunctions Module.

227. CHANGING MEMORY FILES.
PPC CALCULATOR JOURNAL (US): V10 N7, 8/83, p.17-18.

This is a whole set of routines for working on files in the X-memory. You can change the type of file, rename it, change its size, write the contents of an ASCII file on magnetic cards, or read it back into X-memory.

HP-41 (178 lines - synthetic)

+ XFunctions Module
+ Cardreader.

237. EXTENDED FILE TYPE.
PPC CALCULATOR JOURNAL (US): V10 N8, 10/83, p.31.

This program returns an integer to the X register that is indicative of the type of the file in extended memory. The file's name must be in the alpha register.

HP-41 (19 lines)

+ XFunctions Module.

260. RENOMINATION DE FICHIERS.
L'ORDINATEUR INDIVIDUEL (FR): No.53, 11/83, p.321.

Petit utilitaire pour changer à volonté le nom du premier fichier présent en mémoire étendue. Il peut être utilisé, par exemple, pour reconstituer le nom d'un fichier qu'une manipulation malheureuse aurait abîmé.

HP-41 (33 lignes - synthétique

+ Module XFonctions.

268. COPY EXTENDED MEMORY TO CARD OR CASSETTE.
DATAFILE (GB): V.2 N.2, 5/83, p.17.

This routine allows you to copy the contents of the extended functions memory (not extended memory) to either the cassette drive or to magnetic cards. Two versions are listed, one requiring the PPC ROM, the other not.

HP-41 (130 + 53 lines - synthetic)

+ PPC ROM (only for version 2)
+ XFunctions Module.

297. RUNNING PROGRAMS IN E.M.
DATAFILE (GB): V.2 N.3, 6/83, p.21.

The aim of this programme is to allow a programme named in alpha to be run in X-memory. "RUN" is designed to be a manual program, and so must not be called as a subroutine, because no return address is left.

HP-41 (46 lines - synthetic)

+ XFunctions Module.

395. HOW TO RUN PROGRAMS & CALL SUBROUTINES IN 41-X MEMORY.
DATAFILE (GB): V.3 N.1, 1/84, p.14-16.

This article provides some routines and procedures to make the task of running programs and calling subroutines in XM a little more convenient.

HP-41 (214 + 39 lines - synthetic)

+ XFunctions Module.

415. DEMANDEZ LE MENU!
L'ORDINATEUR DE POCHE (FR): No.23, 5/84, p.31-33.

Ce programme offre un menu d'opérations éxécutables avec le module XFonctions. Il est ainsi possible d'obtenir par exemple le catalogue des fichiers en pressant une simple touche au clavier. Il apporte aussi des routines utilitaires, tel le tri alphabétique, pour gestion de fichiers ASCII (textes).

HP-41 (214 lignes - synthétique)

+ Module XFonctions.

435. TEST EFM.
PPC CALCULATOR JOURNAL (US): V11 N3, 4/84, p.8.

To test the Extended Memory registers, especially after a conversion, the best method is a "quick and dirty" routine that will set every other bit to a 1, and then recall those registers for comparison.

HP-41 (48 lines)

+ XFunctions Module / XMemory Module(s).

129. I/O BUFFER PROBLEM: RESOLVED.
PPC CALCULATOR JOURNAL (US): V10 N3, 4/83, p.29-30.

Several programs are given to save and get an alarm catalog from extended memory, thus solving problems which can arise with some PPC ROM routines (which leave garbage in the I/O buffer). A last routine prints the alarm catalog with the HP-IL printer.

HP-41 (274 lines - synthetic)

+ Time Module
+ XFunctions Module
+ PPC ROM.

163. I/O BUFFER SYNTHETIC PROGRAMMING APPLICATIONS.
PPC CALCULATOR JOURNAL (US): V10 N5, 6/83, p.8-9.

These four routines were developed while exploring the synthetic programming applications of the HP-IL Development ROM. They help you explore the I/O buffer and the rest of the HP-41 RAM space. The writing to or reading from the buffer is in hexadecimal form.

HP-41 (94 lines - synthetic)

+ HP-IL
+ HP-IL Development ROM.

189. I/O BUFFER-COMPATIBLE PROGRAMMING.
PPC CALCULATOR JOURNAL (US): V10 N6, 7/83, p.13-15.

The program presented in this article is slow and a bit cumbersome, but on the positive side it enables you to use key assignment routines without regard to buffers present and future (especially the Time Module buffer).

HP-41 (305 lines - synthetic)

+ PPC ROM
+ XFunctions Module.

190. WRITE/READ/SAVE/RECALL ALARMS.
PPC CALCULATOR JOURNAL (US): V10 N6, 7/83, p.20-21.

Write and Read Alarms provides for the transfer of clock alarms to and form magnetic cards. With the second program alarms can be transferred to and from extended memory.

HP-41 (84 + 86 lines - synthetic)

+ PPC ROM
+ Cardreader / XFunctions Module.

226. SUSPENDING ALARMS.
PPC CALCULATOR JOURNAL (US): V10 N7, 8/83, p.10-11.

When using programs which mess around with key assignments and I/O buffers, the activation of an alarm by the Time Module will more often than not cause a crash. To avoid this, a small routine is presented in this article so as to suspend all alarms during the execution of such a program.

HP-41 (9 lines - synthetic)

+ Time Module.

276. SAVE AND RECALL ALARMS.
PPC CALCULATOR JOURNAL (US): V9 N6, 9/82, p.2-3.

This program uses the extended memory to save alarms. The only restriction is that an END is required above it to permit a backwards branch after the curtain is lowered.

HP-41 (99 lines - synthetic)

+ XFunctions Module
+ PPC ROM.

310. ASSIGNMENT AND ALARM REGISTER FINDER.
PPC CALCULATOR JOURNAL (US): V10 N10, 12/83, p.8.

This program counts all key assignment registers and finds out how many registers are used for Time Module alarms. The result is left in X (assignments + alarms) and the number of registers used for assignments is in LastX. Two programs are given, one of which doesn't need the PPC ROM.

HP-41 (45 or 60 lines - synthetic) =BARCODE=

+ XFunctions Module
+ PPC ROM (only for 1st program).

334. STORE & RECALL OF TIMER ALARMS.
DATAFILE (GB): V.2 N.4, 9/83, p.7-8.

This set of programs makes it possible to store and recall timer alarms on mangetic cards or in extended memory. It is based on Bill Wickes program for storage and recall of alarms on digital cassette (see PPC V9 N4).

HP-41 (176 + 65 + 126 lines - synthetic)

+XFunctions Module or Cardreader.

370. HP-41 ALARM CARD PROGRAM.
PPC CALCULATOR JOURNAL (US): V11 N1, 1/84, p.35-36.

Two versions of the same program, which transfers alarms to and from amgnetic cards. The longer version doesn't require the PPC ROM.

HP-41 (81 or 111 lines - synthetic) =BARCODE=

+ Cardreader + Time Module
+ XFunctions Module
+ PPC ROM (only for short version).

16. "REPA" ROUTINE.
HP KEY NOTES (US): Vol.6 No.4, 12/82, p.11.

Short routine that replaces single characters in the alpha register by other single characters.

HP-41 (19 lines)

+ XFunctions Module.

102. PARTIAL ALPHA EDITOR.
PPC CALCULATOR JOURNAL (US): V10 N2, 3/83, p.17-20.

This program contains ten routines which edit and preserve the fourteen rightmost characters within the alpha register. It permits string searches, insertions, deletions, exchanges and transfers of character positions within the alpha register.

HP-41 (447 lines - synthetic) =BARCODE=
Note: only Barcode listing given!

+ XFunctions Module (optional).

116. HP-41 TEXT EDITING.
PPC CALCULATOR JOURNAL (US): V10 N3, 4/83, p.20-21.

A set of programs to key in alpha data, to change existing alpha files, or just display them, and to print personalized letters (names inserted into appropriate spaces in the text).

HP-41 (477 lines)

+ XFunctions Module.

119. ALPHA ROUTINES - NEED XFM.
PPC CALCULATOR JOURNAL (US): V10 N3, 4/83, p.25.

These nine alpha manipulation routines perform most of the conceivable (and useful) character and string chores. No data registers or flags are used, and at least X, Y, and L are preserved throughout.

HP-41 (99 lines)

+ XFunctions Module.

120. AROTIO.
PPC CALCULATOR JOURNAL (US): V10 N3, 4/83, p.25.

This ALPHA Rotate using the HP-82183A Extended I/O Module simulates the AROT function of the HP-82180A Extended Functions Module without the module itself.

HP-41 (24 lines)

+ HP-82183A Extended I/O Module.

121. CP/LC (CAPS/lower-case LETTERS).
PPC CALCULATOR JOURNAL (US): V10 N3, 4/83, p.25-26.

This routine converts all lower-case letters to capital letters in the alpha register string when flag 00 is clear; it converts all capital letters to lower-case whem flag 00 is set. Other alpha characters are unchanged.

HP-41 (33 lines)

+Extended I/O Module.

170. EXTENDED FUNCTIONS - ALPHA PACKING.
PPC CALCULATOR JOURNAL (US): V10 N5, 6/83, p.27.

These two routines will pack and unpack alpha data in the alpha register. What they do is take four characters from the left of the alpha register, pack them into a 3 byte code, and tack them onto the end of the string in the alpha register.

HP-41 (62 lines)

+ XFunctions Module.

172. HP-41 INTERACTIVE TEXT EDITOR.
PPC CALCULATOR JOURNAL (US): V10 N5, 6/83, p.29.

This program allows for 11 different commands which make ASCII file management fun again. If the format given doesn't match that of your favorite editor, the program can easily be modified. If records are over 24 characters long they will display 24 at a time.

HP-41 (110 lines)

+ XFunctions Module.

200. COMMENT FEUILLETER LE REGISTRE ALPHA DE LA HP-41.
L'ORDINATEUR DE POCHE (FR): No.17, 10/83, p.65-66.

Cinq petits programmes pour manipuler les caractères alphanumériques: mise en mémoire, rappel, recherche de caractère, etc...

HP-41 (67 lignes).

203. ASCII SORTING ROUTINE FOR USE WITH "RAMWORD".
DATAFILE (GB): V2 N1, p.5-8.

This routine has been developed to back up the facilities of the program RAMWORD (see DATAFILE V1 N3). It will sort the records of ASCII files into the alphabetic order.

HP-41 (204 lines) =BARCODE= .

278. FORWARD AND REVERSE.
PPC CALCULATOR JOURNAL (US): V9 N6, 9/82, p.4.

This little "RS" program reverses an alpha-string up to 24 characters long. On a second "RS" the string is retransformed. Also works with the printer.

HP-41 (26 lines)

+ XFunctions Module.

281. ALPHA ROUTINES.
PPC CALCULATOR JOURNAL (US): V9 N6, 9/82, p.35-40.

This is a set of seven routines which make working with alpha strings or flags an easy matter. The last of these routines isolate the mantissa and the exponent, respectively, of data in the X-register.

HP-41 (446 lines - synthetic) =BARCODE= .

80. PSEUDO-XROM DECODER.
PPC CALCULATOR JOURNAL (US): V9 N7, 11/82, p.13.

When you press a key and see an XRom number but you can't remember what the assignment is, then "PX" may help. This program doesn't decode the whole two bytes but only the three last nybbles, which is usually enough to determine what the assignment is.

HP-41 (38 lines)

+ PPC ROM.

100. DECODING SYNTHETIC TEXT LINES.
PPC CALCULATOR JOURNAL (US): V10 N2, 3/83, p.13.

With the "STL" program, synthetic text lines in programs can be decoded semi-automatically, provided they do not begin with a null character.

HP-41 (47 lines - synthetic)

+ PPC ROM
+ XFunctions Module.

152. DIRECT BYTE LISTING OF PROGRAMS.
PPC CALCULATOR JOURNAL (US): V10 N4, 5/83, p.29.

This program displays or prints a byte by byte listing of a program in the following format: B.LLLNNNN where B=byte value, L=program line number, N=byte serial number.

HP-41 (60 lines) =BARCODE=

+ Plotter Module
+ I/O Module (or HP-IL development Module).

155. SYNTHETIC TEXT LINE PRINTER.
PPC CALCULATOR JOURNAL (US): V10 N4, 5/83, p.35-36.

This program decodes normal and synthetic text lines to decimal and prints them on any printer. Program lines with leading nulls will however not be decoded properly, and the same goes for the "ultimate" NOP (hex F0).

HP-41 (161 lines - synthetic)

+ XFunctions Module
+ Printer.

171. MCODE HEX CODE AND XROM NUMBER.
PPC CALCULATOR JOURNAL (US): V10 N5, 6/83, p.27-28.

This program will return the MCODE address, the HEX code, and the XROM number for any function. All that is needed is to input the name of the function on the prompt.

HP-41 (60 lines - synthetic)

+ PPC ROM
+ XFunctions Module.

