CONTENTS

PERSONAL BANKING SYSTEM - USERS MANUAL

INTRODUCTION

The System consists of a suite of programs which are designed to be run on the BBC Model 'B', or 'A' with 32K. The main object of the system is to maintain permanent records of your accounting transactions as viewed from a Bank Account. The data is stored within the program in the form of arrays and can be manipulated easily in order to perform various useful tasks, including:

a) Display single or sequential pages of entries posted to the main account (via screen or printer).

b) Automatically post standing orders on due dates at regular intervals (from monthly to annual).

c) Make corrections or deletions at any time to entries previously input.

d) Back dated entry - insert a previously omitted entry in correct date sequence within the account record.

e) Search and locate particular items by date(or any part of the date), amount, cheque number or description. Provide totals by category + printout.

f) An additional module available separately will allow reconciliation of your Bank Statement with your PBS statement and report outstanding items and discrepancies.

In order to protect the data stored in the program, comprehensive validation checks are performed. This is necessary so that once the program is entered, the computer is continually under program control until it is completed. The Personal Banking System can also be used in conjunction with a printer and produce statement pages with full details.

After completion of any cycle or operation the System offers you a choice of action or next step to be taken.

With the conclusion of this introduction you are ready to program your financial records, but before doing so please carefully read the following instructions on loading your cassette.

LOADING YOUR CASSETTE PROGRAM INTO THE BBC 'B'

The Personal Banking System cassette contains one recording on each side. Your cassette has been recorded by a professional recording studio using very high quality studio equipment and you are requested to use the following procedure:

1) Connect cassette recorder to your BBC micro as described in the User Guide.

2) If you have a tone control on your recorder this should be set at a MAXIMUM level at all times, (unless personal experience with your system indicates other settings).

3) Set the volume control to a high level (around 0.7) but this setting may have to be adjusted by trial and error for some makes of recorder.

4) Enter CHAIN "PBS" or CH."" on the keyboard and this will appear on the screen. Then press PLAY on your recorder followed immediately by pressing the RETURN key.

The program will load and run automatically in two parts. The first part is very short and contains the CFS bug fix (which will only be implemented if you have OS 0.1). The second part is the main program. When loaded there will be a brief pause before you are invited to set up a new file or load an existing one from tape. The tape as supplied contains a sample data file called 'DEMOFILE' so with the recorder set to 'play' select option 1 and load 'DEMOFILE'. This will take a minute or two to load after which you will be shown the main menu. You can now select the various modes of operation in order to obtain operational experience of the system prior to setting up your own records.

IMPORTANT: Pressing the Escape key will always return you to the main menu. If for some obscure reason you break into the "Listing" and an error code appears then GOTO 15 will restore the program.

Failure to observe this rule could result in loss of program or damage to the contents of program. This will not damage your computer but you will LOSE all the data you have just loaded!

Now, at last, you can experience the pleasure of using this program and we hope, at the worst, survive the shock of finding out where your money has gone.

THE MENU

The only relation this has to food is that it represents what the computer will give you if you ask by pressing the number adjacent to one of the choices or options. We suggest you commence by selecting any option you like whereupon you will be able to view or modify the data stored in 'DEMOFILE' just to demonstrate the operation and layout.

SETTING UP YOUR OWN SYSTEM

When you are ready, select item 7 'System Maintenance'. This will show you the maximum sizes of the 'transaction' and 'standing order' files and the number of records currently held in each. You will then be invited to create new files or change the maximum file sizes. Note that if you choose to create new files this will always overwrite ALL EXISTING DATA in the transaction file but you may retain any records in the Standing Order file. However, the program will visually warn you of this in case you have not yet read these instructions! The screen will display a series of prompt statements in order to provide the system with the following information:

a) File size (set initially at 200 entries and 20 Standing Orders. The number of standing orders can be varied at any time but will cause a corresponding change in the size of the transaction file.)

b) Retain existing Standing Order file? This only applies to carrying forward from a previous PBS file.

c) Account record name

d) Today's date (day, month and year are input separately)

e) Balance brought forward from last record.

Upon acceptance of the above information you will be invited to change the size of the standing order file or return to the Master Menu. From this you can access the standing order menu in order to select "Addition to S/O file", if required.

ADDITION TO S/O FILE

You can enter your Standing Orders into the S/O file in any order. The PBS will sort them into the correct date order.

