HOME ACCOUNTS SYSTEM

Version 1.1

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*                  HOME ACCOUNTS SYSTEM                       *
*                     Version 1.1                             *
*                      June 1993                              *
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*        A simple accounting system for the home user        *
*                                                            *
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                         INTRODUCTION
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Welcome to HAC, a simple home accounts system.   This
package is intended for the average home user who wishes to
maintain a record of transactions on checking, savings, and
credit accounts without the complexity of a full double-entry
accounting system.

HAC allows you to define up to 26 different accounts,
each of which may be used to record details of a checking
account, a savings account, or a credit or loan account.
Transactions can be entered to any account at any time, and a
reconciliation routine provides for checking your entries
against a bank statement.   Transfers between accounts and
payments on credit accounts by check are easily performed
with just one entry. Many people have transactions which are
processed automatically by their bank on certain days, such
as a monthly paycheck or an installment payment to a loan
company.   HAC allows you to set up a list of   such
transactions so that they will be entered automatically at
the correct time. If the amount varies from week to week or
month to month, you can have HAC ask you for the exact amount
each time the entry is due. This system eliminates the risk
of forgetting to enter such transactions.

HAC incorporates a context-sensitive help system to offer
assistance without the need to refer to the manual. It is
recommended, however, that you read through this guide at
least once as the help text is, necessarily, brief. This is
especially true of the more intricate features such as
automatic transactions.   This manual also contains details
about configuring HAC to suit your particular requirements,
including file paths and display attributes for   color
monitors.

System requirements are modest: HAC should run on any IBM
PC-compatible system with 256K of store and DOS version 2.0
or later.   A printer is desirable for obtaining account
listings, but is not essential.

Please note that this package is released for public use
without payment, so feel free to use and distribute copies of
HAC as widely as you wish. Your comments and suggestions are
always welcome; the address to write to is shown on the cover
of this manual.

INSTALLATION

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The instructions below will get you started with HAC.
You will find more information about configuration in a later
section of this manual; you are advised to become familiar
with the package before attempting any configuration changes.

Note that HAC relies on the system clock being set to the
correct date for some of its functions. If you do not have a
clock which is automatically set at start-up, make sure that
you always set the correct date before running HAC.

Two files from the distribution disk are required to run
the program: HAC.EXE and HAC.HLP.   All data files for
transactions are created as and when needed. Note that the
file HAC.HLP supplies the text for the context-sensitive help
system; HAC will run without this file, but you will not be
able to get on-line help.

SYSTEMS WITHOUT A FIXED DISK

Copy HAC.EXE and HAC.HLP on to a blank, formatted disk.
Unless you keep old transactions for a very long time or are
using an early IBM PC with single-sided disk drives you
should have adequate space on the disk for all the data
files.

Users of twin-drive systems can have HAC use the second
drive to store data. Assuming that your disk with HAC.EXE is
in drive A and that you will be using drive B for data, enter
the following command:

ECHO DATA=B: >A:HAC.CFG

Format a disk for your data and insert it in the second drive
before running HAC.

SYSTEMS WITH A FIXED DISK

     Create a new directory for HAC and copy the files HAC.EXE
and HAC.HLP into it.   Because HAC always uses the default
drive and directory for data files and to locate the on-line
help file (unless altered by configuration changes), you
should make sure that the new directory is made the default
before running HAC. The suggested arrangement is to have a
batch file named HAC.BAT located on a directory in your DOS
path:

               CHDIR \HAC
               HAC %1

This example assumes that you created the directory with the
name HAC.   Change the first line of the file to match
whatever name you actually used.

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     The first time you run HAC you will receive a message telling you that no data could be found. You will then be asked whether HAC should create a new set of records. Answering "Y" at this point will set up a new system and take you to the main menu. Note that you can leave HAC at any time by returning to the main menu and pressing F10.

     You will not be able to enter any transactions until you have set up at least one account. The way to do this is covered in the following section, but before continuing you may wish to become acquainted with some general points about HAC.

DISPLAY LAYOUT

     When you are working on an account the top line of the display shows the account identification letter (A through Z) and the name of the account, along with today's date on the right-hand side for your reference. The bottom line acts as a reminder, showing some of the main options available to you for each part of the program.

     The system defaults assume a monochrome monitor. If you have a color display you can change the appearance of HAC's display by using a configuration file; this is described fully in a later section of this guide.

CONTEXT-SENSITIVE HELP

     Pressing F1 at any time causes HAC to display help based on the part of the system you are currently using. Press Esc to remove the help display and continue. Some help text is longer than the display allows; if this is so you will see "PgDn" and/or "PgUp" appear at the bottom right-hand corner of the help display, indicating that you can use the PgDn and PgUp keys to move through the text.