193. AUTOMATIC SYNTHETIC TEXT LINE DECODER.
PPC CALCULATOR JOURNAL (US): V10 N6, 7/83, p.24-25.

This program checks a random program for text lines which contain characters of the non-ASCII type. If at least one character of a line fulfills this criteria the whole line is decoded and printed. The only one exception is the Append code. In addition synthetic tones will also be printed.

HP-41 (282 lines - synthetic)

+ PPC ROM
+ XFunctions Module + Printer.

292. HEX LOADER.
DATAFILE (GB): V.2 N.3, 6/83, p.6.

This hex-loader uses a dummy program to convert it to the desired program (this dummy program is written over, and you have to be absolutely sure you have enough dummy instructions in it, otherwise the following program will be written over!)

HP-41 (90 lines - synthetic)

+ XFunctions Module.

298. NON-SYNTHETIC BYTE GRABBER.
DATAFILE (GB): V.2 N.3, 6/83, p.22.

This non-synthetic program assigns a Byte-grabber to the X Y key and a Q-loader to the shifted X Y key. It can be entered on any HP-41 with an Extended Functions Module plugged in (or built in).

HP-41 (79 lines)

+ XFunctions Module.

307. SYNTHETIC LINE MAKER.
PPC CALCULATOR JOURNAL (US): V10N10, 12/83, p.6-7.

This program, which must be the first in memory, is quite handy for synthetic line construction.

HP-41 (18 lines - synthetic).

315. NEW PROGRAM POINTER ROUTINES.
PPC CALCULATOR JOURNAL (US): V10 N10, 12/83, p.21.

"PD" decodes a RAM pointer into decimal, giving a number that represents the number of byte from the bottom of memory, while "DP" converts a decimal input to a program pointer suitable for a STO b command.

HP-41 (24 + 25 lines - synthetic) =BARCODE=

+ XFunctions Module.

401. HP-41 REGISTER c ROUTINES.
PPC CALCULATOR JOURNAL (US): V11 N2, 3/84, p.13-14.

This program contains eleven routines which decode and alter the system pointers contained in status register c, locating the summation registers, the curtain, the permanent .END. , or changing those locations.

HP-41 (188 lines - synthetic)

+ HP-IL Development Module.

402. HP-IL DEVELOPMENT MODULE APPLICATIONS.
PPC CALCULATOR JOURNAL (US): V11 N2, 3/84, p.16-17.

These three programs are just a sampling of what can be done with non-normalized recalls. The first one is a non-normalizing recall program that only loses the contents of the L register; the second one is a counterpart, for non-normallized store. The third program is for key assignments

HP-41 (46 + 30 + 25 lines - synthetic)

+ HP-IL Development Module.

404. PRINT/DISPLAY BYTES USING HP-IL DEV. MOD.
PPC CALCULATOR JOURNAL (US): V11 N2, 3/84, p.22,

With the HP-IL Development module, bytes from any register in RAM may be copied to the buffer without normalization. This program will decode any register or block of registers

HP-41 (45 lines - synthetic) =BARCODE=

+ HP-IL Development Module.

406. RX - RECALL FROM ABSOLUTE ADDRESS IN X IMPROVED.
PPC CALCULATOR JOURNAL (US): V11 N2, 3/84, p.25-26.

"RX" uses the buffer of the HP-IL Development Module and therefore does not nomalize the recalled register. It can be used to recall any register (data, program, alarm, status, etc...)

HP-41 (28 lines - synthetic) =BARCODE=

+ HP-IL Development Module.

58. SAVE/GET KEY ASSIGNMENTS.
PPC CALCULATOR JOURNAL (US): V10 N1, 2/83, p.60-61.

With this new improved save/get key assignments routine the Time Module alarms are not disturbed and global label assignments cause no problems. Automatic merging of assignments is also provided, and one can suspend/reactivate assignments without data registers.

HP-41 (102 lines - synthetic)

+ XFunctions Module
+ PPC ROM.

88. MKX/ASG IMPROVED.
PPC CALCULATOR JOURNAL (US): V9 N7, 11/82, p.26-27.

Improvement on a previous assignment program. This one requires 360 bytes, instead of the original 459 bytes of memory.

HP-41 (202 lines - synthetic).

95. IMPROVED SAVE AND GET KEY ASSIGNMENTS.
PPC CALCULATOR JOURNAL (US): V9 N7, 11/82, p.41-42.

These routines are free of the deficiencies possessed by the versions published in PPCJ V9 N4 p.18-19 and p.44 . Versions are also given which will work wether or not alarms are present.

HP-41 (82 + 164 lines - synthetic)

+ PPC ROM.

179. EFFACEMENT SEQUENTIEL D'ASSIGNATIONS.
L'ORDINATEUR INDIVIDUEL (FR): No.50, 7/83, p.214-215.

Deux petits programmes qui permettent d'effacer facilement un certain nombre d'assignations en mémoire. Le premier efface touche par touche; le second efface les assignations entre deux touches déterminées.

HP-41 (7 + 13 lignes)

+ Module XFonctions.

195. KEY ASSIGNMENTS WITH EZK.
PPC CALCULATOR JOURNAL (US): V10 N6, 7/83, p.27-28.

"EZK" stands for "easy key"; This is a synthetic key assignments program which is compatible with all HP-peripherals to date. All catalog 1, 2 and 3 functions and decimal -255 to 255 are valid inputs.

HP-41 (228 lines - synthetic)

+ XFunctions Module.

205. SYNTHETIC KEY ASSIGNER.
DATAFILE (GB): V2 N1, p.12-13.

Programmes to assign synthetic two-byte functions are not new. This one uses the PASN function of the XFunctions module to do all the donkey work. This programme is efficient (filling spaces in key assignment registers before starting new ones) and only uses one card track (112 bytes).

HP-41 (60 lines - synthetic) =BARCODE=

+ XFunctions Module.

243. IMPROVED AS-KEY ASSIGNMENT.
PPC CALCULATOR JOURNAL (US): V10 N8, 10/83, p.53.

This key assignment program uses the extended functions module and doesn't disturb the I/O buffer.

HP-41 (189 lines - synthetic)

+ XFunctions Module
+ Time Module.

244. SUSPENDING THE TOP ROW.
PPC CALCULATOR JOURNAL (US): V10 N8, 10/83, p.53.

These two programs suspend the top row shifted and non-shifted key assignments, thus allowing the use of the A-E and a-e local alpha labels, but retaining all other assignments. "TKX" is for use with the XFunctions Module, while "TK" doesn't need this module at all.

HP-41 (54 or 39 lines - synthetic)

+ XFunctions Module.

290. SELECTIVE CLEAR KEYS.
DATAFILE (GB): V.2 N.3, 6/83, p.5.

A very short programme which, when executed, clears any key touched ofits user assignment.

HP-41 (15 lines)

+ XFunctions Module.

419. PROGRAMMES HP-41.
PPC-T (FR): No.11, 5/84, p.45-46.

Trois programmes utilitaires: pour sauver les assignations de touches en X-memory, pour les rappeler, et pour les lister.

HP-41 (71 + 35 + 96 lignes - synthétique)

+ Module XFonctions.

46. PP - A PROGRAMMABLE PROBLEM.
PPC CALCULATOR JOURNAL (US): V9 N8, 12/82, p.16+18.

This program will write a program to solve an interchangeable solutions problem with up to nine variables, which must be only multiplied together (i.e. of the form D=RT). No other operations are permitted at present.

HP-41 (236 lines - synthetic)

+ XFunctions Module
+ PPC ROM.

53. HP-41 ALPHA FUNCTION INTERPRETER.
PPC CALCULATOR JOURNAL (US): V10 N1, 2/83, p.33.

This program interprets an RPN representation in alpha. It decodes the function one character at a time, using letters A-J for variables. A function can be up to 24 characters long. Any operation can easily be added.

HP-41 (97 lines)

+ XFunctions Module.

63. UNE POLONAISE AU TEXAS.
L'ORDINATEUR DE POCHE (FR): No.1, 4/81, p.42-44.

Ce programme permet de simuler la notation algébrique de presque toutes les autres calculatrices programmables. Il est ainsi même possible de rentrer presque directement les programmes publiés pour TI-57, -58 ou -59 dans la HP-41C.

HP-41 (165 lignes).

164. A.F.I. IMPROVED.
PPC CALCULATOR JOURNAL (US): V10 N5, 6/83, p.10.

This improved alpha function interpreter allows more direct entry of formulas, without having to worry about stack gymnastics and order of execution. Variables are limited to A...J and one level of parenthesis can be accessed. Examples of formulas are given.

HP-41 (137 lines)

+ XFunctions Module.

177. FONCTIONS A PARAMETRES SUR HP-41.
L'ORDINATEUR INDIVIDUEL (FR): No.50, 7/83, p.214.

Méthode pour accéder à différentes routines par actionnement d'une seule touche numérique, sans assignation.

HP-41 (16 lignes - synthétique).

265. ASSEMBLY LANGUAGE ENABLER.
DATAFILE (GB): V.2 N.2, 5/83, p.11-15.

This program is written for advanced programmers, and particularly for those using M-code. It is more a "translator" than a conventional "assembler": this means that it will take a mnemonic in alpha and yield its HEX value in alpha also, but not load it itself inot an EPROM box.

HP-41 (666 lines - synthetic)

+ XFunctions Module.

280. TI-59 TO HP-41 COMPILER.
PPC CALCULATOR JOURNAL (US): V9 N6, 9/82, p.27-29.

This program will compile (not translate) most of the Texas Instruments 59 programs and prepare them for HP-41 use. Afterwards you can use the program as an ordinary HP-41 program, still following the TI-59 user instructions

HP-41 (849 lines - synthetic).

328. ASSEMBLEUR/DESASSEMBLEUR POUR HP-41C.
PPC-T (FR): No.8, 11/83, p.37-41+44-52.

Cet ensemble de programmes permet, soit de déterminer, à partir du code machine en héxadécimal, le mnémonique correspondant, soit, inversement, à partir d'un mnémonique, le code hexadécimal. Tout cela, bien sûr, pour le langage machine de la HP-41.

HP-41 (566 lignes en 7 programmes - synthétique).

398. HP-41 FIFTH.
PPC CALCULATOR JOURNAL (US): V11 N2, 3/84, p.5-9.

FIFTHis a FORTH-like language for the HP-41; the package is a group of four programs. The first one is an editor (not necessary on a -CX); the second one is an interpreter, the third a debugger, and the fourth is used to move files (not necessary on -CX).

HP-41 (280 + 508 + 354 + 84 lines)

+ XFunctions Module + 2 XMemory Modules.

399. HP-41 BASIC INTERPRETER.
PPC CALCULATOR JOURNAL (US): V11 N2, 3/84, p.10-13.

This program will interpret an extended memory (ASCII) file as a BASIC program and run it like any other computer program with a BASIC interpreter. All output goes to a printer, rather than a monitor or TV screen.

HP-41 (932 lines)

+ XFunctions Module.

79. EXTERNAL TRIGGER FOR HP-3468A.
PPC CALCULATOR JOURNAL (US): V9 N7, 11/82, p.11-13.

This program enables the HP-3468A Digital Multimeter to be externally triggered (once every five seconds for about ten minutes) without the use of the Time Module.

HP-41 (133 lines)

+ HP-IL
+ HP-3468A Digital Multimeter.

134. LITTLE BAR CODE ANALYZER.
PPC CALCULATOR JOURNAL (US): V10 N3, 4/83, p.36.

This program replaces the PPC ROM routine "BA" to analyse barcode, thus avoiding the use of an extra port for the PPC ROM itself.

HP-41 (19 lines - synthetic) =BARCODE=

151. CASSETTE TO PRINTER.
PPC CALCULATOR JOURNAL (US): V10 N4, 5/83, p.22-23.

C-P is a general purpose I/O package that allows the user to transfer data directly from the cassette drive to a printer. With very little effort, this program can be modified to allow transfers from any talker on the HP-IL loop to any number of listeners.

HP-41 (150 lines - synthetic)

+ PPC ROM
+ HP-IL
+ I/O ROM.

153. HP-41 TO/FROM HP-75.
PPC CALCULATOR JOURNAL (US): V10 N4, 5/83, p.33-34.

One HP-41 and three HP-75 routines provide a means for transferring numeric data between the HP-41 and the HP-75 using the cassette drive as an intermediate step. Input data is converted to text in an already created ASCII file and converted back after transfer.

HP-41 (78 lines)

+ XFunctions Module
+ HP-IL + Cassette Drive.

154. COMMUNICATING BETWEEN AN HP-41 AND AN HP-75.
PPC CALCULATOR JOURNAL (US): V10 N4, 5/83, p.34-35.

These routines add or delete line numbers from a text (ASCII) file in extended memory so as to make it a BASIC file for the HP-75, or conversely save memory space on the HP-41.

HP-41 (43 lines)

+ XFunctions Module.

