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MAIL ADDRESS LABEL PROGRAM

by

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SUMMARY

The Mail Address Program has been designed to maintain an address database and enable the user to print the database onto sticky labels or directly onto envelopes. Currently only two printers have been tested, the OKI Microline 182 and HP Laserjet Series II.

1. INTRODUCTION

The MAIL database has been constructed with both dBASE III Plus and dBASE IV in mind. Primarily produced for the WANG series of personal computers, the programs can be run on any industry-standard IBM clone under dBASE. The two files CURSON.BIN and CURSOFF.BIN supplied with dBASE III Plus have been altered to control the cursor on a WANG EGA monitor. This facility does not work on dBASE IV.

This MAIL database produces address labels, either on sticky labels or directly onto envelopes. As a total of eight lines are available on a standard sized label, only five lines are allowed for the ADDRESS (the first address line may continue over two label lines). The other lines are shared by TITLE/SURNAME fields and an additional field called ATTENTION. Contents of this last field are printed in bold.

As one address may be required for more than one particular print run, the field KEYWORDS can be used to create printing lists. An option within the PRINT menu allows the user to produce labels for any given keyword in this field.

Although an effort has been made to use a menu-driven system in this program, the user should be aware of dBASE III and IV syntax to make the most out of the Find and For a Selection utilities.

On the disk supplied the following 16 files:

MAIL2.SRC	program source file
MAIL2.PRG	dBASE III Plus encrypted file
MAIL2.DBO	dBASE IV encrypted file
ADDRESS.DB	the database
SURNAME.NDX	index file on field SURNAME
ONE.LBL	label format file
TWO.LBL	label format file
FOUR.LBL	label format file
FIVE.LBL	label format file
CURSON.BIN	binary file to turn cursor blink on
CURSOFF.BIN	binary file to turn cursor blink off
INSTALL.EXE	Installation program
COLOURS.MEM	A memo file containing default screen colours
DEFAULTS.MEM	A memo file containing system defaults
SPACE.EXE	A program used in the backup facility
DBTOWP51.EXE	A program to create a Word Perfect 5.1 secondary merge file from the database.

If any of these files are not on the disk please contact the author.

2. INSTALLATION

To install the program on your hard disk from the DOS A: prompt, type INSTALL. The appropriate files will then be automatically copied. If you intend to run the program from your floppy under dBASE IV, the file MAIL2.PRG must be deleted.

The program is actioned by the command DBASE MAIL from DOS, or DO MAIL from the dBASE dot prompt, and can easily be attached to a WANG Service menu.

3. INITIAL SETUP

By default, output in this installation has been defined as:

Printer:	HP Laser Jet Series II (WANG L{D8)
Port:	LPT1
Label Size:	A4 sheet with 3x8 sticky labels
Report Type:	All addresses to be printed

Printer and colour defaults can be changed using the Utility option on the primary menu. If you wish to temporarily change printers for part of one session only, this can be done through the Print Device options. As soon as dBASE is quit the settings will go back to the defaults.

4. USING THE MENU SYSTEM

To scroll through the database the key strokes listed below have the following effects:

↓	Scroll down one record in the database
↑	Scroll up one record in the database
PgDn	Scroll down 10 records
PgUp	Scroll up 10 records
HOME	Top of database
END	Bottom of database

A menu option can be chosen by either hitting a defined "Command Key" (usually the first capital letter of the option title) or, by using the Space bar, TAB key, BACK SPACE, Left or Right Arrows to highlight the option required, and hitting RETURN. In all cases the ESC key will exit a menu.

Figure 1 shows the options available through the various menu and sub-menu systems.

5. SCREEN DISPLAY

Figure 2 shows the primary screen and menu options. The second line of the boxed menu prompts the user with information on what action is required to operate the menu, add data etc. The number denoted as Max: indicates the total number of records in the database and Record: the relative position of the current record. The print defaults are shown in the bottom right corner and depict the device, report type and label format.

6. ADDING RECORDS

To add a new record, press "A" or move the cursor over Add and press RETURN. This will automatically add a blank record to the database and put you into edit mode. Type in your information. The program will check whether the surname you enter has already been assigned. Note that you can put in either the initials or first name of the addressee but not both. Try to be consistent and use the same address line for the street number, P.O. Box, city etc., to make it easier when you come to try to find, for example, all addresses in Wellington.