Example 1 - ORDER OF INPUT

S/O	Details	Date Due	Frequency	No. of Payments	Amount
1	SEEB	24th monthly	--	---	-15.00
2	SEGB	6th monthly	--	---	-25.00
3	AA	4th April	3	10	-12.00
4	L.B.Bromley	30th monthly	--	12	-32.09

Example 2 - AS SORTED INTO ORDER BY PBS

S/O	Details	Date Due	Frequency	No. of Payments	Amount
1	AA	4th April	3	10	-12.00
2	SEGB	6th monthly	--	99	-25.00
3	SEEB	24th monthly	--	99	-15.00
4	L.B.Bromley	30th monthly	--	12	-32.09

Standing Orders will be posted at regular intervals - from 1 to 12 months. If you just press the RETURN key when asked to input the month, the system will assume that you are inputting a monthly standing order. Otherwise you will be asked to specify the frequency, ie the interval in months, between payments.

You can also program the System to make a predetermined number of Standing Order deductions; this number is decreased after each payment to show the number of payments outstanding. The PBS can accept up to a total of 99 payments per Standing Order and when the number of payments outstanding reaches zero then no further deductions are made. If you do not want to set a limit to the number of payments, just press 'RETURN'.

The system has been set up initially to handle a total of twenty different Standing Orders - this can be varied but will produce a corresponding change to the size of the transaction file so that the total number of records possible in both files together remains fixed. The change will not be allowed if there is insufficient room for existing records.

Routines are also available to display, print, amend and delete standing order entries.

INPUTTING TRANSACTION RECORDS

The Input Cycle commences by displaying the last four transactions entered and after entry of the current line the display is updated. The current line identification numbers are displayed continuously in order that you can make corrections easily via the correction routine (details given later). All required inputs are preceded by a prompt statement (e.g. DATE:- DAY), and are fully validated.

The date is input in three separate parts: day, month and year. To repeat the last date input, just press 'RETURN' for the day. If you input a figure for the day and press 'RETURN' for the month, the PBS will repeat the current month and year. The month may be input in numeric or alphabetic form eg '1' or 'JAN' or 'JANUARY' for January.

It is not possible to enter items dated prior to the date of the last item input. If such a requirement occurs then you must use the 'back dated entry' routine. Automatic year changes are also accommodated.

Up to nine characters are available for a free format description of entry; cheque book numbers must be entered in full for reconciliation purposes.

Amounts are entered as an unsigned decimal number ie pounds. pence. The sign is entered separately as 'D' for Debit (-ve) or 'C' for Credit (+ve). The maximum value for any one entry is $\pm$ £9999.99.

POSTING STANDING ORDERS

After inputting the date of a transaction record, the standing order file is accessed and transaction records created automatically by the System for items which fall due between the date just entered and the date of the last item posted. It is thus possible to post an entry date 1 JAN 83 and then post an entry dated 31 MAR 84 and the PBS will automatically post all the standing orders due in the period.

CORRECTIONS

The Correction Routine requests the input of the page and line number of the item to be corrected. An input greater than 16 (number of account lines per page) is also accepted if it is preceded with a zero page number. The program will locate the required line by either method and display this line together with the adjacent lines in order that you can verify that the correct line has been selected. Certain validations are lifted during the performance of this function. You are then invited to enter amended data. By pressing RETURN only in response to the individual prompts, the original data is copied back into the line being amended. It is thus possible to amend say, the amount only, and the rest of the details are unaltered. All later balances following the correction are automatically adjusted as necessary. Corrections can also be made from the entry search facility in the same way.

NB. It is not possible to correct the 'date' of an entry using the 'correction' routine. This can only be achieved by deleting the record and inserting it at the correct date using the 'back dated entry' routine.

The Back Dated Entry routine is designed to handle those annoying entries that you have forgotten or omitted to input last week, or last year. This routine first asks for the full date and the program will find the location of this

of this item in the account record. Control is then passed to the input
routine to allow entry of the previously omitted item. The System will then
post this entry in correct date order and adjust all later balances.

The Deletion Routine allows you to "rub out" any transaction entered in
error. The item is accessed in the same manner as for a correction and you
are then invited to type "YES" to confirm deletion, in order to avoid error.
All later balances are adjusted automatically.

DISPLAY STATEMENT

The Statement pages consist (as supplied) of 13½ pages of 16 lines each (220
entries in each save(ing)) of the datafile. After selecting option 1 of the
menu the first page is displayed. Each line has the following format:-

Date	Cheque No.	Details	Amount	Balance
DDMMM	Six Digits	Max 9 characters	Max.9999.99	Max.99999.99

The cheque number is shown as '-------' for standing orders.