390. MENUS SUR HP-41 AVEC XFUNCTIONS.
L'ORDINATEUR INDIVIDUEL (FR): No.58, 4/84, p.235.

Ce programme utilise les fonctions GETKEY et POSA du module XFonctions pour faciliter considérablement l'éxécution de tout programme en présentant des options en abrégé, pour lesquelles l'actionnement d'une seule touche suffit. Le texte en clair est présenté, si besoin est.

HP-41 (25 lignes)

+ Module XFonctions.

17. "KEYNUM" AND "KEYNM" ROUTINES.
HP KEY NOTES (US): Vol.6 No.4, 12/82, p.12.

Two short routines using the operation GETKEY and returning the number 0, 1,... 8, 9 in the X register instead of the key code for the keys 0 to 9. The first program returns a -1 if any key besides keys 0 to 9 is pressed. The second one is shorter but doesn't account for a non-number key.

HP-41 (9 + 8 lines)

+ XFunctions Module.

26. INPUT ROUTINE.
HP KEY NOTES (US): Vol.6 No.4, 12/82, p.14.

This short routine can be used in place of PROMPT or STOP. It tests to see if the input is to be an alpha or a numerical input (checks alpha-mode flag 48). Then, after pausing for the input, it returns to the main program.

HP-41 (13 lines).

105. DIRECT ENTRY OF SYNTHETIC INSTRUCTIONS.
PPC CALCULATOR JOURNAL (US): V10 N2, 3/83, p.22-24.

These two programs, "SYN" and "MLB" (the first a subset of the latter) allow instructions to be entered into the calculator symbolically as alpha characters. They do not disrupt any timer alarms in memory and are compatible with a printer and/or HP-IL.

HP-41 (136 + 168 lines - synthetic)

+ PPC ROM
+ XFunctions Module.

158. LOADBYTES WITH THE HP-IL DEVELOPMENT ROM.
PPC CALCULATOR JOURNAL (US): V10 N4, 5/83, p.39-40.

Synthetic strings are created and stored in the I/O buffer. This code is then transferred to numbered data registers. The curtain is then raised and the program exits in the newly created file, where you can immediately switch to the PRGM mode and SST to verify your work.

HP-41 (30 lines)

+ HP-IL Development Module.

159. SIMULATED ALPHA PROMPTING FUNCTION.
PPC CALCULATOR JOURNAL (US): V10 N4, 5/83, p.40.

Using flag 45 and the "IF" routine in the PPC ROM, this small program simulates a regular prompting function with which you can directly enter alpha text.

HP-41 (15 lines)

+ PPC ROM.

264. FLAG CONTROL - USING FLAG 45.
DATAFILE (GB): V.2 N.2, 5/83, p.6.

The use of flag 45 is explained, and a short program is given as an example of its use: this program simulates a regular prompting function, that is: alpha characters entered do not replace existing characters in the display, but are appended to them.

HP-41 (14 lines)

+ PPC ROM.

372. NEW LOAD BYTES PROGRAM.
PPC CALCULATOR JOURNAL (US): V11 N1, 1/84, p.60-61.

This very fast program enables you to load synthetic bytes in a program.

HP-41 (51 lines - synthetic) =BARCODE=

+ XFunctions Module.

383. APRO + CU .
PPC-T (FR): No.10, 3/84, p.60-64.

Programme pour introduire des instructions synthétiques sous forme symbolique. Il utilise une version améliorée du programme "CU" de W.C. Wickes pour déplacer le "rideau" de la mémoire données/programmes.

HP-41 (251 lignes - synthétique)

+ Module XFonctions.

112. DES HIEROGLYPHES A L'AFFICHAGE.
L'ORDINATEUR DE POCHE (FR): No.13, 5/83, p.33-34.

Toutes sortes de lettres, chiffres et signes spéciaux sont déjà disponibles sur la HP-41C. Ils peuvent aussi servir à produire des "mirages" ou hiéroglyphes, en utilisant la remise à zéro du flag 50 lors d'une détection d'erreur.

HP-41 (130 lignes).

145. SAVEZ-VOUS TRACER UNE COURBE SANS IMPRIMANTE.
L'ORDINATEUR DE POCHE (FR): No.15, 7/83, p.23-24.

Ce programme permet de "tracer" une courbe sur l'écran d'affichage, point par point, avec position du point et position de l'axe des X.

HP-41 (107 lignes).

183. PRENEZ DOUZE MONSTRES ET UNE HP-41C.
L'ORDINATEUR DE POCHE (FR): No.16, 9/83, p.43-44.

Les douze monstres sont douze caractères dans le registre alpha que l'on fait défiler à la calculatrice. Il n'est pas donné de programme complet pour "tirer" sur ces monstres, mais la méthode est fournie. Deux routines sont données pour les obtenir.

HP-41 (7 ou 8 lignes - une version synthétique, l'autre pas).

253. PRESQUE DU DESSIN ANIME.
L'ORDINATEUR INDIVIDUEL (FR): No.26, 4/81, p.146.

Emploi de l'affichage pour obtenir des effets spéciaux lorsqu'une opération illicite est exécutée avec l'indicateur 25 armé.

HP-41 (10 lignes).

304. SIGNIFICANT DIGITS.
PPC CALCULATOR JOURNAL (US): V10 N9, 11/83, p.31.

This routine allows the automatic display of a value to a predetermined number of significant digits. it is presented in two forms: a short one and a long one, the latter being useful for numbers displayed in scientific notation.

HP-41 (23 or 39 lines).

335. HP-15C SIMULATION ON HP-41 .
DATAFILE (GB): V.2 N.4, 9/83, p.14-16.

This program enables you to use the display of the HP-41 in the same manner as is possible with the HP-15C (using synthetics), by turning on any wanted segments of each of its 8-shaped display digits.

HP-41 (118 lines)

+ XFunctions Module.

339. DES AFFICHAGES MOUVEMENTES SUR HP-41C.
L'ORDINATEUR DE POCHE (FR): No.21, 3/84, p.43-44.

Quelques petits programmes qui animent l'affichage d'une HP-41 comme pour de véritables dessins animés.

HP-41 (10 + 24 + 22 + etc... lignes).

365. SUR VOTRE HP-41 AFFICHEZ CORRECTEMENT.
L'ORDINATEUR DE POCHE (FR): No.8, 9/82, p.57-58.

Deux programmes utilitaires qui permettent, l'un de sauver l'affichage, l'autre de le rétablir, grâce à quoi il est possible à tout programme de modifier et d'adapter le mode d'affichage propre à ses besoins puis de remettre les choses en état lorsqu'il est terminé.

HP-41 (51 lignes).

13."PRC" ROUTINE.
HP KEY NOTES (US): Vol.6 No.4, 12/82, p.11.

This routine produces column-formatted printer output (without use of the XFunctions Module). The method used is not iterative, and requires only the stack registers, the alpha register, and temporary use of flag 00. The X register contents are preserved.

HP-41 (29 lines)

+ Printer.

15."MATCH" ROUTINE.
HP KEY NOTES (US): Vol.6 No.4, 12/82, p.11.

A routine to print the contents of an ASCII file matched record to register, to the contents of a data file. The output will appear on one line, assuming the total number of characters in the ASCII record and the data register does not exceed 21.

HP-41 (38 lines)

+ XFunctions Module
+ Printer.

25.BARCODE ROUTINE.
HP KEY NOTES (US): Vol.6 No.4, 12/82, p.14.

This routine prints a single type of WNDSCN-type barcode on the HP-82143A (non-HP-IL) printer. The stop-bits come before the start-bits, but the wand doesn't care. To view the results, use the routine "SCN" (also given).

HP-41 (40 + 8 lines)

+ Printer
+ Optical Wand.

56.CONTROL OF THE HP-82905B PRINTER.
PPC CALCULATOR JOURNAL (US): V10 N1, 2/83, p.43-44.

No less than 17 different functions for controlling the 80-column HP-82905B printer are proposed with this program. Among these: Print Width Select; Form Feed; Alpha Underline; Set Vertical Line Spacing; Set Graphics Mode; etc...

HP-41 (183 lines)

+ HP-IL
+ 82905B Printer (80 columns).

130.HP-41 XEQ BAR CODES.
PPC CALCULATOR JOURNAL (US): V10 N3, 4/83, p.31.

This program enables one to print "XEQ..." bar codes. The program prompts for each byte in the function name until R/S is pressed without any data entry; the printer then starts printing the corresponding bar code.

HP-41 (89 lines)

+ XFunctions Module
+ PPC ROM
+ HP-IL printer.

133.HP-41 8PREG , 8PREGX.
PPC CALCULATOR JOURNAL (US): V10 N3, 4/83, p.35-36.

These two functions are designed to reproduce the regular printer (HP-82143 or 82162) functions "PRREG" & "PRREGX" on the HP-82905B eighty column impact printer. The "SIZE?" function of the XFunctions Module (or the "S?" of the PPC ROM) is used. The printout uses a 5-column format.

HP-41 (75 lines - synthetic)

+ XFunctions Module or PPC ROM
+ HP-IL / 80-column Printer.

160. HEADING PRINTER OUTPUTS.
PPC CALCULATOR JOURNAL (US): V10 N5, 6/83, p.7.

This small routine can be very useful to mark anything that is outputted through the printer (time and date).

HP-41 (14 lines)

+ Time Module
+ Printer.

162. PARSE MODE FUNCTION OF THE 82162A PRINTER.
PPC CALCULATOR JOURNAL (US): V10 N5, 6/83, p.8.

This program will help those interested in putting the HP-IL printer to work, and demonstrates the parse mode function of this printer. It also has some features useful in typing a letter on the HP-41C.

HP-41 (81 lines)

+ XFunctions Module
+ HP-IL / 82162A Printer.

168. TYPE 4, 5, 7, 8 BARCODE FOR THE 82162A PRINTER.
PPC CALCULATOR JOURNAL (US): V10 N5, 6/83, p.22.

BAR-TYP will print barcode for the following: direct execution, paper keyboard, alpha replace, and alpha append. The program also has routines for printing XROM's and ASN type barcode. Some of the barcode types have limitations.

HP-41 (208 lines)

+ HP-IL / Printer
+ XFunctions Module
+ PPC ROM.

169. FORMAT PROGRAM FOR PPC ROM II ?
PPC CALCULATOR JOURNAL (US): V10 N5, 6/83, p.25.

"YF" uses only stack and alpha registers. It places X into printer's buffer using Y character spaces, showing as much information in those spaces as possible. Fills surplus space with "spaces" if flag 09 is set, and with zeros if flag 09 is clear. Uses "EX" and "MT" of PPC ROM.

HP-41 (310 lines - synthetic)

+ PPC ROM
+ Printer.

191. TYPE 1 BARCODE.
PPC CALCULATOR JOURNAL (US): V10 N6, 7/83, p.22-23.

A first program ("BART") will print 254 barcodes (without the meaningless Ø-bytes). To print only one or a few barcodes, one can use the program "BAR2".

HP-41 (78+66 lines)

+ PPC ROM
+ XFunctions Module
+ HP-IL / Printer.

233. BAR CODE ON MX-80.
PPC CALCULATOR JOURNAL (US): V10 N8, 10/83, p.17-31.

A very extensive article decribing very precisely how to draw bar code on an EPSON MX-80 printer (or the HP-82905B equivalent).

HP-41 (447 lines - synthetic) =BARCODE=

+ XFunctions Module + PPC ROM + Plotter Module
+ HP-82166A Converter + MX-80 Printer
+ NFCROM or PPC EPROM-2.

405. MORE 82905B/HP-41 BAR CODE PRINTING.
PPC CALCULATOR JOURNAL (US): V11 N2, 3/84, p.23-25.

Using the 82905B printer, this program will print fully labeled bar code, 13 bytes per row, 18 rows per page, and skipping over perforations. It is however quite slow, needing 11 minutes per row or 3.2 jours per page, mostly because each row is printed three times to get bars of sufficient heighth.

HP-41 (219 lines) =BARCODE=

+ XFunctions Module
+ HP-IL / Printer + Plotter ROM.

407. MCODE BAR CODED.
PPC CALCULATOR JOURNAL (US): V11 N2, 3/84, p.27-29.

Two programs are given, one for printing data in bar code form with a Cannon X710 printer (through HP-IL and 82166A converter), the other for printing "exotic" bar codes, i.e. a type not yet defined by H.P., particularly useful for printing microcode programs in bar code form.

HP-41 (198 + 96 lines - synthetic) =BARCODE=

+ XFunctions Module
+ HP-IL / 82166A Converter + Cannon X710 printer.

32. THE HP-41C: A LITERATE CALCULATOR?
BYTE (US): 1/81, p.118-138.

General description of the HP-41, with a program example for plotting bar-graphs on the printer.

HP-41 (272 lines)

+ Printer.

57. INSTANT PERSONALIZED VALENTINES.
PPC CALCULATOR JOURNAL (US): V10 N1, 2/83, p.58-59.

The greeting printed by this program consists of a large outlined heart with the message and the person's name in the middle, as well as smaller dot-matrix hearts inside and surrounding the large heart. The only entry needed is the person's name (maximum 9 characters).