When putting in a keyword list, separate the keywords with a colon or some rarely used key stroke. The reason for this will is explained in Section 11.1, PRINTING BY KEYWORDS, of this manual. Even though only 60 characters are displayed by the keyword field you can enter up to 80 characters.

7. EDITING RECORDS

To edit a new record, press "E" or move the cursor over Edit and press RETURN. Any changes made will be saved to the database when the last field (KEYWORDS) is completed. Until that time you may use the arrow keys to move to the field of your choice. If you change the surname in the record the checking routine will not be activated.
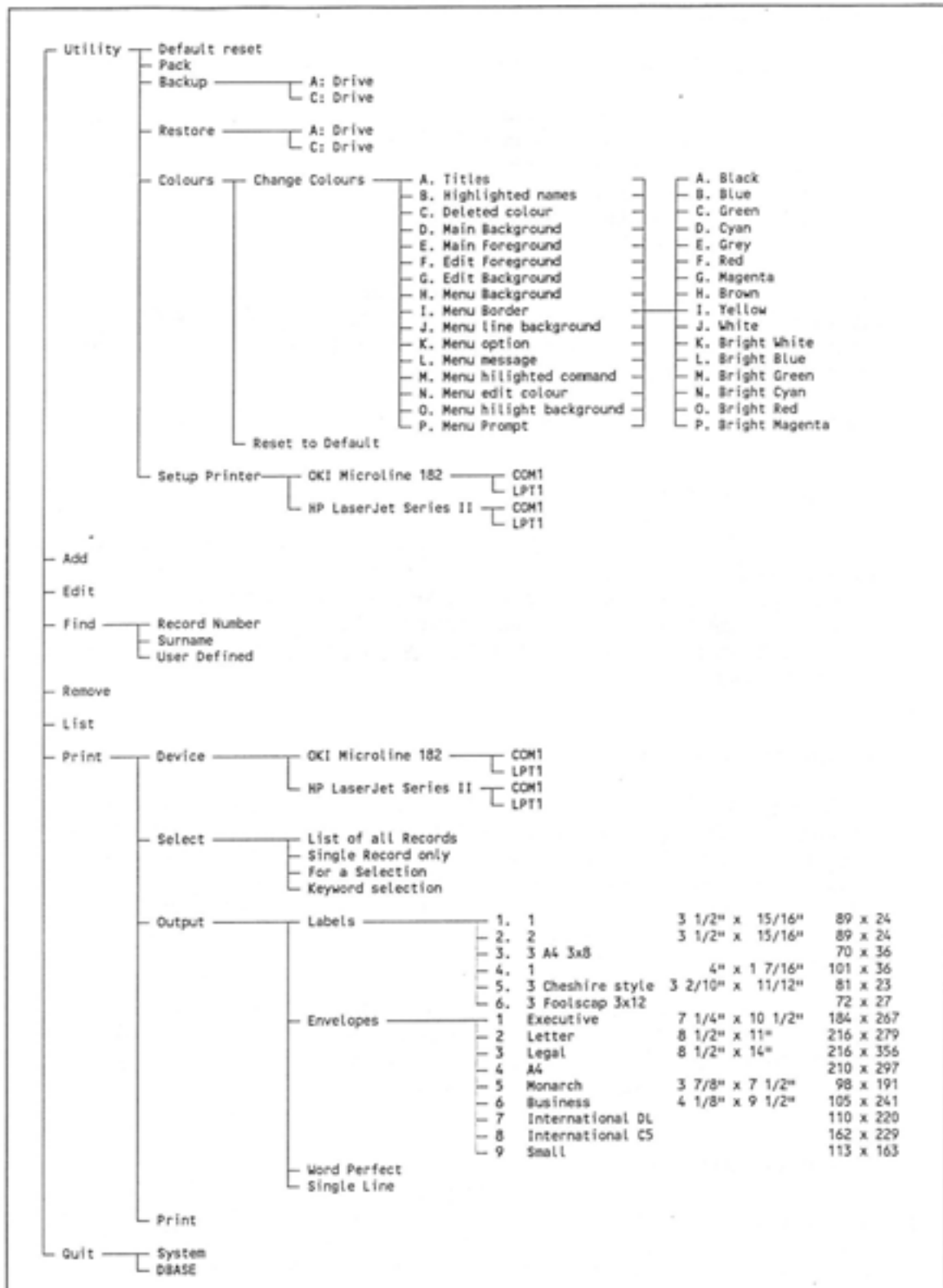
```
- Utility ─┬─ Default reset
           ├─ Pack
           ├─ Backup ────────┬─ A: Drive
           │                 └─ C: Drive
           ├─ Restore ───────┬─ A: Drive
           │                 └─ C: Drive
           ├─ Colours ─┬─ Change Colours ──┬─ A. Titles                  ─┬─ A. Black
           │           │                   ├─ B. Highlighted names       ─┤   B. Blue
           │           │                   ├─ C. Deleted colour          ─┤   C. Green
           │           │                   ├─ D. Main Background         ─┤   D. Cyan
           │           │                   ├─ E. Main Foreground         ─┤   E. Grey
           │           │                   ├─ F. Edit Foreground         ─┤   F. Red
           │           │                   ├─ G. Edit Background         ─┤   G. Magenta
           │           │                   ├─ H. Menu Background         ─┤   H. Brown
           │           │                   ├─ I. Menu Border             ─┤   I. Yellow
           │           │                   ├─ J. Menu line background    ─┤   J. White
           │           │                   ├─ K. Menu option             ─┤   K. Bright White
           │           │                   ├─ L. Menu message            ─┤   L. Bright Blue
           │           │                   ├─ M. Menu hilighted command  ─┤   M. Bright Green
           │           │                   ├─ N. Menu edit colour        ─┤   N. Bright Cyan
           │           │                   ├─ O. Menu hilight background ─┤   O. Bright Red
           │           │                   └─ P. Menu Prompt             ─┴─ P. Bright Magenta
           │           └─ Reset to Default
