

THE  
PERSONAL BANKING  
SYSTEM  
USER MANUAL

## Copyrights and Acknowledgements

Copyright 1987 by Hilton Computer Services Ltd. All rights reserved. No part of this publication, nor the related software known as the Personal Banking System, may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language or computer language, in any form or by any means, electronic, mechanical, magnetic, optical, chemical, manual or otherwise, without the prior written consent of Hilton Computer Services Ltd., 3 Suffolk Drive, Guildford, Surrey, GU4 7FD, except as described in this manual.

### DISCLAIMER

Whilst Hilton Computer Services Ltd have taken all reasonable care to ensure that this manual and software do not contain any errors, no liability will be accepted, in any circumstances, for any direct, indirect or consequential loss or damage arising out of the use or misuse of this product.

### HARDWARE REQUIREMENTS

The Personal Banking System can operate on any QL or CST Thor computer with a minimum of 256K RAM.

### TRADEMARKS

QL is trademark of Sinclair Research Ltd. Thor is a trademark of Cambridge Systems Technology.

Acknowledgements are given to Liberation Software whose Q\_Liberator compiler was used to provide the distributed version of the software supplied with this manual.

Written by Jack Gibbons ACIB.  
First published January 1987, first edition, revised June 1992.

## Contents

### HOW TO USE THE PBS II

CHAPTER	CONTENTS:	PAGE
1	Introduction and overview	4
2	How to make your working copies	5
3	Using the demonstration	6
4	Getting started	7
5	Files and more files	9
6	Standing Orders and direct debits	11
7	Entering your transactions	13
8	Transfers between client accounts	17
9	Transfers between Bank Accounts	18
10	Displaying and printing your transactions	19
11	Looking for things	21
12	Forward Projections	22
13	New and carried forward files	23
14	Backing up	24
15	Security	25
16	Future development	26
	and anything else you can think of!	

The Personal Banking System keeps track of your personal finances in an orderly and easy way. It takes some of the drudgery out of keeping proper records and provides you with Bank statements more up to date than your Bank does!

Used in the most simple way it will just keep records and let you know how much money you have or don't have. However, the PBS can offer you much, much more in the way of powerful analyses, keeping separate client accounts with whom you transact some business, even some double entry book-keeping can be managed. Having this power at your disposal in no way interferes with how easy it is in use.

The PBS (as it has become known) could be used equally to keep the accounts of a club, society or even a small business in addition to handling your personal money.

A major design characteristic of the PBS was to provide a split screen format so that the file names are displayed in the header window with all menu selections printed in the bottom window of the screen. The space between the two is the display window. This offers the benefit of a rollover effect between taking different actions.

This implementation of the PBS includes some new features such as multiple currencies; multiple Bank Accounts; Building Society, credit card and petty cash accounts; on-screen help messages; password control (modelled on a Bank system!); scroll statement display; on-screen limit monitoring; transfers between Bank Accounts; standing orders for ANY frequency (daily, weekly, lunar monthly, monthly etc.) and even remembers which account you used last time so that it is loaded automatically for you. Every effort has been taken in the design of the PBS so it can really work for you.

Further modules are under development for the PBS to cater for budgetting, accounting and Bank reconciliation (also modelled on a Bank system!). These modules will be selected from the System Sub Menu.

We trust that you will now experience the pleasure enjoyed by thousands of other satisfied PBS users. We ask that you complete and return our registration form so that you can take advantage of our after sale maintenance to ensure that you remain happy with our product.

## Chapter 2 - How to make your working copies

To produce working copies of the Personal Banking System is as easy as A B C:

- A    insert original PBS cartridge in drive 1 and a blank formatted cartridge in drive 2
- B    type LRUN MDV1\_PBSCONE and press ENTER - the files being copied will be displayed on screen
- C    remove cartridges when finished and make sure you label the copy

We authorise you to make as many copies as you wish for your own use only. We draw your attention to the copyright notice at the beginning of this manual. Please observe the copyright law. Hilton Computer Services keeps a record of all authorised users.

Should you wish to copy the PBS to disc then follow the A B C but substitute FLP1\_ for destination drive, when running PBSCONE. The System Maintenance and Bank Reconciliation modules can be copied by running PBSCONEM. If your PBS has been supplied on disc then wherever MDV1 or MDV2 are mentioned in this manual then substitute FLP1 or FLP2 instead, as appropriate.