HP-41 (255 lines - synthetic)

+ Printer.

72. TROIS D'UN COUP.
L'ORDINATEUR DE POCHE (FR): No.2, 7/81, p.26-27.

Avec un peu d'astuce et une exploration de la HP-41C, on arrive à lui faire tracer trois courbes simultanément sur l'imprimante. Ce programme s'utilise comme un sous-programme de PRPLOT.

HP-41 (244 lignes)

+ Imprimante.

186. STORING HI-RES-PLOTS IN X-MEMORY.
PPC CALCULATOR JOURNAL (US): V10 N6, 7/83, p.4-5.

A drawback in plotting with the printer is the long time that calculator and printer have to work together, as in fact only a little of this time is really needed by the printer. The idea behind this program is to evaluate all the plot information without the printer, and store it in extended memory.

HP-41 (288 + 40 lines)

+ XFunctions Module
+ PPC ROM.

187. CG CASSETTE GRAPHIC LABEL PRINTING.
PPC CALCULATOR JOURNAL (US): V10 N6, 7/83, p.11-12.

This program prints labels that may be inserted inside the cassette tape box for documenting and filing. When in place the label shows the title on both face and on top so that filed tapes can be located quickly. Lines are printed double wide if possible, and centered.

HP-41 (165 lines - synthetic)

+ HP-IL / Printer.

192. PIE CHARTS ON THE HP-82143A PRINTER.
PPC CALCULATOR JOURNAL (US): V10 N6, 7/83, p.23-24.

Given the percentages for each section of pie, the program will do some curve fitting "on the fly" and create the equation of the line for each percentage. Program "HP" of the PPC ROM will then plot out these lines simultaneously with a circle to produce a pie chart.

HP-41 (144 lines)

+ PPC ROM.

196. POOR MAN GRAPHICS.
PPC CALCULATOR JOURNAL (US): V10 N6, 7/83, p.30-31.

The HP-82162-IL printer can be used as a plotter with this setup of seven routines. You can draw lines, circles, pie charts, etc... The "sketch-pad" is a bit-mapped ASCII file in extended memory. Frequently used patterns could be stored on the cassette drive and hauled off when needed.

HP-41 (239 lines - synthetic)

+ XFunctions Module
+ HP-IL / Printer.

352. HP-41 SLIGHTLY MEDIOCRE MUSIC PRINTER (SMMP).
PPC CALCULATOR JOURNAL (US): V9 N5, 8/82, p.17.

This program prints musical notation. It will handle chords (provided all notes of the chord have the same duration) and different time signatures. It doesn't handle sharps, flats, and naturals: these can be written in by hand.

HP-41 (140 lines)

+ Printer
+ XFunctions Module or PPC ROM.

363. "BAR" A PROGRAM TO GENERATE BAR CHARTS.
DATAFILE (GB): V.2 N.5, 11/83, p.25-26.

This program enables you to print bars in three "colours"; solid black, striped, or white. Split bars are possible, as well as percentage charts. Colours can also be rotated (particularly useful for split bar charts).

HP-41 (373 lines - synthetic)

+ XFunctions Module
+ Printer.

10. PLOTTER EXAMPLE: EXPONENTIAL CURVE FIT.
HP KEY NOTES (US): Vol.6 No.4, 12/82, p.4.

This program is a remake of the curve fit program in the "Standard Applications" PAC. It only fits data to an exponential curve. The program computes the correct scale and then plots a star at each data point. It then computes the equation of the curve and plots 20 points using this equation.

HP-41 (124 lines)

+ HP-IL
+ 7470A Plotter + Plotter Module.

45. HP-41 PLOTTING AT LAST.
PPC CALCULATOR JOURNAL (US): V9 N8, 12/82, p.14-16.

Modification of the "PWIDTH" routine: a row number is added so a single sheet of paper can be used to determine pen condition and track the wear/life of a given pen.

HP-41 (47 lines)

+ HP-IL
+ 7470A Plotter + Plotter ROM.

115. HP-7470 - HP-41 BAR CODE.
PPC CALCULATOR JOURNAL (US): V10 N3, 4/83, p.13-15.

To make use of the improved definition of plotter points, and for general barcode plotting, two useful, friendly compact programs "BC" and "bc" are given. The latter is a minimum headroom program designed to maximize the size of a program which can be plotted in barcode.

HP-41 (30+15 lines) =BARCODE=

+ HP-IL
+ HP-7470 Plotter.

157. THE 7470 AS A PRINTER.
PPC CALCULATOR JOURNAL (US): V10 N4, 5/83, p.38-39.

The 7470A plotter can serve as very good albeit slow printer. It has the advantage that it is very clear in its printing, can be positioned anywhere on a full size page of ordinary paper, and is capable of a vast variety of lettering sizes and slants.

HP-41 (73 lines) =BARCODE=

+ HP-IL / 7470A Plotter.

440. SKPLOT.
PPC CALCULATOR JOURNAL (US): V11 N3, 4/84, p.10-11.

This program plots any function in two dimensions on a Tandy or Cannon X710 plotter. The parameters must be well defined.

HP-41 (109 lines)

+ HP-IL
+ Tandy (or GPIL 83 or Cannon X710) plotter.

47. VIDEO CONTROL ROUTINES. "MODULE Ø".
PPC CALCULATOR JOURNAL (US): V9 N8, 12/82, p.21-26.

This program has two purposes: to demonstrate the Video Interface, and to provide keyboard control of the CRT. Only "MODULE Ø" listing is given; barcode is provided for all seven modules.

HP-41 (130 lines for "Ø" - synthetic) =BARCODE=

+ HP-IL
+ Video Interface
+ PPC ROM.

94. THE HP-82163A VIDEO INTERFACE.
PPC CALCULATOR JOURNAL (US): V9 N7, 11/82, p.40.

This little program needs no data registers. It is a must for all Video Interface owners to keep in their extended memory, or card, or cassette. They will be able to effect all escape sequence instructions with one keystroke and receive ACA as a bonus. All 15 top row local label keys are used.

HP-41 (95 lines)

+ HP-IL
+ Video interface.

50. VIDEO INTERFACE ROUTINES.
PPC CALCULATOR JOURNAL (US): V10 N1, 2/83, p.7.

A couple of small routines which could be very useful for games: with "RTTV" a 10x10 grid can be drawn on the screen, while "POS" facilitates the positioning of the cursor at any point on this grid.

HP-41 (33 + 44 lines)

+ HP-IL
+ Video Interface.

97. THE COMPLEAT CURSOR (AND OTHER CURSES).
PPC CALCULATOR JOURNAL (US): V9 N7, 11/82, p.62-63.

"Video" is a collection of 24 routines for maneuvering the cursor, for printing single or multiple copies of a given character (upper/lower case, normal/inverse) and for printing alpha messages on a video screen.

HP-41 (146 lines - synthetic)

+ HP-IL
+ Video Interface.

81. BOX ON THE 82163A.
PPC CALCULATOR JOURNAL (US): V9 N7, 11/82, p.13.

One of the programs that is handy to have when using the 82163A HP-IL Video Interface is one that "draws" a box, or frame, around the screen. This one will frame a TV screen in six seconds.

HP-41 (47 lines - synthetic)

+ HP-IL
+ Video Interface.

106. VIDEO WORK SHEET.
PPC CALCULATOR JOURNAL (US): V10 N2, 3/83, p.24-25.

The program is designed for a presentation at a board room meeting or something similar. It displays on the video screen a matrix with headings and can be manipulated to reflect changes either to single entries or to whole rows or columns.

HP-41 (466 lines)

+ HP-IL
+ Video Interface.

117. HP-41 VIDEO BOX.
PPC CALCULATOR JOURNAL (US): V10 N3, 4/83, p.22.

This program uses a "double width" side to make more uniform frames on the screen.

HP-41 (22 lines - synthetic)

+ HP-IL
+ Video Interface.

123. VIDEO LINE FEED & CARRIAGE RETURN ROUTINES.
PPC CALCULATOR JOURNAL (US): V10 N3, 4/83, p.26.

These routines are for use with the Video Interface. The first one, "VLF", moves the cursor to the left then down n lines (n in register X). "VCR" moves the cursor all the way to the left of the row it is in and stops.

HP-41 (15 lines)

+ HP-IL
+ Video Interface.

156. MORE BOX (VIDEO FRAME).
PPC CALCULATOR JOURNAL (US): V10 N4, 5/83, p.38.

Two programs to frame a TV screen with a BOX as fast as possible. The first program only needs 5.1 seconds, the second one uses the HP-IL development module.

HP-41 (31 + 18 lines - synthetic)

+ HP-IL / Video Interface.

166. IL DM SPEEDS UP VIDEO INTERFACE 1.9x.
PPC CALCULATOR JOURNAL (US): V10 N5, 6/83, p.11-13.

This program is meant to be a demonstration of useful HP-41, HP-IL and Development Module functions. It is not proposed as a program of any particular utility. With it a 41C buffer can be dumped to produce a screen fill of 512 characters in 10.46 seconds.

HP-41 (148 lines)

+ HP-IL / HP-IL Development Module
+ Time Module.

225. MOVING VIDEO BOX.
PPC CALCULATOR JOURNAL (US): V10 N7, 8/83, p.10.

Starting the cursor Home, the "BXC" routine draws a box clockwise around the video screen, using a character whose code is in X. The repeating box "BXR" is an endless loop, giving the effect of a moving frame around a stationary poster-type message.

HP-41 (81 lines - synthetic)

+ HP-IL / Video Interface.

234. "VI": INVERSE VIDEO.
PPC CALCULATOR JOURNAL (US): V10 N8, 10/83, p.31.

Two small routines, one of them "subroutinable", aid in creating inverse video characters.

HP-41 (17 + 10 lines)

+ XFunctions Module
+ HP-IL / Video Interface.

235. VIDEO DIVIDER.
PPC CALCULATOR JOURNAL (US): V10 N8, 10/83, p.31.

The "VD" routine displays a full line of characters, serving as a dividing line across the screen. Any valid character can be used.

HP-41 (15 lines)

+ HP-IL / Video Interface.

34. KINEMATIK AUF DEM HP-41C.
CHIP (DE): Nr.3, 3/81, S.68.

Mit diesem Programm lassen sich sämtliche Problemstellungen über die gleichförmige beschleunigte Bewegung in der Kinematik lösen. Dabei hängen die fünf Variablen über zwei Gleichungen zusammen, und von diesen Variablen sind drei beliebig einzugeben.

HP-41 (175 Zeilen).

38. PROGRAM PERFORMS VAPOR-LIQUID EQUILIBRIUM CALCULATIONS.
CHEMICAL ENGINEERING (US): 28/6/82, p.77-86.

The program solves basic vapor-liquid equilibrium problems such as calculation of the dewpoint, bubble point, and equilibrium flash. The algorithm presented uses a method for predicting ideal K-values developed by Edmister.

HP-41 (675 lines).

82. LIN-EXP CURVE FITTING IN BIOLOGICAL SCIENCES.
PPC CALCULATOR JOURNAL (US): V9 N7, 11/82, p.14-16.

The curve to which pairs of data points are fitted is of the form $Y = Ax/B^{x}x$ and its skewness resembles in many aspects the Pearson type I, when defined for positive values of x, Y, A and B. This function can easily be linearized and readily adapted fir linear regression.

HP-41 (119 lines).

165. BETTER SOLAR AND LUNAR ECLIPSES.
PPC CALCULATOR JOURNAL (US): V10 N5, 6/83, p.10-11.

This program gives the beginning and ending teimes of solar and lunar eclipses, and for the latter also the times for the different phases when they occur.

HP-41 (375 lines)

+ Time Module
+ XFunctions Module.

201. SATELLITEN IM VISIER.
FUNKSCHAU (DE): Heft 7, 31/3/83, S.104-105.

Nach Eingabe von verscheidenen Daten zeigt der Rechner für jedes Berechnungsintervall die Zeit nach dem AEquatorcrossing des Satelliten an; die Werte für Elevation und Azimut erscheinen nur dann, wenn der Satellit für den Beobachter tatsächlich "sichtbar" ist.

HP-41 (218 Zeilen).

202. PRINTERLESS BIORYTHMS.
DATAFILE (GB): V2 N1, p.4-5.

This programme gives a printerless Biorythm reading for a single date, the number of days to your next critical dates, and your percentage compatibility with someone else.

HP-41 (129 lines) =BARCODE=

+ Time Module (or: 27 lines extra + PPC ROM).

248.PHASES OF THE MOON.
PPC CALCULATOR JOURNAL (US): V10 N8, 10/83, p.58.

This program gives the phase of the moon starting at any chosen date, up to the year 3000.

HP-41 (322 or 324 lines)

+ PPC ROM or Time Module.

439.BIORYTHMS.
PPC CALCULATOR JOURNAL (US): V11 N3, 4/84, p.10.