           └─ Setup Printer ─┬─ OKI Microline 182 ──────┬─ COM1
                             │                          └─ LPT1
                             └─ HP LaserJet Series II ──┬─ COM1
                                                        └─ LPT1
- Add
- Edit
- Find ─┬─ Record Number
        ├─ Surname
        └─ User Defined
- Remove
- List
- Print ─┬─ Device ─┬─ OKI Microline 182 ──────┬─ COM1
         │          │                          └─ LPT1
         │          └─ HP LaserJet Series II ──┬─ COM1
         │                                     └─ LPT1
         ├─ Select ─┬─ List of all Records
         │          ├─ Single Record only
         │          ├─ For a Selection
         │          └─ Keyword selection
         ├─ Output ─┬─ Labels ────────┬─ 1.  1                          3 1/2" x  15/16"    89 x 24
         │          │                 ├─ 2.  2                          3 1/2" x  15/16"    89 x 24
         │          │                 ├─ 3.  3 A4 3x8                                       70 x 36
         │          │                 ├─ 4.  1                              4" x 1 7/16"   101 x 36
         │          │                 ├─ 5.  3 Cheshire style          3 2/10" x  11/12"    81 x 23
         │          │                 └─ 6.  3 Foolscap 3x12                                72 x 27
         │          ├─ Envelopes ─────┬─ 1   Executive                 7 1/4" x 10 1/2"   184 x 267
         │          │                 ├─ 2   Letter                    8 1/2" x 11"       216 x 279
         │          │                 ├─ 3   Legal                     8 1/2" x 14"       216 x 356
         │          │                 ├─ 4   A4                                           210 x 297
         │          │                 ├─ 5   Monarch                   3 7/8" x 7 1/2"     98 x 191
         │          │                 ├─ 6   Business                  4 1/8" x 9 1/2"    105 x 241
         │          │                 ├─ 7   International DL                             110 x 220
         │          │                 ├─ 8   International C5                             162 x 229
         │          │                 └─ 9   Small                                        113 x 163
         │          ├─ Word Perfect
         │          └─ Single Line
         └─ Print
- Quit ─┬─ System
        └─ DBASE
```