     Note that you can move the position of the help display by turning on Scroll Lock and using the up, down, left, and right arrow keys. The position you select will be used until you move the display again or exit the program.

EDITING

When entering data HAC usually presents a display
containing several fields, each of which can be set to the
required values. For example, a data entry display similar
to the one shown below appears when entering a deposit to an
account.

                        Deposit

        Date   > 8/05/92<

        Detail

        Amount

To enter new details into a field, simply start typing - any
existing entry will be cleared. You can correct your entry
or make changes to the current entry by using Home, End,
Backspace, Delete, and the left and right arrow keys. Both
insert and overwrite modes are available, selected by
pressing Ins. The cursor changes size to indicate which mode
is currently selected: a block cursor for insert and a line
cursor for overwrite. Note that HAC sometimes provides a
default entry in a field. An example of this is that when
entering a transaction you will always be offered a date.
You can leave the suggested value as it is or change it to
whatever you require.

Use the up and down arrow keys or Tab and Shift-Tab to
move between fields. When you are satisfied that all the
fields contain the correct values, press F10 to accept the
information. To abandon the entry, press Esc and you will be
returned to your previous activity.

VALUE FORMATS

All amounts should be entered in dollars, using a decimal
point for cents when required. Negative numbers are not
accepted; whether an amount is treated as a debit or credit
is determined by the context of the data being entered. All
amounts entered will be adjusted to a standard form with two
decimal places for cents.

DATE FORMATS

     The standard format for dates is mm/dd/yy, but HAC is
very flexible in interpreting user's input. For example, the
following entries will all be accepted and all represent the
same date - August 5th, 1992:

                    8/5/92
                    8.5.1992
                    08,05,92
                    5 AUG 92
                    August 5, 1992

All entries will be converted to the standard format used by
HAC. If your system is set to British format conventions
with a COUNTRY setting in your CONFIG.SYS file, the default
date format changes to dd.mm.yy. The date of August 5, 1992
would be displayed as " 5.08.92".

     Whenever you select an account to work on, HAC will
initially offer you today's date as a default for transaction
entry. If you are entering a series of transactions on the
same account, HAC will offer you the last date you used.

     Two quick methods for altering the date are provided.
First, you can abbreviate a typed date by omitting the year
if it is the same as the current year. An entry of "6/23",
for example, will be interpreted as June 23, 1993 if the date
on the system clock is currently any time in 1993.   Second,
you can press the plus or minus keys to increment or
decrement the displayed date by one day.   This feature is
convenient when entering a series of transactions that span
just a few days, and these keys were chosen to allow you to
quickly adjust the date from the numeric keypad.

ERROR HANDLING

     Whenever you enter something that HAC cannot handle, such
as an invalid date or amount, you will be presented with an
error message.   Press Esc to remove the message and try
again.

     System problems such as a data file not found or an error
in writing to the disk will cause the program to be
terminated after the display of the appropriate   error
message. You should consult your operating system manual for
details about handling such problems.

     Critical errors can occur during the operation of almost
any program.   In the event of such an error, you will be
informed of the nature of the error and asked to press "R" to

re-try the operation or "A" to abort the program. A typical
example of a critical error would be trying to print
something with no paper loaded into the printer.   In this
case you should load the printer with paper and press "R" to
try the print operation again.

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You must set up at least one account before you can use
HAC to store details of transactions. Provision is made for
up to 26 different accounts, identified by a letter A through
Z.   Each account may be classified into one of three
categories: checking, savings, or credit/loan.

The category selected for an account determines two
things. First, a different set of options is presented for
entering transactions.   A checking account, for example,
provides sequential check numbering which is not required on
other types of account.   Second, for printing a summary of
all accounts HAC lists the sub-total balance for each of the
three categories as well as an overall balance.   The
selection of account type determines in which group the
account will appear on the summary.

All new accounts are   set up through the   account
maintenance menu, which is accessed by pressing F4 from the
main menu. The menu display closely resembles that of the
main menu, with 26 account codes listed and the account names
against them. You can return to the main menu by pressing
Esc.

SETTING UP A NEW ACCOUNT

Choose an unused account code and press the corresponding
letter. You will be asked to confirm that you wish to create
a new account, then presented with a data entry display.   As
with other data entry displays you should enter all the
details then press F10 to accept the information. To abandon
entry, press Esc.

The first field is used to select the type of account.
Press the space-bar until the correct description appears.
In general you should choose "Checking" for any checking
account, "Savings" for any account in which you have savings
but no check facility, and "Credit/Loan" for credit and
charge cards, loans, and installment plan accounts.