This program calculates Meinderts biorythm if you input anything which is not a valid date (e.g. zero) for the current date, and any biorythm if you enter a birthdate and any date for that day.

HP-41 (49 lines - synthetic)

+ Time Module
+ XFunctions Module.

Note: "Meindert" is the author's name...

291.BIORYTHMS.
DATAFILE (GB): V.2 N.3, 6/83, p.5.

Calculates physical, emotional, intellectual, and average values. If any of the first three are going up, an arrow is appended to the display.

HP-41 (49 lines)

+ Time Module.

443.SUNPOS.
PPC CALCULATOR JOURNAL (US): V11 N3, 4/84, p.21-23.

This program gives most things you would want to know about the position of the sun (rising/setting/ position during daylight hours, ...) as welle as rising and setting times, with all the twilight computations.

HP-41 (409 lines)

+ XFunctions Module.

423.SURF.
PPC-T (FR): No.11, 5/84, p.51.

Programme permettant d'encadrer, à 5% près, la surface corporelle d'un homme, connaissant son poids et sa taille.

HP-41 (41 lignes).

11. MILLISECONDS AWAY.
HP KEY NOTES (US): Vol.6 No.4, 12/82, p.5.

This routine "TFUNK" contains all the fundamentals for timing a function. After a first calibration run, the routine can be adapted to time any HP-41 function. This can be handy to help you shorten the execution time of lengthy or iterative programs.

HP-41 (23 lines).

+ Time Module.

21. METRONOME ROUTINE.
HP KEY NOTES (US): Vol.6 No.4, 12/82, p.12-13.

This routine prompts for an "INDEX": zero is "vivace", and 10 is "moderato", with all nuances in-between.

HP-41 (18 lines).

90. TONE DURATION MEASUREMENT.
PPC CALCULATOR JOURNAL (US): V9 N7, 11/82, p.35.

This program will execute any synthetic tone and compute its execution time. With 0... 127 in X, start program: synthetic tone will be executed and the display will show the tone number and the execution time in seconds.

HP-41 (12 lines - synthetic)

+ XFunctions Module
+ Time Module.

118. EASTER DATE CALCULATED.
PPC CALCULATOR JOURNAL (US): V10 N3, 4/83, p.24-25.

This program will calculate the date on which Easter falls over a span of years exceeding 1940 to 2020.
(Note: some results given by this program may be in doubt)

HP-41 (43 lines)

+ PPC ROM.

125. YEAR DAY FOR THE HP-41.
PPC CALCULATOR JOURNAL (US): V10 N3, 4/83, p.27.

For any given date, this small routine "YD" gives the day number, with January 1st = day 1 , and December 31st = day 365 or 366.

HP-41 (13 lines)

+ Time Module.

149. EASTER DATE CALCULATED.
PPC CALCULATOR JOURNAL (US): V10 N4, 5/83, p.9.

Two different programs give the date of Easter. One uses the PPC ROM and is valid for dates from 1900 to 2100. The second one is valid from year 1 to 4199, flag 01 being used to correct the resulting date in accordance with the calendar used (Julian or Gregorian).

HP-41 (68 or 104 lines)

+ PPC ROM (for first program only).

185. EASTER DATE CALCULATED PROGRAM.
PPC CALCULATOR JOURNAL (US): V10 N6, 7/83, p.3.

Another program to calculate Easter dates accuratly from 1583 onwards, is based on the one for HP-67 published in the book: "Mathematical Astronomy with a Pocket Calculator" by Aubrey Jones.

HP-41 (150 lines).

317. SUBROUTINE TIMER.
PPC CALCULATOR JOURNAL (US): V10 N10, 12/83, p.31-32.

"TMR" is a Timer program that computes the time to run any user written routine in RAM that is given a temporary name "FT". The program automatically compiles and times "FT" by running it ten times and taking the average.

HP-41 (60 lines - synthetic)

+ Time Module.

299. HP-41 MIMICS SIDEREAL CLOCK.
PPC CALCULATOR JOURNAL (US): V10 N9, 11/83, p.11.

This small program displays sidereal time continuously, which can be very handy for astronomers, as sidereal time and solar time flow at different rates (the sidereal hour being shorter than the solar hour by about one part in 365).

HP-41 (33 lines)

+ Time Module.

385. DEUX CONCOURS DE VITESSE (Misez p'tit: op'timisez!).
L'ORDINATEUR DE POCHE (FR): No.22, 4/84, p.24-25.

Programme "améliorable" qui permet de calculer la durée d'éxécution de tout autre programme, en éxécutant celui-ci 100 fois et en chronométrant chaque fois pour prendre la moyenne du résultat final.

HP-41 (21 lignes)

+ Module Horloge.

303. TIME MODULE CALIBRATION.
PPC CALCULATOR JOURNAL (US): V10 N9, 11/83, p.27-28.

This program allows simple and leisurely setting of the clock and automatic setting of the accuracy factor. The precision of the setting is limited only by the eye's perception of the changing digits while listening to the ticking of a time standard (such as WWV).

HP-41 (90 lines)

+ Time Module
+ XFunctions Module (optional).

391. TEST DE BATTERIE POUR HP-41C/CV/CX.
L'ORDINATEUR INDIVIDUEL (FR): No.58, 4/84, p.235.

Ce programme, dont le principe repose sur un affichage "plein cadran" et une forte consommation, permet de mesurer la durée de fonctionnement jusq'à ce que l'alimentation faiblisse (la calculatrice est alors éteinte et il suffit de la rallumer pour pouvoir lire ce temps de fonctionnement à pleine charge).

HP-41 (46 lignes).

93. THE CHIMING CLOCK.
PPC CALCULATOR JOURNAL (US): V9 N7, 11/82, p.38-39.

This program is intended as a Time Module application for beginners. A PPC ROM is helpful but not essential. The HP-41 will "wake up" every 15 minutes for a few seconds, and will sound one, two or three tones for quarter hours, and "count the hours" on the hour.

HP-41 (59 lines - synthetic)

+ Time Module
+ PPC ROM.

361. CHIMING WATCH (Beginners Corner).
DATAFILE (GB): V.2 N.5, 11/83, p.22.

This all-automatic program gives a single tone (or click) at a quarter past every hour, two tones at half past, three at a quarter to, and four on the hour every hour. Setting flag 00 makes it remain silent.

HP-41 (46 lines)

+ Time Module.

319. "AL" ALARM SETTING PROGRAM.
PPC CALCULATOR JOURNAL (US): V10 N10, 12/83, p.35-36.

"AL" prompts for time, date, repeat interval and message, and then sets the alarm. Both the time and date inputs may be either valid times and dates, or number of hours or days relative to the current time and date.

HP-41 (73 lines)

+ Time Module.

376. REVEIL.
PPC-T (FR): No.10, 3/84, p.41.

Petit programme qui permet, en utilisant le module horloge d'être réveillé tous les jours à l'heure qu'on aura choisi sauf le samedi et le dimanche, où on pourra faire la grasse matinée sans être inquiété...

HP-41 (14 lignes)

+ Module Horloge
+ Module XFonctions.

326. VOTRE HP-41C EST-ELLE EN AVANCE OU EN RETARD SUR SON TEMPS?
L'ORDINATEUR DE POCHE (FR): No.4, 12/81, p.29-30.

Ce programme transforme votre HP-41 en montre-réveil avec fonction chronographe et compte à rebours.

HP-41 (80 lignes).

64. COMPUTE VOLUME CORRECTION FACTORS ON YOUR CALCULATOR.
HYDROCARBON PROCESSING (US): 11/81, p.295-296.

A program for the HP-41C produces the new API volume correction factors with the press of a key. Also given are a few additional steps which may be added to enable the calculator to compute volume correction factors not only for gasolines, jets and fuel oils, but also for crude oils.

HP-41 (155 + 12 lines).

65. PROGRAMS SOLVE UNDERWOOD'S EQUATION.
HYDROCARBON PROCESSING (US): 4/81, p.231-233.

In multicomponent analysis, the method most used to find minimum reflux, is the Underwood's equation. The programs presented here for the HP-67/97 and the HP-41C calculators quickly solve this equation in the case of constant relative volativity, using a Newton convergence method.

HP-41 (191 lines).

66. SHORTCUT PROGRAM EASES GAS CALCULATIONS.
HYDROCARBON PROCESSING (US): 12/82, p.81-84.

Physical property data for components often require tedious manipulation before they can be determined for a mixture. With an HP-41C obtaining viscosity, thermal conductivity, heat capacity and net heating value are now a minimal exercise.

HP-41 (5 programs: 145 + 99 + 39 + 27 + 19 lines).

110. VERGLEICHENDE AUSWERTUNG VON SIEBANALYSEN.
GLÜCKAUF-FORSCHUNGSHEFTE (DE): H.1, 2/83, S.45-47.

Das zur Auswertung von Siebanalyse durch die RRSB-Funktion vorgestellte Programm gibt der Wertetabelle der Siebanalyse, des Bestimmtheitsmasse, der Steigung sowie der Korngrösse eines Probengutes aus.

HP-41 (216 Zeilen).

142. SOLVING PROBLEMS OF VARYING HEAT-TRANSFER AREAS IN BATCH PROCESSES.
CHEMICAL ENGINEERING (US): 17/5/82, p.101-107.

Batch processes often involve an evaporation step or the precipitation of crystals. The heat-transfer area varying with time, heating and cooling problems are hard to solve. The program "SOLVE" gives the relation between the time of the operation and the volume of evaporated liquid.

HP-41 (95 lines).

220. APPROXIMATE VENTED-BOX AND CLOSED-BOX LOUDSPEAKER SYSTEM DESIGN.
JOURNAL OF THE AUDIO ENGINEERING SOCIETY (US): 6/81, p.421-441.

This group of programs help select the most suitable enclosure for a given low-frequency cone transducer of known parameters. Enclosure volume and/or tuning may be either computed or specified. Additional programs for graphic re-representations of approximate frequency response are provided.

HP-41 (363 + 291 + 334 + 189 lines).

411. HP-41 CALCULATES DYKSTRA-PARSONS PERMEABILITY.
PETROLEUM ENGINEER (US): 7/83, p.58+60.

This program will calculate the often used Dykstra-Parsons permeability variation factor, V. Rock permeabilities generally have a log normal distribution, and when plotted on log probability paper a straight line will result. In this program, all points have equal weight.

HP-41 (38 lines) =BARCODE= .

450. ESTIMATE AIR-COOLER SIZE.
CHEMICAL ENGINEERING (US): 12/12/83, p.65-68.

This program calculates the required extended surface, bay size, number and diameter of fans, driver horsepower, number of tubes, and tubeside velocity and pressure drop, in an air cooler system.

HP-41 (393 lines).

135. PROGRAMMEERBARE ZAKREKENMACHINES VOOR TWEE-DIMENSIONALE GRONDWATERSTROMING.
H_2O (NL): 4/83, blz.77-78.

Een twee-dimensionaal waterstromingsprobleem (stroming naar een horizontale drain) wordt met hulp van het "DRAIN" programma opgelost; als oplossing zijn de potentiaalfunctie en de stroomfunctie berekend.

HP-41 (178 regels)

+ Printer.

136. ZAKREKENMACHINES EN DE WATERLEIDINGSINDUSTRIE.
H_2O (NL): 3/81, blz.67-70.

Vier programma's zijn beschreven om verschillende waterleidingsproblemen op te lossen: berekening van de spoelsnelheid voor een filter; van de weerstandscoëfficient in een bezinkbassin; van de meest economische diameter van een transportleiding; van de potentiaalverlaging bij een puttenreeks.

HP-41 (59 + 96 + 55 + 67 regels).

137. INZICHT NIET GETALLEN. ZAKREKENMACHINES IN DE WATERBOUWKUNDE.
H_2O (NL): 10/81, blz.223-227.

Drie verschillende programma's: het gemiddelde duurlijnen voor de jaarsommen van regenval; de formule van Penman; evenwichtsdiepte en stuwkrommen van een openleiding (met invloed van kunstwerken en aftappingen).

HP-41 (90 + 121 + 185 regels).

138. HANTUSH "WELL-FUNCTION" IN DE POCKET CALCULATOR.
H_2O (NL): 18/81, blz.397-398+406.

Hantush's well function beschrijft de instationaire grondwaterstandsverlaging door een put die een constante volumestroom onttreekt. Het programma geeft resultaten meet een fout kleiner dan 3% en meestal beduidend kleiner dan 1%.

HP-41 (127 regels).

139. ZAKREKENMACHINES EN DE STROMING DOOR LEIDINGEN.
H_2O (NL): 23/81, blz.557-563.

Vier programma's: wrijving in busleidingen; stroming in leidingen; gedeeltelijk gevulde leidingen; vullingsgraad van leidingen.

HP-41 (151 + 208 + 259 + 133 regels).