We recommend that you keep the original copy stored safely and use a copy for every day use. After you have set up your system and entered your own configuration, maybe your own system codes as well, then we recommend that you make another copy at this point also. In this way you can recover your normal working version without having to reconfigure again. If you are unfortunate enough to lose everything then return a formatted disc/cartridge to us together with a remittance of £3.00.

Now you are ready to run our demonstration!

## Chapter 3 - Using the demonstration

Insert your copy of PBS in drive 1 and reboot your QL. Press F1 or F2 depending on whether you are using a monitor or television. The demonstration version is configured to run from one drive only but a working version would use two drives with the cartridge or disc containing your files in drive 2. How to change from 1 to 2 drive operation is explained in the next chapter.

The PBS will load with our demofile which includes some sample data so you can try all the operations and then read the rest of this manual! Some account and Bank transfers appear in this file also so you can understand what is happening.

Make use of the help screens as required. To display a list of system codes (analysis or account) during the entry of a transaction enter a "?" at either input prompt. You can abort an entry of a transaction in a similar way by entering a "\*" at any input prompt.

You should not remove a disc or cartridge while the PBS is running unless you are specifically prompted to. Frequent access is made to either drive for file or system information. Should you cause the PBS to stop running you can recover by typing RUN and pressing ENTER.

First of all put the original PBS cartridge away so it is not picked up and used by accident.

We supply an Initial Program Load program just like the biggest computer company in the world. With this utility you can change the system parameters of the PBS to suit your own requirements. To load this program insert your copy PBS cartridge in drive 1, type LRUN MDV1\_PBSIPL and press ENTER. We have already included default values which are displayed on screen as follows:

File size:	400	Printer page	55
S/O file size	32	Passwords	N
Drive name 1	MDV1_	Background colour	0
Drive name 2	MDV1_	Menu colour	6
Printer Driver	SER1	Input colour	2
Baud rate	9600	Statement colour	4

You are invited to change any items according to your needs or just press ENTER at any item that you wish to keep as it is. We do suggest that at least you change drive name 2 to MDV2\_ : just type this over the top of MDV1\_ and then press ENTER. If you are running your PBS on disc then you must replace these drive descriptors with those used by your disc system e.g., FLP1\_ .

Similarly your printer may require extra printer driver options or a lower baud rate in order to operate. Consult your printer manual together with page 16 of the QL User Guide (QL Concepts) to determine the correct values required. If the printer page size is changed to 0 (zero) then all the printer options in the PBS are switched off.

Before proceeding further you need to ensure that you have inserted the PBS disc in drive 1 if you have changed the drive 1 descriptor. You will need also to insert another copy of the PBS cartridge/disc (or the original PBS cartridge if necessary) in drive 2 as the PBS will now look here to load our demofile on loading.

On exit from PBSIPL the amended IPL file is saved to the PBS cartridge in drive 1 which is needed at all times (even if you are using your PBS on disc), as the PBS will frequently look here for the system parameters contained in the IPL file. Reboot your QL to load the PBS.

You may wish to set up your analysis and account codes at this stage, although the PBS can run quite happily without any codes if you do not require them.

Analysis codes are intended to be used in order that you can group various items under specific headings e.g., house repairs. This way you can extract all the items you have entered in the PBS under a heading and either display or print them, with totals. The printout can be restricted by the period of your choice, for just one month or can span the whole file. We plan to make more extensive use of analysis codes in the budget module we are developing.

Account codes are included so that you can set up a list of the people with whom you frequently have transactions. So instead of repeatedly typing in their name in the details field you can enter a code in the account code field instead. If you wish you could enter very brief details of the transaction in the details field. This facility could be used as the basis of using the PBS with true book-keeping conventions and keep separate accounts of the clients with whom you transact some business. Our planned accounts module will use these codes.

It is well worthwhile to give some time to planning which codes you wish to use but you can always amend them or add further codes later as required. To give you some ideas we have supplied example codes in each code file which you can amend or delete as you wish. Select SYSTEM MAINTENANCE on the sub menu and then select SYSTEM CODES so that you can set up your own codes. If you want a printout of your codes then press "P".