After displaying each page you have the option of producing a copy of the
page on a printer. Otherwise, enter 'N' to display next page, 'R' in order to
reselect page number, or 'M' to return to menu.

ENTRY SEARCH

The system incorporates the facility to locate particular items in the account record by either entering the date (or any part(s) of the date), cheque number, description or amount. The screen will then display the item(s) selected. You can prematurely cause the PBS to terminate a search by pressing "M" (for menu). If more than one screenful is presented the sub-totals are displayed, along with a prompt message for your next command. A copy of the page can be output on a printer by pressing "P".

You can use this facility to list items by category. Any number of categories can be defined automatically by using the item description. Subtotals and totals of categories are provided.

If you require more detailed analysis, you can use the cheque number instead as an analysis code. For example, the first two digits (of the six) would represent a supplier code, the second two digits the product code and the remaining two digits could store the month (01 to 12). You would then be able to list, using the search routine, each instance of a particular product, per supplier, per month, and print it. This would not affect the provision to search additionally by description e.g. all items per supplier, all dates.

When your items are displayed the item numbers are shown on the right. If you wish to correct any one of the items that are displayed just press "C" in reply to prompt message – followed, when asked, by the item number. Amended details can then be entered by following the screen prompts. The current page will be re-displayed and the sub-total corrected if necessary.

SAVING DATAFILES

Menu selection '8' invites you to SAVE your Datafile on cassette. You can enter a new file name of not more than 10 characters or to use the account name just press RETURN.

You will then be presented with the prompt "Press 'R' when tape is ready". Responding to this will produce the normal 'RECORD then RETURN' prompt. After the 'SAVE' is complete you will be invited to take a second 'SAVE'. If you say 'NO' control will return to System Master Menu.

LOADING DATAFILES

In order to LOAD a datafile, select menu item 5 and follow the screen prompts. Remember, you can SAVE and LOAD as many datafiles as you wish using the same PBS program.

DATA STORAGE

It is recommended that the data is saved as a library of C12 cassettes and a second copy of the data input is kept in addition.

e.g. period 01/09/82 – 30/12/82 cassette 1 (first 200 entries)

period 31/12/82 – 30/03/83 cassette 1 second side (next 200 entries)

period 31/03/83 – to date (incomplete) cassette 2 (next 57 entries)

plus a second copy of the above.

RECOVERY

In the unexpected event that you lose program control, an error message will be displayed. In all cases, recovery can be accomplished by entering "GOTO 15". The input of commands "CLEAR" or "RUN" (or "NEW") will corrupt the system and the program must be reloaded.

MAINTENANCE

This program has been compiled by a professional Banker and each purchaser of the system has the benefit of after sales maintenance and advice from the author, who will circulate to all registered Users any later enhancements to the program at no additional cost (with the exclusion of new cassette modules). If your PBS cassette becomes damaged, for whatever reason, then please return it to us for free replacement. Please enclose 29p in stamps to cover postage and ensure prompt attention.

For your part, may we make the following suggestions:

1) Regularly clean the surface of your cassette recorder recording head, pinch drive wheel and tape guides. A cleaning kit with instructions is obtainable from all good audio shops.

2) Periodically demagnetise the tape recorder heads, see 1 above.

3) Send us your name and address, clearly printed, stating where you saw this program advertised. We will record this to ensure you receive our unique after sales service, which includes program circulars, advice, special amendments and special offers to existing clients.

4) We are always pleased to receive, together with praise,

   - constructive criticism of any of our programs
   - any suggestions you may have for programs on other subjects.

5) Please observe the copyright code.

DEVELOPMENTS

Future modules, as and when they are developed, will be offered to PBS clients at small additional cost:

   PBS Bank Reconciliation Module - available soon

   Other items being considered so far include:

   a) PBS Financial Analysis
   b) A disc based version
   c) Building Society accounts
   d) PBS Database
   e) Sales and Purchase Day Books

The design of further modules depends upon future enhancements of the BBC micro.

CONCLUSION

Would you render us a favour? You have seen and experienced the presentation and quality of this program. Please could you favour us with an outline of any program you would like to purchase but have not found available.

DESCRIPTION OF PROGRAM

The following pages are included for those enthusiasts who wish to know what makes the PBS work.