140. BEREKENING VAN VERBLIJFTIJDEN VAN GRONDWATER.
H_2O (NL): 4/82, blz.59-61.

Het programma berekent de grondwatersnelheid, voor zowel spanningswater als semi-spanningswater, in een watervoerend pakket, waarin, naast een natuurlijke of andere basisstroming, een in principe willekeurig aantal onttrekkings- en infiltratieputten aanwezig zijn.

HP-41 (354 regels).

39. CALCULATOR SIMPLIFIES FIELD PRODUCTION FORECASTING.
PETROLEUM ENGINEER (US): 5/82, p.186+189-190.

This program presents a method of forecasting future field production from an assumed average well production schedule and drilling schedule, avoiding tedious row summations by hand for staggered well production schedules. Two programs are given, one with and the other without printer.

HP-41 (103 or 100 lines)
+ Printer (optional).

40. HANDHELD CALCULATOR ASSISTS IN DIRECTIONAL DRILLING CONTROL (1).
PETROLEUM ENGINEER (US): 7/82, p.79+82+84+88.

Part 1: CALCULATING THE DRILLER'S ANGLES. The solution presented in this article for the three driller's angles is for use with a borehole angle measurement sensor which produces signals form two sources: a three-vector magnetometer and a two- or three-axis accelerometer or inclinometer.

HP-41 (178 lines).

41. HANDHELD CALCULATOR ASSISTS IN DIRECTIONAL DRILLING CONTROL (2).
PETROLEUM ENGINEER (US): 9/82, p.82+84+88.

Part 2: CALCULATING THE BOREHOLE SENSOR OUTPUTS. It is sometimes useful to be able to put a sensor in a known orientation and predict its output. This process of calculating the sensor outputs is the inverse of the procedure described in part 1 of this series.

HP-41 (170 lines).

111. HANDHELD CALCULATOR ASSISTS IN DIRECTIONAL DRILLING CONTROL (3).
PETROLEUM ENGINEER (US): 1/83, p.48+50+52+56.

Part 3: CORRECTING THE BOREHOLE SENSOR OUTPUTS. The concluding part in this series describes a procedure to correct error terms due to scale factor, bias, temperature, and misalignment errors in the individual magnetic and gravity sensors used in a borehole angle measurement system.

HP-41 (184 lines).

197. USE OF HAND-HELD CALCULATOR PROGRAM AIDS ANALYSIS OF SUBSEA PIPELINE DESIGN.
OIL & GAS JOURNAL (US): 14/2/83, p.94-96.

The Scaline program simulates the behavior of the developed transport pipeline after the installation stage. The basic design data, i.e. water depth along the pipeline route, environmental conditions, proposed line routine, current velocity at sea-bed, waves, etc... must first be known and checked.

HP-41 (459 lines).

198. CALCULATOR PROGRAM HELPS SET OFFSHORE DESIGN CRITERIA.
OIL & GAS JOURNAL (US): 10/1/83, p.89+92-94.

This program can quickly provide the calculations necessary for proper design involving wind forces, wave forces, and stress acting on the hydrostatic pressure case of a submerged system.

HP-41 (367 lines).

212. "3P" FLOW ANALYZER.
OIL & GAS JOURNAL (US): 9/8/82, p.132+134+136+138
&: 16/8/82, p.148-152.

Using the Beggs and Brill method, this program simulates the behavior of a 3-phase fluid (oil, water and gas) as it flows in a piping element.

HP-41 (934 lines).

213. AGA GAS FLOW EQUATIONS CAN BE QUICKLY DONE...
OIL & GAS JOURNAL (US): 8/3/82, p.233-236+241.

This program combines the AGA flow and compressibility equations to study the behavior of natural gas in long pipelines.

HP-41 (896 lines).

214. CRUDE DEHYDRATION/DESALTING CALCULATIONS.
OIL & GAS JOURNAL (US): 15/3/82, p.76-79.

This program makes it possible to quickly perform the calculations necessary when defining facilities to remove water-soluble salts from crude oil.

HP-41 (221 lines).

251. CALCULATOR CAN EASE PIPELINE SURGE ANALYSIS.
OIL & GAS JOURNAL (US): 10/8/81, p.100+102+105+106
17/8/81, p.128+130-132+134.

The program simulates the behavior of a liquid having uniform temperature flowing in a pipeline with a centrifugal pump and check valve at the upstream end, and a time-controlled block valve at the downstream end.

HP-41 (651 lines).

255. PROGRAMS SPEED LINE HYDRAULICS CALCULATIONS.
OIL & GAS JOURNAL (US): 20/4/81, p.76-78+83-85.

Two programs have been developed for quickly making pipeline hydraulics calculations; the first computes velocity, Reynolds number and friction loss for steady-state incompressible flow, and these results are used in the other program to relate any two points on the hydraulic gradient (head & pressure).

HP-41 (290 + 225 lines).

397. CALCULATOR PROGRAM AIDS SUCKER-ROD SYSTEMS DESIGN AND OPTIMIZATION.
OIL & GAS JOURNAL (US): 15/8/83, p.56-63.

This program generates design parameters for three types (conventional, air balanced, and Mark II) of rod pumping systems. Given basic well parameters and rod and pump data the program will print out values as basic design criteria for the problem.

HP-41 (550 lines).

412. CALCULATOR PROGRAM WRITTEN FOR ACCURATE AGA ORIFICE METERING OF NATURAL GAS.
OIL & GAS JOURNAL (US): 8/8/83, p.106-109.

Measuring the flow rate of gas as accurately as possible has become imperative for gas-transmission companies. This program, written for flange tap orifice meters, contains no restrictions, assumptions, or limitations whatsoever and can be used to calculate flow rates under any conditions.

HP-41 (959 lines)

+ Printer.

413. PROGRAM PERMITS FAST SOLUTION TO PIPELINE LOOP REQUIREMENTS.
OIL & GAS JOURNAL (US): 31/10/83, p.136+138-139.

This program provides pipeline engineers with a quick and easy means for determining loop requirements on exiting gas-transmission pipelines. "Looping" or adding pipe in parallel to an existing pipeline is necessary to ensure a minimum gas pressure at a given point.

HP-41 (257 lines).

430. CALCULATING POROSITY FROM SONIC AND BULK-DENSITY LOGS.
OIL & GAS JOURNAL (US): 20/2/84, p.70-71.

The first program calculates the sonic porosity using the Wylie equation with the correction factor for non-compacted formation. The second program calculates the bulk-density porosity from a given equation. Both programs use the TITLE, IN and OUT subroutines of the HP Petroleum-Fluids PAC.

HP-41 (49 + 38 lines)

+ Petroleum-Fluids PAC
+ Printer.

431. PROGRAM COMPUTES RADIUS-OF-CURVATURE COORDINATES FOR STRAIGHT, DEVIATED HOLES.
OIL & GAS JOURNAL (US): 24/10/83, p.100-102+107-108.

This program computes, updates, and stores well-position coordinates using the radius-of-curvature method. It can handle vertical and horizontal holes, as well as holes drilled at angles above the horizontal.

HP-41 (456 lines).

432. HP-41C/CV PROGRAM COMPUTES TORQUE FACTORS FOR ANY ROD PUMPING UNIT TO SPOT PROBLEMS EARLY.
OIL & GAS JOURNAL (US): 9/1/84, p.93-94+96.

The purpose of this program is to calculate polish-rod position and torque factors for any conventional Class I lever, Class III Mark II, or air balanced units. All equations necessary for the computations are derived from API Bulletin STD 11E.

HP-41 (315 lines).

447. PROGRAM PREDICTS TWO-PHASE PRESSURE GRADIENTS.
OIL & GAS JOURNAL (US): 28/11/83, p.126-129.

This program uses the time-tested Orkiszewski correlation for predicting two-phase pressure gradients in vertical tubulars, a method which was developed based on data from 148 wells. Hold up is derived from observed physical phenomena, and the pressure gradient is related to the geometrical distribution of the liquid and gas phase (flow regime).

HP-41 (808 lines).

448. CORRELATION EASES ABSORBER-EQUILIBRIUM-LINE CALCULATIONS FOR TEG-NATURAL GAS DEHYDRATION.
OIL & GAS JOURNAL (US): 7/11/83, p.96-98.

This program computes an absorber equilibrium line (weight ratio TEG vs. water content of natural gas) when given the TEG concentration, contact temperature, and pressure. The program eliminates the use of plots and any error associated with reading them.

HP-41 (117 lines).

449. FRICTION LOSS IN PIPING.
HYDROCARBON PROCESSING (US): 1/84, p.100-102.

This program computes pipe friction loss, velocity, and optimum diameter given pipe ID, flow rate, viscosity, and density. For some standard strength pipes, nominal to actual diameter conversion is provided.

HP-41 (243 lines).

1. ANALYZING COMPARATOR ERRORS IN A-D CONVERTERS.
ELECTRONICS (US): 27/1/83, p.123-125.

This program determines the comparator's system error contribution in a successive-approximation analog-to-digital converter, given its input offset voltage, its input offset current, and gain specifications. The program also seeks new specifications for either the comparator or the system.

HP-41 (138 lines).

6. DIE BERECHNUNG TRANSFORMIERENDER HOCH- UND TIEFPÄSSE.
NACHRICHTEN ELEKTRONIK (DE): 5/82, S.215-218.

Dieser Beitrag beschreibt ein Programm zur Berechnung transformierender Hoch- und Teifpässe. Er zeigt anhand konkreter Beispiele im Tonfrequenzbereich die Ergebnisse der Berechnung. Ausserdem werden augrund dieser Berechnung realisierte Schaltungen dargestellt.

HP-41 (155 + 156 Zeilen).

7. STROM-ZEIT-FUNKTION EINER ELEKTROMAGNETISCHEN SCHWINGUNG.
CHIP (DE): 9/82, S.108.

Dieses Programm löst eine Differentialgleichung mit Hilfe des Näherungsverfahrens.

HP-41 (82 Zeilen).

29. HP-41C TWEAKS VERTICAL ANTENNA ARRAYS.
ELECTRONICS (US): 17/1/80, p.141-143.

This program is ideal for in-the-field plotting of the radiation pattern of a directional antenna array. It accomodates three-tower arrays, which are probably the most popular found in amateur work and broadcasting, but can be extended to handle a maximum of 5 elements if necessary.

HP-41 (58 lines).

48. CALCULATOR PROGRAM EVALUATES EMI FROM DIGITAL SYSTEMS.
ELECTRONIC DESIGN (US): 8/11/80, p.153-154.

This program computes the spectral characteristics of an approximated digital pulse.

HP-41 (67 lines).

89. POTENTIAL FIELD DISTRIBUTION.
PPC CALCULATOR JOURNAL (US): V9 N7, 11/82, p.32-33.

In solving electrical engineering problems associated with electric field potentials, it is sometimes useful to set up a grid structure and solve for the unkowns using an iterative approach. "PFD" loads the knowns and the unknowns and "SLV" solves for the unknowns.

HP-41 (89 + 212 lines).

147. HP-41C BERECHNET TRANSFORMATOREN.
FUNKSCHAU (DE): Nr.26/82, S.75-76.

Das Programm berechnet abhängig vom Eisenquerschnitt des Trafos und von den elektrischen Werten der maximal drei Sekundärwicklungen sämtliche Wickeldaten.

HP-41 (190 Zeilen).

180. HP-41C PROGRAM PLOTS ANTENNA'S RADIATION PATTERN.
ELECTRONICS (US): 28/7/83, p.140-143.

This program makes it quite easy to compute the electrical parameters and the free-space radiation pattern of a three-element Yagi-Uda dipole array. The program makes use of the antenna's self-impedance and mutual impedances in order to calculate parasitic currents due to different elements.

HP-41 (616 lines).

219. HP-41C CALCULATOR ANALYSES RESISTIVE ATTENUATORS.
ELECTRONICS (US): 13/1/82, p.176-177.

This program gives the attenuation in decibels of three-element pi or T attenuators. Source and load resistance are taken into account.

HP-41 (103 lines).

272. MILLMAN'S THEOREM.
DATAFILE (GB): V.2 N.2, 5/83, p.31-32.

This program uses Millman's theorem to provide a shortcut for finding the voltage across any number of parallel branches in a circuit.

HP-41 (44 lines).

320. PROGRAM ANALYZES SIX-ELEMENT ACTIVE RC NETWORKS.
ELECTRONIC DESIGN (US): 7/1/82, p.291-296+298+300.

This program calculates the transfer function - its poles and zeros, natural frequency, and quality factor - and the points for a Bode plot of a generalized siz-element RC network. Both ideal and non-ideal op amps can be handled.

HP-41 (620 lines).

321. PROGRAM QUICKLY FIGURES COMPLEX FILTER PARAMETERS.
ELECTRONIC DESIGN (US): 31/3/83, p.105-110.

This program makes short work of Butterworth and Chebyshev high- and low-pass filters with just four input parameters.

HP-41 (269 lines).