Each code file is saved to the PBS disc/cartridge in drive 1 on exit to menu. If you require different sets of system codes e.g., one for personal use and one for business use then you must maintain separate PBS program discs/cartridges.

The PBS allows you to store up to 32 codes and descriptions each for analysis and account which should cater for most needs. If you find that this number is insufficient then write to us. The PBS does not restrict you to use these codes only and allows you to enter codes that are not known to the system. You can still make selective enquiries using these additional codes.

Now you have completed the configuration of your PBS it is a good idea to make another working copy of this disc/cartridge as explained in chapter 2. Then you are ready to set up your files.

All you ever need to know about files, as far as the PBS is concerned, is that a file name is the name under which you wish to store your transactions on disc/cartridge. These transactions could be in one or more Bank accounts. When we use the term "Bank accounts" we also include Building Society, credit card and petty cash accounts within this description. It is intended that the file name represents someone's name i.e., the account holder but additional information can be added as required.

Bank names and addresses are used to identify the financial institution where the account holder maintains the account.

The PBS is not fussy about what you type in for file and Bank names. Everything will still work but you get some strange headings on your screen displays and printouts!

Part of the design characteristics of the PBS is that you need to type in a file or Bank name just once. So if you set up different Bank accounts under one file name then the PBS uses the original file name. Similarly if you wish to re-use an existing Bank name and address then the PBS will use the original details entered.

All the file and Bank details are stored in the PBS directory which is a system file kept on the file disc/cartridge which usually resides in drive 2. Each file disc/cartridge you create will have its own PBS directory which tells the PBS which files are on that particular disc/cartridge.

Should you execute the QL DIR command to look at the contents of a file disc/cartridge then you will note that file names DIRPBS and PBSTRANS are displayed together with one or more file names consisting of six digits which are the internal file names used by the PBS. DIRPBS is the directory file whereas PBSTRANS is the file which enables the PBS to remember which particular account is currently being used or was last used.

In order to set up your own accounts you must first initialise a file disc/cartridge ready for use: we suggest that you initialise at least two so you always have a spare one. Make sure you have formatted these before proceeding further, also that you still have a PBS program disc/cartridge in drive 1 and another copy in drive 2 as explained in the previous chapter.

Reboot your QL and select SYSTEM MAINTENANCE which is option 1 on the sub menu. Now select FILE MANAGEMENT and then NEW DIRECTORY. You will be prompted to insert a blank formatted disc/cartridge at this stage. If you have used your original PBS cartridge in drive 2 to enable the PBS to restart then make sure that you remove it and put it in a safe place.

Next you can take option 1 (OPEN NEW FILE) of the SYSTEM MAINTENANCE main menu and enter a file name e.g., your name. You are then invited to enter one or more Bank names representing each of your Bank accounts for the same file name. If you need to open another file e.g., for your wife, then you re-select option 1 and enter her name followed by her Bank accounts. You may add further Bank names later as required at any time.

The PBS will allocate a file reference number for each entry in the PBS directory. You are free to choose a two digit Bank number to identify the Bank name you are entering. Those of you using a Winchester disc can use 1 to 99! If you repeat a Bank number already used for another file name then the PBS will copy the Bank details onto the screen and allow you to make changes if necessary e.g., a different account number. But if you repeat a Bank code for the same file name then you will create a "carried forward file". This is explained later in the manual in CHAPTER 13 so we suggest that you don't do this now.

As you complete each file name and Bank name the details are displayed in the window above where you are entering the information on your screen.

It is wise to spare a little thought here as to how much activity is going to be recorded in these accounts. If you feel that your accounts are going to be very busy, for example, then ask yourself will all these transactions fit on one cartridge (or disc)? If you are in any doubt then only have one file name per disc/cartridge (one file name plus all Bank accounts). As a rule of thumb one full file of 400 transactions occupies about 25K of space.

The PBS will initialise a file for each file name/Bank name entered and on exit to the main menu will save the new PBS directory onto the disc/cartridge in drive 2.

The loading of files is simplified by just having to make your choice from the PBS directory displayed on screen. Enter one of the file references displayed on the left of your screen to make your selection.

All saving of files is handled automatically by the PBS as you exit from the INSERT/AMEND/DELETE facility. Provision has been made for you to save copies of your files (and your PBS directory) onto a backup disc/cartridge. This is covered in CHAPTER 14 of this manual.