The System consists generally of separate modules which are accessed from the main menu, as follows:

Menu Selection	Program Lines
1. Display Bank Account	1000 - 1999
2. Input Data	2000 - 2999
3. Correction/Back Value/Deletions	3000 - 3999
4. Standing Orders	4000 - 4999
5. Load Datafile	8000 - 8999
6. Entry Search	6000 - 6999
7. System Maintenance	7000 - 7999
8. Save Datafile	8000 - 8999

The individual routines are located within the System, as follows

		Main Procedure	Lines
1.	Main menu	PROCmM	150 - 250
2.	Printer Control	PROCprint	500 - 545
3.	Display transactions	PROCdP	1000 - 1065
4.	Input transactions	PROCiP	2000 - 2290
5.	Enter date	PROCdatein	2300 - 2340
6.	Date validation	PROCVa	2500 - 2625
7.	Enter cheque no.	PROCchqin	2800 - 2835
8.	Enter amount	PROCamtin	2920 - 2985
9.	Correction of transaction	PROCCo	3000 - 3410
10.	Back dated entry	PROCbD	3700 - 3788
11.	Deletions	PROCdL	3900 - 3952
12.	Standing Order Menu	PROCso	4000 - 4055
13.	Enter S.O.	PROCadso	4065 - 4265
14.	Display SO'section	PROCdpso	4350 - 4550
15.	Correction of SO's	PROCcso	4600 - 4645
16.	Deletion of SO's	PROCdelso	4700 - 4730
17.	Posting SO's	PROCpost	5000 - 5200
18.	Search menu & control	PROCsH	6000 - 6135
19.	Search display	PROCsL	6165 - 6250
20.	Set up/Change files	PROCMa	7000 - 7030
21.	Change file sizes	PROCcH	7050 - 7078
22.	Set up new file	PROCnF	7200 - 7296
23.	Load/Save datafiles	PROCls	8045 - 8320
24.	Utility procedures/functions	-	9000 - 12000

NOTES FOR PROGRAMMERS

The program style makes much use of multiple print statements. procedures, conditional GOTO's and GOSUBs. No measures have been taken to prevent you from seeing (or LISTing) the program listing, but we do ask you to observe the copyright code.

DATES
These are input, stored and displayed as follows:

    A) Input   DD MM YY or DD MMM YY
                    (ie month can be input as alpha or numeric)
    B) Stored   DD MM YY (packed data)
                    d% 220, m%, 220, y% 220
    C) Display   DD MMM YY (e.g. 25 OCT 82)

Each element of the date (day, month and year) is input separately in order
that correct evaluations can be performed. Variable yr% contains the current
year and is incremented by 1 each time you enter a new year. In no
circumstances, except in the back dated entry routine, can you enter a date
which falls before the previous date entered.

CHEQUE BOOK NUMBERS
The cheque number is stored in packed data form, c1% 220, c2% 220, c3% 220
The full six digit number is required to maintain a complete history of the
item and to enable future Modules to operate.

FREE NARRATIVE
The descriptions of entries are stored in an array: a$(220).
The standing order file descriptions are stored in the last twenty elements
(201-220) of this array. The standing order file is automatically relocated
to the end of the main file when setting up a new file, irrespective of the
file sizes.

AMOUNTS
These are input in two parts — the amount (unsigned) and the sign (Debit or
Credit). The amounts are stored in arrays as follows:
        a1% 220, a2% 220, a3% 220
Similarly, balances are stored in arrays:
        b1% 220, b2% 220, b3% 220, b4% 220
The largest amounts acceptable for input to the system are 9999.99 DR or CR
because of the shortage of screen space (max 40 characters). The maximum,
balance can be 99,999.99 DR or CR. The sign is input as 'D' for Debit or 'C'
for credit.

STANDING ORDERS
Items must be set-up exactly as stated. The System displays the S/O file
after set-up or later amendment in order to ensure that details are correct.
This module is so designed that it is impossible for you to miss a standing
order due date and it allows for the fact that you do not input entries every
day. Upon input of a date when entering a transaction record, the PBS will
check the S/O file and post all items due since last date input and then
return control to you to complete the particular item being input. The
routine will also make automatic year changes if a S/O item happens to be the
first item posted in a new year.

IMPORTANT NOTE
All material relating to the Personal Banking System, whether printed or
stored on tape, is subject to Copyright and may only be copied for the
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modules.

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