The text you enter in the account name field is used to
identify the account on menu displays, transaction listings,
and account summaries.   A typical entry might be "Acme
Savings Bank."

The two fields for debit and credit default text are
linked with two transaction options that are available on all
accounts. Every account has two main options for entering

transactions - a checking account, for example, has options
for "Check" and "Deposit."   Two extra options are also
available: "Miscellaneous debit" and "Miscellaneous credit."
These can be used for transactions that do not fall into one
of the other categories, such as bank charges. If you find
that you regularly enter a miscellaneous debit or credit with
the same detail text (e.g. "Interest earned") you can set up
the text as a default by entering it in one of these two
fields.   Whenever you choose the miscellaneous debit or
credit option on this account you will be presented with your
chosen text as   a default.   (See also the   ENTERING
TRANSACTIONS section of this manual.)

     The final field, check number, is of significance only
for accounts of type Checking. HAC maintains a record of the
next check number in sequence and updates it each time you
enter a check. This field indicates the next check due to be
used, and you can set it to the correct value when creating
an account.

     Once you have set all the fields to the correct values,
press F10 to accept your entry and create the account.   You
can press Esc at any time prior to this to abandon the new
account.

CHANGING OR DELETING AN EXISTING ACCOUNT

     You can alter the details of an existing account by
selecting the appropriate code, A through Z, from the account
maintenance menu. The current details will be displayed in
the form described above. Changes to the account name or
account type will be reflected immediately in the menu
listings and the transaction options available.

     When editing an existing account, a fourth option appears
for the account type field. To remove an account, press the
space-bar until "DELETE" appears in this field, then press
F10 to accept the entry.   You will be asked to confirm that
you really do want to delete the account in question.   HAC
will not allow you to delete an account unless the balance is
zero and all transactions have been reconciled (see the
VIEWING ACCOUNTS section of this guide for reconciliation
details). All data relating to the deleted account is purged
from the system, so be sure to print a transaction list, if
required, before deleting an account.

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Select the account you wish to use by pressing the appropriate letter, A through Z, from the main menu. This will take you to a display showing the latest transactions, if any, entered for the chosen account. Transaction options are shown just below the account name on the left side of the display, and are accessed by the function keys F4, F5, F6, F7, and F8. The options listed against F5 and F6 are dependent on the type of account.

In all cases, the transaction requires a date, amount, and description. You will be offered a date as a default; this will be the current date or the date of the last transaction you entered on the account. If the transaction date is different, simply edit the date field before accepting the transaction. Remember that the plus and minus keys will allow you to quickly adjust the date forward or back a day at a time, and you can omit the year from a typed date if it is the same as the current year. Note that backdated transactions will automatically be inserted in the account record at the correct place to maintain chronological order. Whatever the type of transaction, press F10 when you have entered values for all the field and are satisfied that they are correct. Pressing Esc will abandon the entry.

CHECKING ACCOUNTS

Press F6 to enter a deposit. You will be prompted to enter the date, amount, and description. The latter will appear on the account listing for this transaction.

Press F5 to enter a check. Set up the date, amount, and detail fields as required for the transaction. HAC automatically records check numbers, and the last field indicates the check number that will be used for this entry. For example, if the last check you entered was number 100900, then you will be offered 100901 as the check number. You can move to this field and correct the number if necessary (e.g. a check was incorrectly filled in and destroyed). Check numbers in the range 000001 through 999999 are allowed, and are always displayed as a full six digits for consistent alignment in listings. Checks appear in the account listing as the check number followed by the detail description (e.g. "100901 Acme Inc.").

Sometimes it is the case that a check is drawn on one bank account to deposit funds into another. The "Credit A/C" field allows you to enter the corresponding credit to another

account simultaneously. For example, suppose that you are in account A (your checking account) and are writing a check to transfer money to account B (a savings account). After entering a description and the amount, move to the credit field and enter "B." When you accept this transaction, HAC will enter the check as normal, but will also enter a corresponding transaction to deposit the funds into the specified account. This relieves you of the trouble of going to your savings account and entering the transaction explicitly.

The credit transaction appears in the specified account, with the same date as the check, as "Transfer" followed by the checking account letter and the check number. The entry for the above example might appear as "Transfer: A-100902."

SAVINGS ACCOUNTS

Press F5 to enter a withdrawal from the account (debit) or F6 to enter a deposit (credit). In either case you will be prompted for the transaction date, amount, and description. Accept the entry with F10 when you are satisfied that all fields are correct.