388. AUTOMATIC STABILITY CALCULATIONS FOR FEEDBACK CONTROL SYSTEMS.
CONTROL ENGINEERING (US): 6/82, p.80-82.

With this program the calculator automatically derives the correct Bode diagram and calculates the control parameters of a feedback system, giving very accurate results easily and quickly.

HP-41 (111 lines).

392. SIMPLE COMPENSATION PROGRAM OPTIMIZES OP-AMP RESPONSE.
EDN (US): 27/10/83, p.279-282+284-286+288-289.

Two programs are proposed, together with a compensation technique that you can use for arbitrarily complex open-loop transfer functions. The first calculates optimum compensation for an amplifier. The other and shorter program provides phase margin data at any frequency.

HP-41 (220 + 47 lines).

35. HP-41 SOLVES WIDEST RANGE OF MICROSTRIP DESIGN PROBLEMS
ELECTRONICS (US): 10/2/81, p.156-157.

This program uses the equations recently proposed by Wheeler, which have proved to be by far the most accurate to date. It therefore agrees to within 3% with the published table for striplines operating in the transverse electromagnetic mode, so enabling all line variables to be accuratly found.

HP-41 (293 lines).

418. CIRCULAR MICROSTRIP DISK REONATOR F_o AND Q CALCULATIONS (...)
MICROWAVE JOURNAL (US): 9/83, p.165-169.

A first program computes the resonant frequency of a circular microstrip disc resonator for any given set of input variables, dielectric constant and thickness to radius ratio. The second program calculates its quality factor, given the thickness and the radius.

HP-41 (279+67 lines).

83. TRANSMISSION LINES Zs AND Zl.
PPC CALCULATOR JOURNAL (US): V9 N7, 11/82, p.16-17.

This routine provides a solution for source and load impedances, given a known impedance, characteristic impedance, and the electrical length, Bs, in units consistent with trigonometric mode. No data registers are used, but the alpha subregisters are used for program scratch.

HP-41 (77 lines - synthetic).

114. LEITUNGSWERTE MIT DEM TASCHENRECHNER ERMITTELT.
ELEKTROTECHNIK (DE): H.6, 28/3/83, S.16-18+21-22.

Die Leitung wird als eine Kette von differentiellen Elementen aufgefasst, und die für jede Leitung characteristischen Beläge sind auf die Länge bezogen und werden als kilometrische Werte angegeben. Diese Art der Leitungsnachbildung erlaubt das Berechnen der Orts- und Zeitabhängigkeit von Strom und Spannung.

HP-41 (754 Zeilen).

19. COST OF MEETING ROUTINE.
HP KEY NOTES (US): Vol.6 No.4, 12/82, p.12.

This program will display the increasing labor costs of a business meeting, given the number of people and their labor rates in dollars per hour.

HP-41 (41 lines)

+ Time Module.

20. "SHOP" ROUTINE .
HP KEY NOTES (US): Vol.6 No.4, 12/82, p.12.

This routine helps the budget minded grocery-shopper to choose the least costly (lowest unit cost) of equivalent items.

HP-41 (17 lines).

52. "FIN" - "FI" IMPROVED.
PPC CALCULATOR JOURNAL (US): V10 N1, 2/83, p.20-22.

The FIN program expands the capabilities of the typical "five financial key" calculator program by providing nine combinations of compounding and payment timings with the facility for specifying independant payment and compounding frequencies.

HP-41 (301 lines).

184. PREPAREZ LA MONNAIE SUR HP-41.
L'ORDINATEUR DE POCHE (FR): No.16, 9/83, p.62-63.

Programme fournissant pour un ensemble de sommes d'argent différentes, le nombre de pièces et de coupures distinctes nécessaires pour effectuer le paiement exact.

HP-41 (89 lignes).

209. TELEPHONE TIMER.
DATAFILE (GB): V2 N1, p.27-28+36.

This programme displays the cost of a telephone call in progress, and gives the time left to the next charge pulse. With the help of the Time Module, the programme knows the day of the week and the time of day, and can thus determine the charge rate (cheap, standard, or peak). Adapted to UK conditions.

HP-41 (143 lines) =BARCODE=

+ Time Module.

222. SPARPROGRAMM.
CHIP (DE): 2/80, S.71-73.

Dieses Programm kann man für Probleme, wo Daten sortiert, die Mehrwertsteuer herausgerchnet, einem Konto zugeordnet und schliesslich ausgedruckt werden soll, verwenden. Nach Eingabe der einzelnen Bruttobeträge erfolgt die Vorsteuerrückrechnung, und wird den Nettobetrag je belasteten Kontos ausgedruckt.

HP-41 (136 Zeilen).

249. UNE LETTRE DE COMMANDE SUR HP-41C.
L'ORDINATEUR INDIVIDUEL (FR): No.25, 3/81, p.83.

Ce programme permet d'automatiser les opérations nécessaires à la passation d'une commande: établissement d'un tableau, remplissage de celui-ci, calcul du total de la commande, et impression.

HP-41 (155 lignes)

+ Imprimante.

273. FRÜHER TEST - MINIMALE KOSTEN.
ELEKTRONIK (DE): Heft 9, 6/5/83, S.69-72.

Werden Bauteile mit unzureichender Anliefer-Qualität eingebaut, so steigen die Kosten für die Fehlerbeseitigung, je weiter das Produkt in der Fertigstellung fortgeschritten ist. Die Berechnung der relativen Reparaturkosten kann mit Hilfe dieses einfachen Programms erfolgen.

HP-41 (69 Zeilen).

288. SALARY - INFLATION CHECKING.
DATAFILE (GB): V.2 N.3, 6/83, p.3.

"INFL" tells you, depressingly, what your money might once have been worth and wether your earnings have kept up with inflation, or more precisely, with the Official Index of Retail Prices. The years covered are 1962 to 1982 included. The program can easily be kept up to date.

HP-41 (137 lines)

+ HP-IL / Printer (optional).

341. LE PROGRAMME P.E.L (Plan d'Epargne Logement).
PPC-T (FR): No.9, 1/84, p.55-57.

"PEL" calcule la valeur acquise par le dépôt initial et les versements mensuels sur un plan d'épargne. Il ne tient pas compte des planchers ni des plafonds imposés par la règlementation; certaines autres conditions sont également appliquées.

HP-41 (234 + 86 lignes).

356. COMMENT NE PAS ETRE TROP PRECIS.
L'ORDINATEUR DE POCHE (FR): No.7, 7/82, p.47-48.

Programme de conversion de dollars américains ou de livres anglaises en francs français, avec résultat sur deux chiffres significatifs, c'est-à-dire arrondi indépendamment de son ordre de grandeur.

HP-41 (55 lignes).

410. CALCULATOR HELPS DETERMINE CASH FLOW - PRESENT WORTH.
PETROLEUM ENGINEER (US): 11/83, p.76+78-79+82.

This program computes and prints a schedule for oil or gas production and a cash flow-present worth projection. The program multiplies production rates by product prices to arrive at gross income. Expenses then are subtracted to arrive at net income (discounted for every year).

HP-41 (618 lines)

+ Printer (optional).

437. MINI SPREAD SHEET PROGRAM.
PPC CALCULATOR JOURNAL (US): V11 N3, 4/84, p.9-10.

The purpose of this program is to allow account totals from income and expense summary and balance sheet to be entered, adjusted, added, and balanced without the need to reenter data.

HP-41 (155 lines - synthetic).

8. LE JEU DU CROQUE-ODILE SUR HP-41.
L'ORDINATEUR DE POCHE (FR): No.10, 1/83, p.66.

Vous êtes tombé(e) d'une pirogue dans une rivière infestée de crocodiles affamés. Vous essayez donc de rejoindre la pirogue aussi vite que possible... Utilise les possibilités graphiques rudimentaires de la HP-41 (divers symboles vous représentent, ainsi que la pirogue et le crocodile).

HP-41 (150 lignes).

199. CAP HORN.
TILT (FR): 7/83, p.44-45+50-51.

Simulation d'une course en planche à voile (max. 4 joueurs) la calculatrice déterminant la direction et la force du vent, et plaçant d'éventuelles embûches sur le parcours.

HP-41 (362 lignes).

62. LE JEU DE LA VIE SUR VOTRE HP-41C.
L'ORDINATEUR DE POCHE (FR): No.2, 7/81, p.62.

Adaptation du jeu de la vie à une seule dimension. Dans une rangée de dix cellules, un certain nombre de "microbes" naissent et meurent d'une génération à l'autre, selon certaines règles.

HP-41 (123 lignes).

324. DU TAC AU TAC SUR HP41.
L'ORDINATEUR DE POCHE (FR): No.5, 3/82, p.36-37.

Deux jeux en un programme. Le jeu de la voiture consiste à maintenir votre véhicule (symbole) sur une route fictive et sinueuse (limites sur l'affichage). Le jeu de l'étoile consiste à juger très rapidement la position sur laquelle apparaît brièvement une étoile, à l'affichage.

HP-41 (188 lignes).

176. L'HEURE EST A L'ESQUIVE.
L'ORDINATEUR INDIVIDUEL (FR): No.50, 7/83, p.179-180.

Jeu de réflexe dans lequel l'affichage est utilisé "graphiquement"; le but du jeu est d'éviter les "obus" tirés par un canon qui se trouve placé à l'autre extrémité de l'affichage.

HP-41 (176 lignes - synthétique).

366. 41C STAR RAIDERS.
PPC CALCULATOR JOURNAL (US): V11 N1, 1/84, p.14-15.

Similar game to the Atari cassette Star Raiders, where the aim id to destroy the Krylon warships that are headed for your own starbase.

HP-41 (433 lines).

367.ZCAR - HP-41 ACTION GAME.
PPC CALCULATOR JOURNAL (US): V11 N1, 1/84, p.20-23.

"ZCAR" is an action game that simulates driving a car at high speed through five laps of a slalom race course. Each lap has eight turns all of which are randomly selected except for the first one (always straight).

HP-41 (369 lines - synthetic) =BARCODE=

+ XFunctions Module
+ Time Module (optional).

374.TIR.
PPC-T (FR): No.10, 3/84, p.20.

Il s'agit d'un jeu qui consiste à toucher des cibles mobiles qui défilent sur l'affichage (hommes et boucliers). La touche ON constitue la gachette, le flag 1 est le canon.

HP-41 (168 lignes)

+ Module XFonctions
+ Module Horloge.

438.LIFE.
PPC CALCULATOR JOURNAL (US): V11 N3, 4/84, p.10.

This program calculates and prints (if printer is present) LIFE cells and their subsequent generations.

HP-41 (123 lines - synthetic).

37. ÇA BALANCE DANS LA HP-41C.
L'ORDINATEUR DE POCHE (FR): No.11, 3/83, p.64.

La calculatrice place dans l'un des plateaux d'une balance un objet de poids inconnu secret. Il faut déterminer ce poids à l'aide d'une boîte contenant huit poids que l'on peut poser ou reprendre, un par un, sur l'autre plateau de la balance, en un minimum d'essais.

HP-41 (128 lignes).

67. ETES-VOUS LOGIQUE? UN JEU SUR HP-41C.
L'ORDINATEUR DE POCHE (FR): No.1, 4/81, p.48-49.

Comme pour les tests de logique, où on vous propose trois figures et on vous demande de deviner la quatrième, ce programme réalise un test avec des nombres. La "logique" de chaque test est une succession d'additions et/ou de multiplications, avec quatre niveaux de difficulté.

HP-41 (208 lignes).

68. L'AVION ESPION.
L'ORDINATEUR DE POCHE (FR): No.2, 7/81, p.57-58.

Sur une grille 10x10 un avion espion doit survoler la base ennemie secrète, au centre (4 cases) avant de revenir à son point de départ. Il doit aussi éviter un missile qui part de la case centrale (5,5).

HP-41 (99 lignes).

74. DU CHEMIN A LA GRILLE: UN JEU D'UNE NOUVELLE DIMENSION.
L'ORDINATEUR DE POCHE (FR): No.2, 7/81, p.26-27.

Le but du jeu consiste à découvrir au moyen d'une série de renseignements qui se recoupent, la position de différentes cases. Au début de la partie, on demande ces renseignements au hasard, et selon la chance qu'on a, ils sont exploitables immédiatement ou non.

HP-41 (334 lignes).

208. HP-41C MASTERMIND.
DATAFILE (GB): V2 N1, p.26-27.

This short and very fast programme allows you to play 9 digit mastermind. The program listing includes both time module and X-functions instructions, but these can easily be removed.

HP-41 (121 lines) =BARCODE=

+ Time Module
+ XFunctions Module (optional).

256. MASTERMIND VOOR DE TI-59 EN DE HP-41C(V).
PROCALIST (NL): Deel I, 3/82, blz.29-34.

Dit is het welbekende Mastermind spel, waarbij cijfers in plaats van kleuren worden gebruikt. Bij iedere beurt controleert het programma de ingevoerde code op hoeveel cijfers op de juiste plaats staan en hoeveel cijfers goed zijn maar niet op de juiste plaats staan.