## Chapter 6 - Standing orders and direct debits

For the purposes of the PBS both standing orders and direct debits are handled in the same way. These instruments differ only in how the funds are settled at your Bank.

Direct debits do tend to be for varying amounts, usually upwards, but normally you are advised how much is going to be charged in advance so you can budget for them. So any reference to standing orders in the PBS is deemed to include direct debits also. When you set up a standing order you can enter "SO" or "DD" in the reference field to distinguish between the two if required.

Before you select option 2 of the SYSTEM MAINTENANCE main menu to set up your standing orders have a quick look at the file name and Bank name/address displayed at the heading of the screen. This tells you which account is currently loaded into your QL. If this is not the account under which you wish to set up the standing orders then first select FILE MANAGEMENT and load the account required by entering the file reference as already explained in CHAPTER 5.

The standing order insert screen (selected by pressing "I" on the STANDING ORDERS menu) operates in split screen format so as you enter new S/O's they are displayed in the upper window on your screen while you continue to enter new S/O's on the input screen in the lower window.

We need to mention a few details about entering your S/O information at this point. All dates in the PBS are entered in English. By this we mean that "January 1987" is entered as jan87 (or JAN87). So that we can break up the date we enter the days separately e.g., 1st = 1 or 01. We have adopted the splitting of the date like this so you can choose to accept a part of the date as a default. After you have entered the very first date in the S/O file you can choose when making the next entry to accept the default year, month and year, and/or days. This all makes more sense when you have tried it. The default date is the last date that was entered in the S/O or transaction file accordingly.

You are prompted to enter the start date that you wish the PBS to commence the S/O, followed by prompts for analysis code, account code, reference, details, and amount. None of these fields are mandatory but your S/O will be meaningless if they are all left incomplete. We recommend that you complete the number of payments required so that the PBS will stop posting the S/O when all payments have been made. For "until further notice" enter 999.

## Chapter 6 - Standing orders and direct debits

It is important to enter the frequency so that the PBS will know how often to post the S/O. This is entered in the format of monthly/daily frequency and is an "either or" situation. You enter the monthly frequency in the first two digits or enter the daily frequency in the last two digits. So for a monthly S/O you enter 0100, for quarterly 0300, weekly 0007, lunar monthly 0028.

We include a facility to make amendments and deletions to/from the S/O file together with the option to produce a hardcopy of all standing orders.

All details are saved to disc/cartridge on exit to the main menu automatically.

To set up S/O's for other accounts reselect FILE MANAGEMENT and load another file.

## Chapter 7 - Entering your transactions

All additions, amendments and deletions to your Bank account are handled by option 2 of the PBS main menu (INSERT/AMEND/DELETE). Upon exit from this option your updated file is saved to disc/cartridge automatically. You will need to check that the file/bank name displayed in the heading is the one you wish to update. If not then select FILE MANAGEMENT and load another Bank account as required.

We recommend that if you are entering many transactions or making many changes that you frequently exit to the main menu and reselect this option to continue. This will keep the Bank account updated on disc/cartridge and will protect you to some extent in the event of something nasty happening like someone tripping over your QL power lead for example.

INSERT mode operates in split screen format: the upper half of the statement window displaying the last six transactions entered whereas the lower half presents you with an input screen. This is similar to the standing order input screen except that you do not have a number of payments or a frequency to enter.

After you have entered a transaction you will see it added to the list of entries displayed in the upper half of the screen. This is intended as an aid to help you to ensure that you do not miss entering an item say if you are distracted during input e.g., the phone rings. You can always return to the PBS and know exactly where you are at all times, even next month (if you have long phone calls!).

The entry of your transaction is similar to that of standing order entry, however, the date is now the date of the transaction e.g., the date you wrote the cheque. You can enter your transactions in any date order as the PBS will automatically sort them into the correct date order for you. This caters for the situation where you discovered a transaction from last month that you omitted to enter, for example, Bank charges. Similarly, you can enter dates in the future also but beware...read the paragraph later in this chapter detailing the posting of standing orders before doing this! Note that any Bank balance displayed relating to a back valued transaction will be the balance at that date and should not be confused with current Bank balances being displayed with present dated transactions.