CREDIT/LOAN ACCOUNTS

Press F5 to enter a credit-card purchase. You will be prompted on the data entry display for the date, amount, and description. Accept the entry with F10, as with all other transactions.

Press F6 to enter a payment made on a credit-card or loan account. If the payment is a simple cash deposit, enter the amount and a suitable description in the appropriate fields.

For payments made by check, HAC allows you to simultaneously enter the corresponding debit in your checking account. This is most useful when reconciling credit-card statements and making monthly payments. To use this facility, enter the amount then move to the "Checking A/C" field and enter the identification letter for the account on which the check is drawn. (You can overwrite this field with a space if you have entered a code by mistake.)

You will be presented with a check number in the last field, just as if you were entering a check directly from the checking account. You can alter the check number if it is incorrect. Notice that as soon as you enter a checking account code the detail field automatically changes to "Payment: X-999999," where "X" is the checking account code and "999999" is the check number. You can, if you wish, move

back to the detail field and edit this description. When you accept the transaction with F10, HAC will enter the credit on the account you are working on and automatically enter the corresponding check to the specified account.   The transaction on your checking account will appear as the check number followed by "Account X," where "X" represents the credit/loan account to which the payment was made.

     For example, if you are in account J (your credit card) and are making a payment from account A (your checking account) with check number 100903, you would enter "A" in the "Checking A/C" field.   The transaction will appear as a credit in account J - "Payment: A-100903" - and a debit in account A - "100903 Account J."

MISCELLANEOUS DEBITS AND CREDITS

     These two options are available on all three types of account and provide facilities for entering debits and credits not covered by other account options.   Such transactions include bank charges, interest earned on savings, and so on.

     Press F7 to enter a miscellaneous debit or F8 to enter a miscellaneous credit.   In either case you will be prompted for the date, transaction description, and amount. Accept your entry with F10, as usual.

     HAC allows you to set up default text for the description field in these two entries.   Suppose, for example, that you regularly use a miscellaneous credit transaction to enter an amount as "Interest earned."   To save having to type this text every time, go to the account maintenance menu and select the appropriate account (see the preceding section of this guide).   Move down to the "Credit default" field and enter "Interest earned." Accept your changes and return to the main menu.

     With this default   set up, whenever   you use   the miscellaneous credit option on this account you will be presented with your chosen text as the description. Should you wish to enter a credit with some other description, just edit the field.   Note that changing the default text from the account maintenance system will not have any effect on transactions already entered; it only affects future entries.

TRANSFER FUNDS

    Transfers between accounts are often performed, such as
moving funds from a checking account to a savings account or
vice versa. To avoid the need to make two entries - one for
each account - HAC provides a transfer option that will make
both entries simultaneously.

    Pressing F4 will display a data entry screen requesting
the transaction date, amount to transfer, and the account to
credit.   The latter field must be completed with the
identification letter of an existing account. On accepting
the entry, HAC will debit the account you are currently
working on and credit the account you specified in the
"Credit A/C" field. The transaction will appear in the
accounts as "Transfer to a/c X" and "Transfer from a/c Y"
respectively, where "X" and "Y" are the account codes.

    Note that there are two alternative ways of making a
transfer when that transfer involves the use of a check.
These are described in CHECKING ACCOUNTS and CREDIT/LOAN
ACCOUNTS, above.   The F4 option is provided for transfers
that do not generally involve the use of a check.

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You can select an account to view by pressing the
corresponding letter, A through Z, from the main menu
display. The account display shows the identification code
and account name on the top line and the most recent
transactions in the main area of the display, just below the
transaction options. Each transaction is shown with the
debit or credit amount in a separate column and a running
balance in the right-most column. Debit balances (credit-
card account, loan accounts, overdrawn checking accounts, and
so on) appear enclosed in parentheses.

You can browse through the list of transactions by using
the PgUp, PgDn, Home, End, and up and down arrow keys.
Pressing Esc returns you to the main menu so that you can
select a different account or perform account maintenance (or
quit HAC). It is also possible to move quickly between
existing accounts by using Ctrl-PgUp and Ctrl-PgDn. Using
these keys skips unused accounts, so pressing Ctrl-PgDn from
account G, for example, would take you to account J if
accounts H and I are unused. If you press Ctrl-PgUp from the
first account or Ctrl-PgDn from the last account in use, you
will be returned to the main menu. Ctrl-Home and Ctrl-End
switch you to the first and last active accounts
respectively.

PRINTING TRANSACTIONS

You can obtain a printed list of transactions on an
account by moving to the first transaction you want to print
and pressing F9. After requesting confirmation, HAC will
print every transaction from the one you selected to the most
recent. You can list all transactions on file for an account
by pressing Home followed by F9.