Figure 1: Options Available to User Through the Menu System

```
26 April 1990 ══════════════════ ADDRESS LIST ══════════
                    Title  [      ]          Initials  [      ]
                                           or First Name
                 Surname or Company  Department of Conservation

        Address   Science and Research Division  - May be 2nd order Cmpy name
                  P.O. Box 10420                 - Street, box number
                                                 - Suburb
                  Wellington                     - City
        Attention ATTN:  ROSS PICKARD

        Post Code  [   ]
        Telephone (STD) 04      (Number) 710-726

        Key Words :DBASE:S&R:
                          (Separate the key words with a colon  : )
   ┌──────────────────────────────────────────────────────────────────┐
   │ COMMAND:  Utility   Add   Edit   Find   Remove   List  Print  Quit │
   │ (Enter a Command Letter or use ↑ or ↓ <RETURN> to select)          │
   │ Record:   1      Max: 235       Print Defaults: Laser List   3 Wide│
   └──────────────────────────────────────────────────────────────────┘
```

Figure 2: The Address Database standard screen.

8. FINDING RECORDS

There are three ways of finding a record. They are:

Record Number: This option prompts for the generated number associated with each record. The current record number is displayed at the bottom left of the screen as: Record: and is the quickest way of moving through the database other than by the List option.

Surname: The surname of the record required can be entered without the use of quotes. If found, you have the opportunity to continue the search pattern for other occurrences of this surname.

User Defined: A dBASE xpression can be entered here using the logical operators such as .AND., .OR., and .NOT.. Single quote marks should be used to define character strings. To assist the user the field names are also displayed (see Figure 3 for an example).

9. DELETING AND RECALLING RECORDS

In dBASE, a record can be marked for deletion but is not physically removed from the database until the command PACK is made. Any record can therefore be recalled back into use before that last stage. Under the Remove option you can mark the record displayed on the screen for either deletion or recall.

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```
26 April 1990 ════════════════ ADDRESS LIST ════════════════

            TITLE ░░░░░░░░░░░        INITIALS      ·
                                    FIRST_NAME
         SURNAME                 Department of Conservation

ADDRESSL1 Science and Research Division  - May be 2nd order Cmpy name
ADDRESSL2 P.O. Box 10420                 - Street, box number
ADDRESSL3                                - Suburb
ADDRESSL4 Wellington                     - City
ATTENTION ATTN:  ROSS PICKARD

POSTCODE  ░░░░░░
          STD  04          PHONE 710-726

KEYWORDS  DBASE S&R
                   (Separate the key words with a space)