The first transaction that you enter in a new file is the start or carried forward balance. You should date this entry with the date you wish to commence recording your transactions less one day e.g., to start from the 1st January 1987 enter the date 31st December 1986. This is needed in order that the PBS can make correct date comparisons for the posting of standing orders.

## Chapter 7 - Entering your transactions

Enter your date in English format e.g., 1jan87 as explained in the previous chapter. After you have entered the first date you will be able to accept or modify the default date on entry of subsequent transactions.

When entering either analysis or account codes the PBS will look to see if the code is on file and display the description if it is. If not, then you will get a message to this effect. You can still choose whether to accept the code or not irrespective of whether the code is on file. If you enter nothing in a system code field or if you haven't set up any system code descriptions then the PBS will skip the check altogether. If you are not sure which code to enter just input "?" and your list of system codes will be displayed in the header window.

The reference that you may enter is intended to be a cheque or paying in slip number but it is free format so you can choose to use this field for any other purpose. We shall be using this field for reconciliation in a planned new module.

You can decide how to use the details field according to your needs. You can either enter the payee of a cheque, maybe enter "cashcard" if appropriate or, if you are making full use of the account code facility, perhaps enter a short description of the transaction.

You will notice that we provide a separate input to determine whether the amount of the transaction is to be a debit or credit (D or C). So when you enter an amount you just enter the figures without any sign. The PBS will accept up to two decimal places. It is up to you to decide which accounting convention to follow: either "debit = money out, credit = money in" as used in the demonstration which is a copy of your Bank statement or you could adopt "debit = money in, credit = money out" to follow true book keeping and have a mirror copy of your Bank statement. Whatever you choose, it is wise to keep to one convention throughout the PBS and make sure you have set up your standing orders correctly! Otherwise, this could be a good chance to try out the amendment facilities of the PBS.

One input we haven't covered yet is the one preceded with the prompt "ACCOUNT/BANK TRANSFER (A/B)". Entering an "A" or "B" here invokes a transfer between two account codes or a transfer between two Bank accounts respectively. Just press ENTER at this prompt for a normal (non transfer) transaction. These transfers need quite a full explanation so we have allocated separate chapters (8 and 9) in the manual for them.

## Chapter 7 - Entering your transactions

Upon completion of all the fields you are presented with a prompt to either accept the transaction by pressing "Y" or, if you spot a mistake, by pressing "N" the cursor is returned to the date field so you can single step through changing your entries as necessary. Press ENTER at the fields which are correct and retype those that are in error. We do offer an AMEND and DELETE facility if you find later that a transaction is incorrect.

When you have accepted the transaction the PBS will now check and post any standing orders due since the last transaction that you entered. If any are due (and assuming you have set some up) the standing order transactions will be displayed in the upper part of the split screen as they are posted to your Bank account. This is designed to enable you to see your money disappearing before your very eyes!

Should a transaction cause your balance to be overdrawn (in debit) or exceed any overdraft limit that you have set up then the PBS will inform you immediately of any balance being in excess. This information is displayed in the title line of the Bank statement. Any overdraft limit is displayed here also.

The INSERT mode operates in a cycle so you can keep entering transactions by entering "C" to the "continue/menu" prompt or enter "M" to exit to the main menu.

To cater for any little mistakes that creep into your accounts the PBS offers an AMEND mode. To amend a transaction you must find it first so the PBS asks you to enter a search parameter. This can be either a date, analysis code, account code, reference, details or amount. Quite often the transaction that you wish to amend you have only just accepted as being correct. In this case when you are presented with the search choices mentioned above just press SPACE and the last transaction will be selected.

However you have selected your transaction for amendment you can use the keys "F" and "B" to scroll either forwards or backwards to ensure that the transaction you wish to amend is the first one in the display window in the top half of the split screen. At this point if you press "M" then you will exit to the previous menu. Press "C" to continue with the amendment and a screen similar to the insert screen will appear, but this time all the fields will be completed with information from your transaction that you have selected. You can simply single step through by either pressing just ENTER to keep the original entry or retype any fields that need changing. You are asked to confirm the transaction in the normal way.

If the incorrect transaction is beyond amendment or shouldn't be there at all, you can select the DELETE mode. You select the rogue transaction in the same way as an amendment but when you are satisfied with the selection you are asked to confirm the deletion.