RECONCILIATION OF TRANSACTIONS

HAC provides a way in which you can check, or reconcile,
your record of transactions against those which appear on
your monthly bank statement. Each transaction that you enter
is classed initially as unreconciled and appears on the
account listing with an asterisk in the "Rec" column.

When you receive a bank statement you should compare it
with HAC's record of the account. Locate each item that
appears on the statement by moving the arrow markers on to

it, then press Enter. The asterisk marker will disappear,
showing that the transaction is now classed as reconciled.
To enable you to locate unreconciled transactions rapidly you
can press Tab to move to the next entry that still has a
marker against it. All reconciled entries in between are
skipped. Shift-Tab moves back to the previous unreconciled
entry. The "+" and "-" keys can be used in place of Tab and
Shift-Tab respectively so that you can conveniently use the
plus, minus, and Enter keys on the numeric pad when
reconciling transactions. Note that if you reconcile an
entry by mistake you can restore the marker by pressing Enter
a second time.

Once you have finished marking transactions against your
statement, the figure shown at the top of the screen for
"Reconciled" should agree with the balance on the bank
statement. The "Unreconciled" figure then shows the sum of
transactions entered on the computer but not yet checked
against a statement. The figures shown for the reconciled,
unreconciled, and current balance follow the same format as
the running balance figures with debit amounts being enclosed
in parentheses.

ACCOUNTS SUMMARY

Press F3 from the main menu to see a brief summary of
accounts. The figures show the sub-total of checking
accounts, savings accounts, and credit/loan accounts, along
with a grand total of all accounts. Press Esc to return to
the main menu.

You can print a more detailed summary by pressing F9
while the brief summary is displayed. After requesting
confirmation, HAC will print a list showing the current
balance of each account, along with category sub-totals and a
grand total.

PURGING TRANSACTIONS

The transaction list on an account can grow quite large,
especially on regularly used accounts. HAC does not impose a
fixed limit the number of transactions that can be stored,
and this factor is determined primarily by available disk
space.

You can delete old transactions from an account, just
leaving a single "Balance brought-forward" amount. Choose
the account to work on from the main menu, select the point
at which you want the amended account record to start using
the up and down keys as usual, and then press F2. You will
be asked to confirm that you really do want to delete

transactions. Replying "Y" will cause all transactions up to
and including the selected entry to be deleted from the file.

Once a transaction has been deleted in this way, HAC has
no record of it whatsoever, so be sure to print a transaction
list if you require one before purging data. As a safeguard,
HAC will not allow you to purge data if any of the target
transactions have not yet been reconciled.

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Many people have transactions that are automatically processed by their bank at some regular interval. These include payments to an installment plan, a monthly salary that is deposited straight into a checking account, and so on. HAC provides a facility to have such transactions entered at the appropriate time. This system eliminates the risk of you forgetting to enter a regular transaction.

Each time you run HAC it checks all automatic transactions on file to see if any are due for entry. Any record with a date the is equal to or prior to today's date will be added automatically to the appropriate account before you see the main menu.

To set up an automatic entry, go to the account on which the entry is to be made and press F3. A data entry display with seven fields will appear. Enter the appropriate text or values in each field, as described over the page, then press F10 to accept the entry. You can abandon the entry at any time by pressing Esc.

Date   Enter the date on which the first entry of this
                transaction is to be made.

Detail   The text you enter here will be used to fill in
                the transaction description field each time the
                automatic entry is made.

Amount   The amount entry consists of two fields.   The
                first takes a normal amount and the second can
                be set to "Debit" or "Credit" by pressing the
                space-bar.

No. entries   This field   sets the   number of   times a
                transaction is to be entered.   Each time HAC
                adds an automatic transaction to an account, the
                value in this field is decremented and the date
                stored in the first field is amended to reflect
                the date that the next entry is due. When   the
                "Number of   entries" field   reaches   zero
                (indicating that   there are no   more of these
                credits or   debits   due), HAC   automatically
                deletes the   automatic transaction   record.   If
                you want   an   automatic entry to   be processed
                indefinitely you should set this field to zero;
                HAC will then not decrement the field and will
                continue to process the transaction at   the
                requested intervals until such time as   you
                delete it.

Interval   The interval entry comprises two fields.   The
                first accepts a positive value and the second
                can be switched between "Months" and "Days" by
                pressing the   space-bar.   These two   fields
                determine how   often HAC will   enter   the
                transaction on   the account.   To enter   an
                automatic transaction every two weeks,   for
                example, you would set these fields to 14 days.
                When the second field is set to "Months," the
                transaction will be entered on the same day in
                each appropriate   month.   For example, with a
                starting date of April 7 and an interval of 2
                months, entries would be made on April 7, June
                7, August 7, and so on.