╔═══════════════════════════════════════════════════════════════════╗
║ FIND FOR: 'PAPAKURA'$ADDRESSL3 .AND. ADDRESSL4='AUCKLAND'          ║
║ (Enter a dBASE expression using fieldnames & .NOT. .OR. .AND. etc) ║
║ Record:   1      Max: 235       Print Defaults: Laser List  3 Wide ║
╚═══════════════════════════════════════════════════════════════════╝
```

Figure 3: Using the Find option.

10. LISTING RECORDS ON SCREEN

The List option throws the screen into the dBASE browse mode without the ability to add or edit the data. Browse mode shows the record as a single line of text. To display information that is off-screen, use the TAB key (dBASE IV) or CONTROL → (dBASE III+). The PgUp (PREV), PgDn (NEXT), ↑and ↓ will scroll through the database. When List is exited with the ESC key the record displayed will be the current one that was displayed last in the Browse mode.

11. PRINTING

Within the Print option, the user can re-define where the printout is heading with the option Device. The type of printout can also be defined with the Select option. This can be of all records, only the single record displayed currently on the screen, all records that fit the dBASE description provided, or those that match a keyword list. Formatting options are available through Output. Pre-defined sticky label and envelope sizes have been included as well as a one record per line option (Single Line) and Word Perfect Mail Merge format. Some of these options are discussed in more detail below. No options are actioned until Print has been selected. When using the OKI dot matrix printer the label, or envelope, should be inserted so that it sits under the guide rollers and to the left of the edge of the platen.

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11.1 Printing by keywords

The key strokes Print Select Keyword Selection will allow you to define a list of keywords. At the end of each keyword hit <RETURN>,and to exit from the list hit <RETURN> on a blank line. When printing, the field KEYWORDS is searched for any occurrence of the defined list and the record will be printed if any keyword is found. An example has been given in Figure 4. If the keywords OS stood for overseas and OSNZ stood for Ornithological Society, then searching for keyword OS would find both. To overcome this use a delimiter, in this case the colon :, so that :OSNZ: would find only the OSNZ list and :OS: would find only the overseas list.

It should be noted that the search procedure only allows 9 spaces for each keyword. We have found this to be sufficient for our use, but if more space is required please contact the author.

Figure 4: Defining a list of keywords to be printed.

11.2 Printing for a selection

The Print Select Keyword Selection option works in the same manner as the Find User Defined in that an expression can be entered, linking the conditions with the logical operators such as .AND., .OR. and .NOT.. For example:

SELECT FOR: ADDRESSL4= 'AUCKLAND' .AND. .NOT. ADDRESSL3= 'EPSOM' will select for all records from Auckland that are not in Epsom.

Single quote marks should be used to define character strings such as 'AUCKLAND'.

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11.3 Printing on labels

Print Output Labels provides a list of label types that have been pre-defined by dBASE, as well as two formats that have been created specifically for this program. The most commonly used label formats will be the single label 4" x 1 2/16 " for tractor-feed paper and A4 sheets of 3x8 sticky labels. Because of physical size constraints of laser printers, the last row of labels on the foolscap 3x12 sheets has to be trimmed, otherwise the printer will jam. Only these three options (3, 4 and 6) have been fully tested by the author, and the default has been set to the A4 sheet of labels.