## Chapter 7 - Entering your transactions

After you have completed the update of transactions on one Bank account you may need to select another of your Bank accounts to update. You could exit from INSERT/AMEND/DELETE then select FILE MANAGEMENT, select your Bank account from the directory on your screen, return to the main menu, re-select INSERT/AMEND/DELETE, press I for INSERT mode and then enter your transactions.

But, on the other hand, you could just select CHANGE BANK ACCOUNT on the INSERT/AMEND/DELETE menu, select your Bank account by entering a Bank code and then enter your transactions. You need to be aware of the Bank codes you have allocated in the PBS directory to use this facility and you are permitted only to change to a Bank account set up under the same file name as the one you are currently using. The PBS takes care of the saving of your files during the change.

This facility is made available under other main menu options also in order to make your PBS convenient and easy to use.

## Chapter 8 - Transfers between client accounts

These particular transactions are intended to record a settlement between two clients who have been allocated account codes in the PBS. You would probably be keeping records of all your dealings with clients and using the account code facility to its fullest extent as previously described in this manual. The planned accounts module would also make much further use of this also.

To invoke a client transfer you enter a transaction in the normal way except that you need to enter an "A" after the prompt "ACCOUNT/BANK TRANSFER (A/B)". The PBS will respond, after you have accepted the transaction, with the prompt "Enter ACCOUNT CODE" to which you must enter the account code of the other party.

The PBS will then proceed to update your Bank account with a pair of matched transactions of equal and opposite value e.g. a debit against one account code and a credit against the other code. Additionally, the code of the other client in each instance will be inserted in the directory reference field (which will be displayed in the "Dr" column on your statement screen). You will also note that an "R" appears in the reconciliation (R) column so that these items, being of a compensating nature on your Bank account, do not feature in any Bank reconciliation to be performed by the Bank reconciliation module.

Because these are matched transactions any amendment or deletion to either of the transactions will be made to the corresponding transaction by the PBS automatically.

We have included an example client account transfer with our demofile to illustrate the concept and make it easier to understand.

## Chapter 9 - Transfers between Bank accounts

These transactions can be effected between any two Bank accounts, set up in the PBS directory, to reflect the situation whereby the funds received and credited to one Bank account are financed by a drawing on another Bank account. The PBS requests you to enter the transaction once and then applies an equal and opposite copy to the other Bank account for you.

A good example of this is to draw a cheque on your Bank account for cash. You would enter the cheque against your Bank account, enter "B" in response to the "ACCOUNT/BANK TRANSFER (A/B)" and then select the file/Bank name, by entering the PBS directory reference when prompted, for the petty cash account you have set up e.g., 6. This example we have included in our demofile to help you to understand the concept.

This facility operates in a similar manner to client transfers except that the PBS has to update two separate Bank account files on disc/cartridge automatically and return you where you were in the PBS so that you can continue as required. While the PBS is swapping Bank accounts it also checks and posts any standing orders due in the second Bank account before returning to the original one. Your screen heading and the statement window will keep you informed of the Bank account changes and the posting of all items.

Each transaction keeps a record of the corresponding PBS directory reference of the matched transaction which is displayed in the "Dr" column on your statement screen. As the transactions are matched pairs any amendment or deletion to either one causes the PBS to effect the same change to the other one.

The PBS makes no distinction between Bank accounts which have been set up in different currencies and will still post an equal and opposite numerical amount to the selected Bank account, because the PBS does not maintain any system foreign exchange rates (PBS III ?).

Now you have some transactions entered we are able to display and print some statements.

## Chapter 10 - Displaying and printing your transactions

As soon as you have entered a transaction then the respective Bank account is updated immediately and the balance is adjusted. This means that you can look at your PBS statement at any time and it will always be up to date. The PBS takes care of all the posting of standing orders automatically.

A major design criteria was to provide clear, informative displays throughout the PBS and to concentrate on a purely functional utility. Because of this we have avoided what we feel could be described as gimmicky such as flashing text, extreme multiple colours and unnecessary noises.

If you just want to scan your Bank statement you select main menu option 1 (BANK STATEMENTS) and press "D", assuming that you have already made sure that the file/Bank account displayed in the screen heading is the one you wish to look at. The PBS will respond by displaying the last fourteen transactions entered on this account and the menu in the bottom window will change to offer you more choices. You now have a window view of your Bank statement and by pressing "F" or "B" you can scroll the statement forwards or backwards.