        The following examples should help to clarify the way in
which the automatic transaction system works.

Example 1:

     You have a salary of $950 that is deposited into your
checking account every two weeks. An entry to have HAC
automatically enter these deposits might look like this:

                    Date   8/14/92

                    Detail   Salary - Acme Inc.

                    Amount   950.00
                                    Credit

                    Number of entries   0

                    Interval   14
                                    Days

As soon as you run HAC on or after August 14 an entry will be
made in your checking account. The date field will then be
amended to 8/28/92, the date on which the next entry would
then be due.

Example 2:

     You have made a purchase on an installment plan and your
account is to be charged with $152.75 on the 18th of each
month for the next 4 months, starting on August 18th.   A
entry might be as follows:

                    Date   8/18/92

                    Detail   XYZ Inc. Installment

                    Amount   152.75
                                     Debit

                    Number of entries   4

                    Interval   1
                                    Months

On August 18, HAC will make the first entry and amend two
fields in this record. The date will be adjusted to 9/18/92
and the number of entries will be decremented to 3.   Similar
amendment will be made of the following entries, until after
the entry on November 18 HAC will note that no further
entries are due and will delete this automatic transaction
record.

LAST DAY OF MONTH ENTRIES

With the interval set to "Days" HAC just adds the appropriate number of days on to the date after each entry of the transaction. Similarly with dates from the 1st to the 27th and an interval set to "Months," the appropriate number of months are added each time (adjusting the year if necessary).

If the date entered is the 28th, 29th, 30th, or 31st when using monthly intervals HAC assumes that the transaction is to be entered on the last day of each month. For example, with the interval set to 1 month and a starting date of March 31, you will get entries on March 31, April 30, May 31, June 30, and so on.

VIEWING/AMENDING AUTOMATIC TRANSACTIONS

When you press F3 from the account display the line part way down the screen starting "Automatic transactions" also shows the total number of automatic transactions on file for this account. The center of the line initially shows "New," indicating that you can enter a new record. Press PgUp and PgDn to move through the list, viewing each record that is currently on file; the status line will show the record number you are viewing at any time.

You can amend any details you wish move moving to the appropriate field and entering the new value (if, for example, you are still having you salary paid into your bank account directly but you have just been given a raise).   As soon as you press F10 to finish editing or PgUp or PgDn to move to another record, the amendments you have made will be accepted. Press Esc to abandon your changes if necessary.

HAC automatically deletes records once the requested number of entries have been made, but you can delete an entry manually if required. With automatic transactions set up for an indefinite period manual deletion is the only way in which they can be stopped.   In either case, use PgUp and PgDn to locate the entry to delete, then press F4. You will be asked to confirm that you want to remove the entry.

VARIABLE AMOUNT ENTRIES

    Sometimes a transaction is regularly entered on an
account but the exact amount varies from one entry to the
next. This might be the case, for example, where you are
paid on the same day every month but the amount is dependent
upon the hours you have worked, any bonus payments, and so
on.

    You can still have HAC remind you to enter such
transactions by setting up an automatic transaction record
with the amount field set to zero. You should still set the
amount as a "Debit" or "Credit" as appropriate.

    When you run HAC and a variable-amount automatic
transaction is due you will see a data entry display
requesting an amount. This display shows the account name,
due date, and description so that you can enter the
appropriate value. Once any and all such entries have been
made, the main menu will appear.

    It is possible that you do not have the amount of a
transaction available at the exact time that the entry is
due. If this is the case you can postpone entry by entering
zero or pressing Esc when HAC requests the amount. The
transaction will be held over until the next time you run
HAC, at which point you will be reminded again.

    Two other options are also available when HAC is
requesting an amount. Pressing F3 will cause the entry to be
skipped. For example, if you have a monthly transaction due
to be entered on the 14th of each month and HAC is requesting
the entry for 6/14/93, pressing F3 will cancel the entry for
that date and advance the due date to 7/14/93. You will then
be prompted as usual on or after July 14. Note that the
"Number of entries" field is still decremented when you skip
an entry (unless it is set to zero for unlimited entries).

    You can also completely delete an automatic entry by
pressing F4. You will be asked to confirm your request, then
HAC will remove the automatic transaction to prevent any
further prompts. This option is a quick way to remove an
automatic transaction that will no longer be required, and
saves you having to go to the editing routine to delete it.