HP-41 (165 regels)

+ PPC ROM
+ Printer.

257. VLIEG EENS EEN GROT IN MET "FLY".
PROCALIST (NL): Deel 3, 10/83, blz.42-44.

Het is de bedoeling van het spel dat men naar de ingang van een grot vliegt en hierna door de gang tot het eindpunt. Na de toon kan de roer en fuelstand aangepast worden. Bij niet of te laat reageren blijft de vorige ingestelde waarden gelden.

HP-41 (181 regels).

293. SUB-HUNT - A GAME.
DATAFILE (GB): V.2 N.3, 6/83, p.7.

This is a simple game of finding and sinking a submarine hidden on a 100x100 grid. The submarine is destroyed if a shot lands in the square in which it is located. You have sixteen shots to start with.

HP-41 (179 lines - synthetic).

336. SEA BATTLE.
DATAFILE (GB): V.2 N.4, 9/83, p.17-20+24+23.

This version of the old "sea battle" game is for the solo player against the machine, The battlechart consists of a 10x10 grid of squares, and the HP-41 will observe certain rules when placing its fleet. A number of modules are required but can be omitted: alternatives are given in each case.

HP-41 (577 lines - synthetic) - alternatives are given for synthetic lines.

428. SPELLETJES MET WIN-STRATEGIE.
DE SOFTWARE (BE): Nr.3, 5/84, blz.33-37.

Uitgaande van een theorem van Neumann, worden twee spellen met win-strategie voorgesteld: het Nimspel en het spel van Wythoff, die beide gebruik maken van stapeltjes lucifers.

HP-41 (133 + 112 regels).

33.KIBUR OU LE DESORDRE ALPHABETIQUE.
L'ORDINATEUR DE POCHE (FR): No.3, 10/81, p.42-43.

Dix lettres (A à J) sont mélangées par la calculatrice: il suffit de retrouver l'ordre alphabétique, en tenant compte de quelques règles qui ne facilitent pas les choses.

HP-41 (122 lignes).

327.LA HP-41C A ELLE AUSSI SON MOT A DIRE.
L'ORDINATEUR DE POCHE (FR): No.4, 12/81, p.49-51.

Ce jeu consiste à trouver un mot-mystère (parmi 180 dans le vocabulaire du programme) en proposant l'une après l'autre les lettres qui pourraient le composer. Le nombre d'essais malheureux est limité à neuf...

HP-41 (176 + 401 lignes).

207.XOR - A GAME.
DATAFILE (GB): V2 N1, p.18-19.

This is a game against the HP-41, involving binary numbers and logic operators. Starting from a random four-bits combination, you must try to reach "1111", by thinking fast!

HP-41 (118 lines) =BARCODE= .

346.VOUS LAISSEREZ-VOUS BRANCHER PAR VOTRE CHERE HP?
L'ORDINATEUR INDIVIDUEL (FR): No.29, 7/81, p.112-114.

Jeu du pendu, où la calculatrice ne sert que de support et d'arbitre impartial, tout en proclamant las sentences. Les joueurs s'affrontent l'un après l'autre par l'intermédiaire de la calculatrice qui tient à jour les résultats de chacun et apprend au perdant où en est sa potence.

HP-41 (291 lignes).

224.JOUEZ A "TIRS CROISES".
JEUX & STRATEGIE (FR): No.7, 2/81, p.76-79.

Jeu contre la machine, utilisant une grille de chiffres 5x5 aléatoires, chaque joueur prenant à son tour un chiffre de la grille soit sur la même ligne, soit sur la même colonne que le joueur précédent, en essayant d'obtenir le total le plus élevé possible.

HP-41 (346 lignes).

355.ESSAYEZ DE VOUS SOUVENIR.
L'ORDINATEUR DE POCHE (FR): No.7, 7/82, p.41-42.

Jeu de mémoire dans lequel la calculatrice présente brièvement et successivement cinq séries de six caractères, puis une sixième série qui peut être ou ne pas être l'une des cinq séries précédentes: c'est au joueur de répondre par oui ou non.

HP-41 (224 lignes).

357. LA MEMOIRE DES CHIFFRES SUR HP-41.
L'ORDINATEUR DE POCHE (FR): No.7, 7/82, p.66.

Petit jeu de mémoire, où la HP-41 présente une succession de chiffres qu'il faut lui restituer dans l'ordre inverse où elle les a présentés. Le niveau de difficulté est croissant, à partir d'un seul chiffre, puis deux, puis trois, etc...

HP-41 (65 lignes).

76. LE JEU DE NEISCAT.
L'ORDINATEUR DE POCHE (FR): No.12, 4/83, p.39-41.

Ce jeu, contre la calculatrice, consiste à obtenir des alignements de trois pions ordonnés (1-2-3) sur un damier hexagonal à cases elles-mêmes hexagonales. Si le programme n'est pas très difficile à battre, il n'en est tout de même pas moins assez habile.

HP-41 (708 + 9 lignes).

275. OTHELLO-REVERSI (DAMIER 6x6) POUR HP-41.
L'ORDINATEUR DE POCHE (FR): No.19, 12/83, p.44-48.

Ce programme est celui qui a atteint la troisième place au championnat 1983 d'Othello, catégorie "ordinateurs de poche", à l'occasion du SICOB. Il ne nécessite ni module XFonctions, ni synthétisme, mais utilise toute la mémoire disponible (319 registres).

HP-41 (643 lignes).

113. OTHELLO-REVERSI SUR HP-41C.
L'ORDINATEUR DE POCHE (FR): No.13, 5/83, p.70-71.

Version d'Othello pour HP-41, se jouant sur échiquier de 36 cases (dimensions 6x6).

HP-41 (533 lignes).

332. VIRTUALLY CONNECTED... "FOURS".
DATAFILE (GB): V.2 N.4, 9/83, p.5-6.

New "virtual" game based on a "real" game where players drop coloured counters into a 6x6 matrix with the intention of connecting any four of their counters vetically, horizontally, or diagonally. This game is "virtual" because there is no equipment and players must remember the positions in their heads.

HP-41 (73 lines) =BARCODE= .

231'. HP41 ET BASIC: LA LISTE DE DEUX PROGRAMMES D'OTHELLO.
L'ORDINATEUR INDIVIDUEL (FR): No.27, 5/81, p.114-115.

Programme d'Othello/Reversi sur damier 6x6.

HP-41 (441 lignes).

389. COMMENT PRENDRE LE MORS AU PION FACE A UNE MACHINE.
L'ORDINATEUR INDIVIDUEL (FR): No.58, 4/84, p.158-160.

Programme pour jouer à "Puissance 4" contre la machine. Le but du jeu est d'aligner quatre de ses pions avant que la calculatrice ne le fasse elle-même. Un seul niveau de jeu est offert, mais la modification de quelques constantes peut le rendre plus ou moins agressif.

HP-41 (380 lignes)

+ Module XFonctions.

42. HUNT THE WUMPUS WITH YOUR HP-41C.
BYTE (US): 3/81, p.230+232.

This version of the Hunt-the-Wumpus game has all the excitement of the big game, including the ability to throw gas cans, get snatched by bats, or fall into a pit. You'll also be warned when the Wumpus, a pit, or bats are near.

HP-41 (148 lines).

108. UN ROBOT DANS LE DEDALE D'UNE HP-41C.
L'ORDINATEUR INDIVIDUEL (FR): No.47, 4/83, p.172-176.

Jeu dont le but est de trouver, dans un labyrinthe, un robot que l'on doit détruire, à condition d'avoir, au préalable, trouvé le pistolet nécessaire. Les différentes salles portent des noms, au lieu de numéros.

HP-41 (745 lignes)

+ Lecteur de Cartes Magnétiques.

132. HP-41 GHOST TOWN ADVENTURE.
PPC CALCULATOR JOURNAL (US): V10 N3, 4/83, p.33-35.

This is a game program of the adventure type. Lost in a ghost town in the desert, without any equipment, the player must try to fond a number of items to save himself. There are 24 nodes in the game.

HP-41 (509 lines)

+ Cardreader.

173. XFM MAZES.
PPC CALCULATOR JOURNAL (US): V10 N5, 6/83, p.30-31.

You are in the midst of a labyrinth of passages. Some of these close off when you walk through them, sealing you off. You must find your way out of the maze without getting trapped. The maze is mapped in a text file in extended memory, with one character being one room.

HP-41 (179 lines)

+ XFunctions Module.

194. HOBBIT.
PPC CALCULATOR JOURNAL (US): V10 N6, 7/83, p.25-27.

This is an adventure game program, played on a 10x10 torus maze. The aim is to steal the mighty Orb of Zot; you can also find amulets, kill demons, teleport, etc...

HP-41 (423 lines - synthetic tones).

238. HP-41C ADVENTURE.
PPC CALCULATOR JOURNAL (US): V10 N8, 10/83, p.40-42.

This game follows the more traditional scenario of "ADVENTURE", which is the exploration of a cave for treasures.

There are 93 nodes in all so developing a map is a prerequisite.

HP-41 (799 lines - synthetic)

+ XFunctions Module.

254. METTEZ DES MONSTRES DANS VOTRE CALCULATRICE.
L'ORDINATEUR INDIVIDUEL (FR): No.27, 5/81, p.74-75.

Ce programme ne propose pas un jeu de rôle complet mais, ce qui est tout aussi intéressant, seulement les combats entre personnages et monstres tels que pratiqués dans "Donjons & Dragons". Cahque personnage peut être défini par cinq paramètres, et les monstres sont fournis par la calculatrice.

HP-41 (378 lignes).

282. UNE MENACE PLANE SUR LA FEDERATION GALACTIQUE.
L'ORDINATEUR INDIVIDUEL (FR): No.54, 12/83, p.191-193

Jeu de simulation basé sur "STARTREK", dans lequel on doit éliminer les vaisseaux Klingons. Différentes actions sont possibles (déplacements, inspection radar, tirs laser ou torpille, ravitaillement, etc...).

HP-41 (607 lignes)

+ Module XFonctions (pas obligatoire).

424. DRAGON, DU HAUT DE TON DONJON NE VOIS-TU RIEN VENIR ?
L'ORDINATEUR INDIVIDUEL (FR): No.59, 5/84, p.156-159.

Programme pour promener un personnage qui vous représente à travers le monde fascinant et dangereux de Donjons & Dragons (sur un damier de 400 cases!) Toute une variété de monstres peuvent croiser votre chemin...

HP-41 (753 lignes)

+ Module XFonctions.

144.ROULETTE-PACKARD.
L'ORDINATEUR DE POCHE (FR): No.14, 6/83, p.31-32.

Jeu de roulette pour plusieurs joueurs. La machine fait elle-même la roulette (fournissant un nombre de 0 à 36), et le croupier, prenant les mises et donnant les résultats, gains et pertes.

HP-41 (314 lignes).

252.LE JEU DE L'ORDINATEUR ET DU HASARD.
L'ORDINATEUR INDIVIDUEL (FR): No.26, 4/81, p.96-97.

Devant l'effort intellectuel nécessaire pour jouer au loto ce programme peut s'avérer un outil très précieux, et vous fournir les six chiffres ou numéros dont vous rêviez!

HP-41 (210 lignes).

296.GAMBLER.
DATAFILE (GB): V.2 N.3, 6/83, p.20-21.

The '41 picks two numbers within a specified range, and shows only one of them. The player must decide wether the second number is higher or lower. This game is for any number of players, and Bank account are managed by the '41.

HP-41 (189 lines - synthetic)

+ XFunctions Module.

343.RANDOM NUMBER GENERATION.
HCCNIEUWSBRIEF (NL): Nr.32, 9/81, blz.35-36.

Na een opsomming van enkele eigenschappen waaraan een goede RNG moet voldoen, volgen een aantal test-methoden en enkele programma's, waarvan een dobbelsteen programma voor de HP-41.

HP-41 (90 regels).

359.RESULTS PENDING.
DATAFILE (GB): V.2 N.5, 11/83, p.8.

This POOL programme, to select matches for permutations without repetition, uses the technique of getting the next result while the first is still displayed by a "VIEW" or "AVIEW".

HP-41 (62 lines).

375.JACKPOT.
PPC-T (FR): No.10, 3/84, p.20-21.

Jeu de hasard classique, mettant en valeur ici les possibilités graphiques de l'imprimante.

HP-41 (201 lignes)

+ Module XFonctions
+ Imprimante.

387. ET SI ON ALLAIT TOUS A LAS VEGAS?
L'ORDINATEUR DE POCHE (FR): No.22, 4/84, p.55-56.

Programme de Jackpot utilisant des symboles affichés sur la machine et se déplaçant de gauche à droite pour faire plus "machine à sous".

HP-41 (167 lignes).

420. DES.
PPC-T (FR): No.11, 5/84, p.47-48.

Le but de ce programme est de simuler le lancer de deux dés à six faces, de manière aléatoire.

HP-41 (58 lignes - synthétique)

+ Module XFonctions.

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