11.4 Printing on envelopes

Addresses can be printed directly onto the envelope if desired with the Print Output Envelope key strokes. Address positioning on a variety of envelope types has been defined, with the default being an A4-sized envelope. A disadvantage of using this option is that each envelope must be hand-fed into the printer.

11.5 Printing to word perfect

Print Output Word Perfect puts all output into a Word Perfect 5.1 secondary mail merge file called ADDRESS.SEC. The fields are in the order: ATTENTION, TITLE + SURNAME, ADDRESSL1 to ADDRESSL4. Blank fields are closed up and the POSTCODE is added to the last address line. A letter can then be typed and its address pulled into the document when needed (refer to the Word Perfect manual). Note that each time output is directed to Word Perfect the file ADDRESS.SEC will be over-written.

12. QUITTING THE DATABASE

Quit gives the choice of quitting completely out of the system and back to DOS or the WANG Services Menu, or entering into on an interactive basis. If you do enter dBASE make sure that none of the files listed at the start of this document have been altered or deleted.

13. UTILITIES

Within the Utility option, the user can backup and restore data either from a floppy diskette or the hard drive, PACK down the database, reset the system print parameter to their defaults, define the default printer setup, or change the screen colours.

Figure 5 shows which parts of the screen are effected by the colour change options. The variables B. Highlighted names, C. Deleted colour, and N. Menu Edit colour have been omitted in this figure. B. Highlighted names affects any warning messages that may be displayed, e.g. DELETED RECORD; C. Deleted colour will alter the background colour if a record has been marked for deletion; N. Menu Edit colour assigns the colour of any question that appears in the menu, e.g. Continue with Search (Y/N): Y.
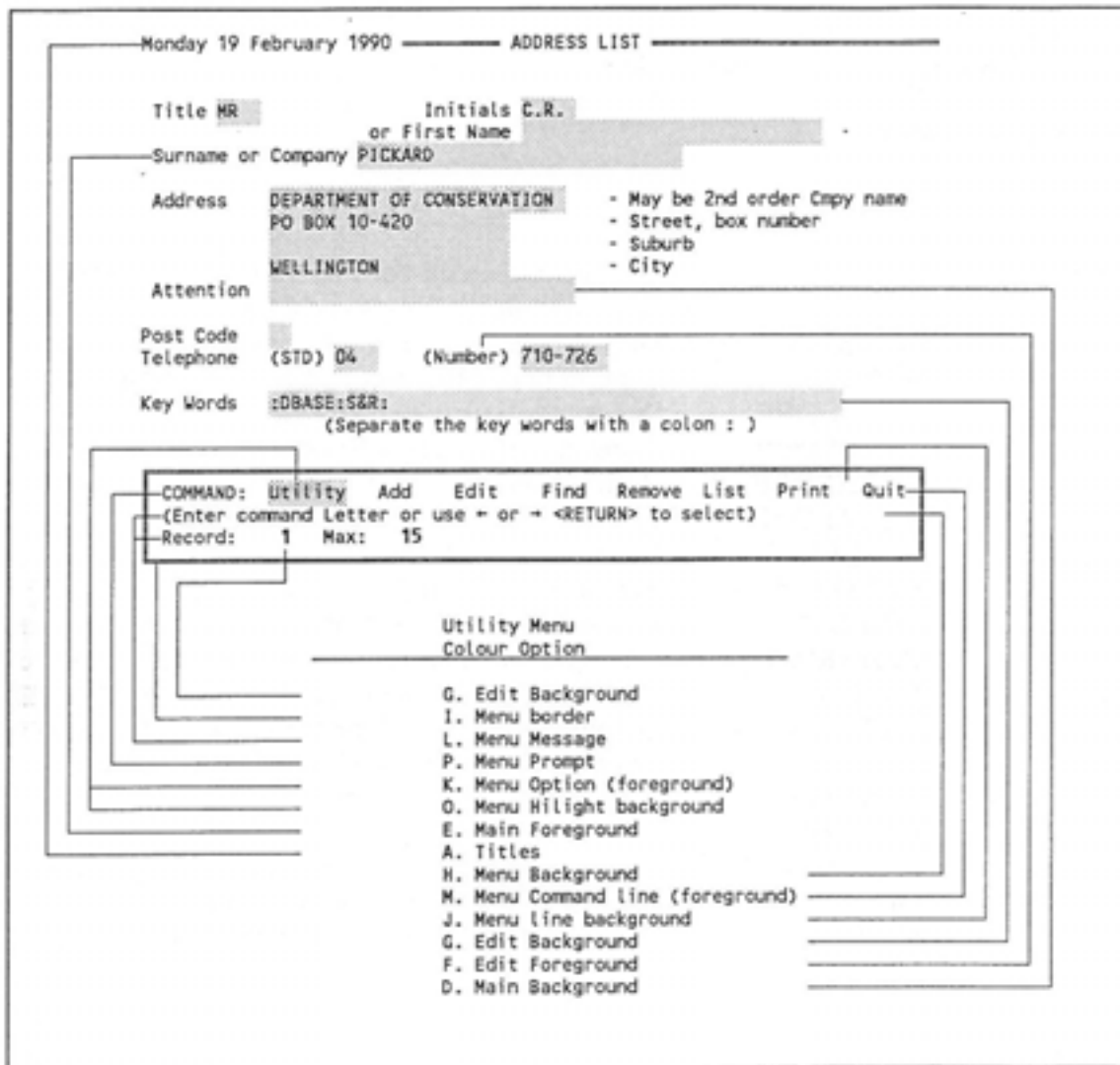
Figure 5: Parts of the screen effected by the colour change option.

14. TECHNICAL INFORMATION

Database Structure

Filename: ADDRESS.DBF
Index: SURNAME.NDX   Key field: SURNAME STD

Field Name	Field Type	Length
TITLE	Character	8
INITIALS	Character	7
FIRST_NAME	Character	15
SURNAME	Character	40
ADDRESSL1	Character	30
ADDRESSL2	Character	24
ADDRESSL3	Character	24

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ADDRESSL4	Character	20
ATTENTION	Character	32
POSTCODE	Character	4
STD	Character	6
PHONE	Character	8
KEYWORDS	Character	80

Procedure Contents

Filename: MAIL.SRC

Procedures:	MENU	Displays the menu bar and allows the selection of menu options by cursor movement
	DISPMENU	Displays current menu selection
	VMENU	Popup menu definition and selection program Stores
	STOREDEF1	Stores menu variables to memory
	STOREDEF2	Stores menu variables to memory
	RECALDEF1	Restores memory held menu variables
	RECALDEF2	Restores memory held menu variables
	SCREEN	Screen format of field titles
	GETDATA	Format for Edit and Append
	FINDSCN	Screen format for Find options
	BLANKSET	Sets up a blank screen for Add mode
	REPORT	Option definition and default setting for Print options
	LASER	Output of formatted labels 3 across (label options 3 and 6) for both the HP Laser Jet and OKI printers
	ENVELOP	Print output on Envelope of choice
	LASERPRT	Print of single label to 3 across sticky labels
	CHUCKOUT	Forces printers to eject page on pressing of ESC
	ONELINER	Print procedure for single line output
	UTILITY	Option definition of system defaults and backups