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Configuration of HAC to your exact requirements is by way
of one or more configuration files containing simple text.
Use EDLIN or any other ASCII text editor to create a file
named HAC.CFG in the same directory as HAC.EXE and HAC.HLP.
HAC checks for this file at start-up and loads the
configuration options listed in it if found. Note that
HAC.CFG must be in the current default directory in order for
HAC to locate it. Each option should be placed on a separate
line in the file and text can be either upper or lower case.

PATH FOR DATA FILES

By default HAC expects to find its data files in the
current default directory. You can change this with the line

            DATA=C:\PATH\

where C:\PATH\ is the drive and directory path for the data
files. Note that you must include a trailing "\" after a
directory name.

As a simple example, on a two-drive system with no fixed
disk you might want to keep the HAC program on drive A: and
use drive B: purely for data to maximize storage space.   You
configuration file on drive A: should contain the line

            DATA=B:\

to tell HAC where to look for (or create) data files.

PRINTER OUTPUT

HAC normally sends all printer output to the operating
system device LPT1.   You can redirect printer output to a
different device or a disk file with the line

            PRINT=path

where "path" is either a valid device name, such as "LPT2",
or a drive path and/or filename.   Note that device names
should not be followed by a colon, so "PRINT=COM1" is
acceptable, but "PRINT=COM1:" is not.

DISPLAY ATTRIBUTES

     When run without a configuration file HAC is set up
primarily for a monochrome display; this will also produce a
readable display on a color monitor.   To set the display to
your own preferences include the configuration line

          COLORS=ww,xx,yy,zz

where each letter pair represents a decimal number for each
area of the display:

     ww   The main display attribute
     xx   Highlighted areas, borders & field markers
     yy   Title lines & headings
     zz   Top status line block

To obtain the value for each number add together the required
foreground and background color from the following table:

          Color   Foreground   Background

          Black   0   0
          Blue   1   16
          Green   2   32
          Cyan   3   48
          Red   4   64
          Magenta   5   80
          Brown   6   96
          Light gray   7   112

          Dark gray   8
          Light blue   9
          Light green   10
          Light cyan   11
          Light red   12
          Light magenta   13
          Yellow   14
          White   15

For example, to view the main text as green on black,
highlighted areas as yellow on black, titles and headings as
white on blue, and the status line block as light gray on
black, you would use the following line:

          COLORS=2,14,31,7

Attributes for monochrome displays can vary slightly depending on the type of display adapter, but the following values are the most usual.

Appearance	Value
Underlined	1
Normal text	7
Intense & underline	9
Intensified	15
Reverse	112

DATE FORMAT

By default HAC checks the operating system's COUNTRY setting and uses "mm/dd/yy" or "dd.mm.yy" for dates depending upon whether the country is set to American or British format conventions respectively.

You can force HAC to override the default setting and always use American format with the line

        DATE=MDY

or to always use British format with the line

        DATE=DMY

CURRENCY SYMBOL

A floating dollar sign is usually placed ahead of the account balance on the viewing screen and on the total figure for summary displays and print-outs.

You can change the currency symbol to any printable character with the CURRENCY configuration option. You should give the decimal ASCII code for the character you require. For example, the line

        CURRENCY=156

will change the currency symbol to the British pounds-sterling symbol. You can also tell HAC not to use any currency symbol by assigning a value of zero.

Note that the same character is used for both the display and for printing. Some printers cannot print ASCII codes of 128 or above, or may need their configuration switches to be set for a particular character set in order to print the correct symbol. Check your printer's manual for details.

MULTIPLE CONFIGURATION FILES

     Although by default HAC looks for the configuration file
HAC.CFG, you can have any configuration file read   by
specifying its name on the command line you use to start HAC.
If you do not explicitly specify a file extension, ".CFG" is
assumed. For example, starting HAC with the command line

                    HAC MYCONFIG

causes HAC to search   for a configuration file   named
MYCONFIG.CFG instead of the usual HAC.CFG.   The specified
file must exist in the current directory or on the path given
in the command line.

     The main reason for allowing more than one configuration
file is to provide facilities for keeping more than one set
of accounts. The suggested arrangement is outlined below.

     From your HAC directory create a sub-directory for each
set of accounts. These sub-directories will be used for the
data files. Create a configuration file for each set of
accounts, using a suitable name for ease of identification.
These names could be initials of different users or even a
single letter such as "P" for personal accounts and "B" for
business accounts. Within each configuration file, put a
suitable DATA line that sets the appropriate file path.   Now
all that is necessary is to specify which configuration is
required when starting HAC.   The following example should
clarify the situation.