Should you wish to jump to a particular period in your account then you press "S" to select the month and year which you wish to see. The required month will now be positioned in the statement window.

You can take a screen dump of any statement display at this point by pressing "P".

The PBS provides an option to CHANGE BANK ACCOUNT within the BANK STATEMENTS mode. This facility, which is explained in some detail in chapter 7, will enable you to rapidly select different Bank statements to look at.

So you can keep hard copies of your Bank statements the PBS has comprehensive printing facilities. Select "P" on the BANK STATEMENTS menu and the PBS will respond with a menu asking you to select which period you wish to print out. You can enter the dates of your choice but they must fall within the range of dates of the transactions posted to your Bank account. Default start and end dates will already be provided which you can either accept or enter new ones. You will be asked to confirm your selection and then your statement will be printed.

## Chapter 10 - Displaying and printing your transactions

Similarly, you may wish to print a statement for a particular month only. To do this enter "S" and enter the required month and year to print your selected statement.

The PBS also offers you the ability to print the statement for the whole Bank account but, if the account has many entries, make sure that your printer is loaded with lots of paper.

On the BANK STATEMENTS menu the PBS provides you with a STATISTICS utility which informs you of important data relating to your Bank account and will tell you whether it is a good idea to print the whole Bank account or not!

Have you ever wanted to know how much you have paid to the local supermarket in the past year? Do you really want to know how much it has cost to run your car? The PBS is capable of quickly providing you with this kind of information on demand. By using the ENQUIRIES mode you can dig out transactions that fulfil your selection criteria and either display them or produce a printout.

Option 4 of the PBS main menu gives you a similar menu of choices to that for BANK STATEMENTS. After you have selected either "D" or "P", for display or print, then you have the opportunity to select the period of your Bank statement which you wish to include in the enquiry.

If you have selected "B" then you can enter start and end dates which you need to confirm before proceeding further. Should you wish only to look at one particular month then press "S" followed by the month and year as required. Alternatively you may wish to select transactions from the whole file so enter "A" for all.

Next the PBS will prompt you for a search parameter. This can consist of any transaction input field e.g., analysis code, account code, reference, details, or amount. When searching for transactions by details you can enter the first few characters only and all items with details starting with the same characters will be included.

If you wish to skip the search parameter, select 1 for ALL ITEMS to be included in the enquiry. This latter option will provide a list of transactions similar to that which can be obtained from the BANK STATEMENTS mode but with a total for the period instead of a balance.

All transaction lists contain the search parameter in the heading together with the period selected.

The CHANGE BANK ACCOUNT facility is included within the ENQUIRIES mode so you can quickly load another bank account and continue with your enquiries.

## Chapter 12 - Forward projections

Question: you have just been paid your salary and your mortgage, rates, car repayments etc., are all due on different dates in the month - how much money have you got left to play with?

Select option 3 (FORWARD PROJECTIONS) of the PBS main menu, enter the date which is one day before your next salary date and the PBS will have the answer for you.

When you are in this mode the PBS operates on a copy of whichever Bank account you have loaded. So any changes that appear to be made within this option do not affect the file stored on disc or cartridge.

After entering a future date you will see the PBS posting your standing orders to the copy Bank account. Then you are offered all the facilities available within the BANK STATEMENTS mode so you can display, scroll and print your projected statements.

On exit to the main menu the original copy of the Bank account is re-loaded.

We explained how to set up a new file in chapter 5 and described how the PBS re-uses Bank names and addresses where possible so you don't have to type things unnecessarily. We also touched on the distinction between new and carried forward files.

When you enter a new Bank name/address (identified by a Bank code) for a particular file name for the first time, according to the information contained in the PBS directory, then the PBS creates a new file, which is saved to disc/cartridge.

On the other hand, if the Bank code describing the Bank name and address has been used for the same file name already then a carried forward file is created. In this instance the PBS brings the balance forward from the "old file", copies the standing order file into the carried forward S/O file and creates an entry in the PBS directory. The carried forward file is available then to continue entering transactions.

You should avoid entering new transactions in an "old file" after you have carried forward to a new file unless you are entering back valued transactions, otherwise you may include standing order postings in error. You are free, however, to make any amendments or deletions to/from the "old file" but you will need to adjust the carried forward balance in the carried forward file by using the AMEND mode.