     Directory structure:

          C:\HAC
          :   HAC.EXE   (Main program)
          :   HAC.HLP   (On-line help file)
          :   P.CFG   (Configuration files)
          :   B.CFG
          :
          :--------PERSONAL   (Data sub-directories)
          :
          :--------BUSINESS

     Contents of P.CFG:

               DATA=C:\HAC\PERSONAL\

     Contents of B.CFG:

               DATA=C:\HAC\BUSINESS\

The files for each configuration can also contain other options as required. For example, different users may have different preferences for display colors or use an alternative printer port.

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    HAC uses a file named ACSTAT.DAT to record the current
status of all 26 accounts. This file contains the account
names, account type, current balances, and so on.

    Each account you open creates two files on disk.   These
are named "TRANS" and "AUTO" followed by the   account
identification and a ".DAT" extension. For example, when you
create account Q you will see the files TRANSQ.DAT and
AUTOQ.DAT appear in the directory.   The former is used to
hold all transactions entered in the account and will grow in
size as you add transactions.   The latter file contains the
list of automatic transactions that are set up for the
particular account.   Note that this file can be of length
zero if no automatic entries are currently in effect.

    Note: If you should copy files from one sub-directory to
another you should carry out the transfer using XCOPY,
because COPY will not transfer zero-length files and you will
get a "File not found" error when next running HAC.

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The Home Accounts System was developed using Borland's
Turbo Pascal Professional 5.5. Source code is included on
the distribution disk.

In order to modify HAC, or to understand the program
fully, you will require a copy of Turbo Pascal Library,
version 2.0.   This is a freely distributable software
development library for Turbo Pascal that was written by the
same author as HAC.   It provides many useful features for
application programs.   Your distributor of "Shareware" or
public domain software that supplied this package should be
able to provide you with a copy. (Note that version 1.0 of
HAC was designed with Turbo Pascal Library 1.1. The current
version of HAC requires the new version 2.0 library.)

The main program is contained within the file HAC.PAS.
It is assumed that your compiler has all options set to their
default values as described in Borland's handbooks for Turbo
Pascal 5.5. The final compilation of HAC.EXE was done with
the /$D- switch from TPC to suppress debug information and
make the EXE file smaller.

The file HELP.TXT is the ASCII source for the context-
sensitive help system, and the HAC.HLP file is produced by
running the text through the HELPCONV utility (part of Turbo
Pascal Library).

Please feel free to use any of the source code for your
own programs. If you are distributing software derived from
HAC a note to that effect in your documentation would be
appreciated.

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VERSION 1.0, August 1992

    HAC was developed to serve the author's need to maintain
a record of various bank accounts.   The aim of HAC was to
give a simple method to keep track of balances and reconcile
monthly bank statements.

VERSION 1.1, June 1993

    The original version of HAC has now been in use for
several months, and some minor revisions have been made to
make certain operations simpler.   Specifics can be found in
the appropriate section of this manual.

    When entering a transaction, version 1.0 would always
offer the current system date.   This has been modified so
that when entering a series of transactions on the same
account you will be presented with the last date you used.
Also, the edit field now always starts on the date; in
version 1.0 it started on the field below the date.

    Another new feature is the use of the plus and minus keys
to move forward or back one day at a time. This allows very
convenient entry of a series of transactions with dates that
are close. Note that in order to support this feature the
date separator for British-format dates has been changed to a
period (e.g. "23.06.93"). American-format dates are not
affected by this change. Directly typed dates can now also
be entered without the year; HAC will automatically default
to the current year.

    With variable-amount automatic transactions, version 1.0
allowed you to postpone entry of a due transaction.   Version
1.1 provides two new options when an entry is due: You can
skip the entry and advance the due date, or you can delete
the automatic transaction entirely.

    A floating dollar sign is now used on account balance
displays and summary print-outs.   A new CURRENCY option has
been added to the configuration file to enable the symbol to
be altered to any other character or to be disabled.

    Some minor alterations to the editing layout have also
been made to improve the alignment and appearance of data-
entry screens.

APPENDIX D.
DISTRIBUTION POLICY
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     This package is released for free distribution and use by
individuals or businesses. My reasons for not charging a
registration fee are fairly simple: I am not in a position to
provide full support for any of the software I write. If you
feel that you should make some sort of financial contribution
for the software you use, then I suggest a donation of a few
dollars to a charity.

     Although there is no "official" support for this package,
you are welcome to write with any ideas or suggestions.   If
you have any problems that you think are caused by a bug in
the software, please feel free to write me and I will try to
help (letters to England from the United States require 50
cents postage for the first half ounce). If you just want to
pass on a short comment or let me know that you find the
software useful, a picture-postcard from your home-town would
be most welcome (40 cents postage).

     Please pass on copies of this package to anyone who may
find it useful.