As you approach the end of each transaction file (which you can check by selecting STATISTICS) you could continue to create additional files in this way. Each would be readily selectable to load through the FILE MANAGEMENT menu. Be sure not to exceed the storage capacity of your cartridge however.

The PBS will warn you during INSERT mode when you are nearing the end of a file and you are allowed to enter up to ten more transactions if necessary. Note that the PBS will continue to post any standing orders due until the file is full.

If you have backed up your earlier files onto another disc or cartridge as explained in the next chapter, then you may wish to use the BANK NAMES - DELETE facility (option 4 on the SYSTEM MAINTENANCE main menu) in order to free some space on your current disc or cartridge.

We believe that you cannot attach too much importance to this subject that is why we have decided to devote a separate chapter to it.

The PBS incorporates file utilities so that you can save a copy of the PBS directory and its associated transaction files onto a separate disc or cartridge for backup purposes. Alternatively, you may wish to use a disc/cartridge copy utility which is generally available. We recommend that you clearly label all discs or cartridges for ease of identification.

It is wise to operate a "parent/child" sequence of using discs or cartridges for backup. With this method you backup on disc or cartridge number 1 in the first instance. For the next backup you use disc or cartridge number 2. On the next occasion, you backup using disc or cartridge number 1 again. You keep rotating the sequence of using your discs/cartridges so you never have overwrite your latest backup copy.

How often you should take backups depends on the volumes you are handling and whether you are using disc or cartridge. But it is a good idea to take copies at least once a month as a minimum and perhaps even keep copies at a different location.

Remember to keep working copies of your PBS program disc or cartridge also as this contains any system code files you have spent some time setting up.

We have all become more security conscious (or should have) since the Data Protection Act become law in the UK. However, the need to keep private information away from prying eyes has always been present.

The PBS has a password controlled security which can be switched on or off by using the utility PBSIPL which you may choose to keep on a separate disc or cartridge to prevent its use by anybody. We have endeavoured to make the password control the least cumbersome as possible but at the same time effective.

When passwords are made active then a particular transaction file can only be accessed if the correct password is known. You are allowed three attempts at entering the password.

So you can set up password profiles for selected persons to access their individual transaction files we supply the utility PBSPWM (which you may wish to keep on a separate disc/cartridge with the PBSIPL).

The utility is designed so that you can select your file/Bank account from the PBS directory and enter your password. The holder of the first file/Bank account in the PBS directory is the Master Password holder and has access to all passwords and transaction files. Other holders of file/Bank accounts can only enter/display/change their own password and need their existing password to display and change it.

When entering the first password for a file/Bank account in response to the prompt "ENTER PASSWORD:" press ENTER to proceed.

Each transaction file is automatically updated with the new password.

## Chapter 16 - Future development

Since the first version of the Personal Banking System was published in April 1981 the author has adopted a policy of continual revision and improvement of the product. Where possible an upward compatibility has been maintained when releasing new versions operable on the same computer.

The author wishes to acknowledge the invaluable assistance, provided by many PBS clients, which has contributed very much in the development of this current implementation.

The present PBS design lends itself to the addition of new modules which can be invoked directly from the PBS. You will have discovered already the options on the PBS sub menu, which when selected, give you the message "This facility is not yet implemented". System codes incorporated already in the PBS form the basis of some of these modules.

Of the three modules included on the sub menu, RECONCILIATION has already been implemented on versions for other computers. This is a full Bank reconciliation utility based on the real thing and keeps you informed of why your Bank statement is different to what you think it should be.

The Budget module will, by making use of the analysis codes, allow you to track expenses described by your own headings and compare these against a budget which you have allocated for each one.

In the Accounts module you will be able to record items extracted from the PBS transaction files in an account format. We will use the account codes to describe the accounts to be maintained.

The latter two modules will consolidate multiple Bank accounts within one file name to provide an overall position.

Should you have a need for an application which we have not yet covered in the PBS or, indeed, have some thoughts on any utility that you have not found available then we shall be pleased to hear from you. We welcome any constructive criticism of our products or suggestions.

Be sure to complete and return the enclosed registration form so that we can keep you informed of developments and provide you with our after sale maintenance.