Introduction

Welcome to the Dial-in Inquiry System. This system was developed to enable our customers to receive the Motor Vehicle information they need quickly and easily via their own computer terminals.

With the proper terminal device, users will be able to perform searches of our three major files -- the Driver License file, the Vehicle Registration ("Reg") file, and the Vehicle Identification Number ("VIN") file, and receive all the information that can be legally provided. The customer will be charged four dollars per search and the balance in the account will be displayed as each transaction is completed.

Briefly, the dial-in service will work as follows. Account holders will be provided with a telephone number which will establish communications with our computer. The customer will then enter a seven digit account number and four digit password. When these entries are verified, the customer will be presented with a data entry screen allowing the desired search to be performed. Users will experience a busy telephone signal if our computer is not functioning. This will prevent their being charged for a telephone call (perhaps long distance) when we could not complete their search.

If the customer requires a printed copy of the information at the time the search is done, they will need to purchase a printer to which screen images may be transferred.

Security

To assure that users are not charged for searches they did not authorize as well as to protect the confidentiality of file data, we have developed a security sign-on for user searches.

To begin each search session, users will be required to enter a seven position account number coupled with a four position alphanumeric password. Both the account number and password will be initially assigned to you by the DMV. You will, however, be able to change your password at any time you wish.

A three position password (called the primary password) will be used to change the four position password (called the secondary password) through an on-line password change transaction which may be initiated through the main menu screen (more on that later). The primary password will not display during the password change transaction and should be memorized by those who need use it. The secondary password should be changed at least once every two months. Security experts recommend this and we will require it. In addition, it is recommended that you change it whenever you experience a turnover in personnel.

If, for any reason, you feel the need to change your primary password, you must contact the DMV.

Fees

The fees charged for your search transactions will be as follows:

1.	For each search that results in a single record retrieval.	$4.00
2.	For each search that results in no record being found to match the search argument entered.	$4.00
3.	For each search that displays multiple records.	$4.00
	For the expansion of one record within a multiple record display.	No Charge
	For each additional expansion within a multiple record display.	$4.00
4.	Individual records with multiple pages may be redisplayed while viewing any of its pages.	No Charge
5.	If a group display results in multiple pages, one* previous page may be redisplayed.	No Charge

*In group search format, it is not possible to display more than one previous page.

NOTE: EXEMPT ACCOUNTS - Fee statement above does NOT pertain to "Exempt Accounts."

Equipment

The equipment required to connect to the system normally consists of three items: a visual display, a modem, and, optionally, a printer. In this section we will discuss items separately.

Visual Display

To develop a service that would provide relatively high functionality at a low cost, we chose to use ASCII terminals that "talk" to our computer using an asyncronous communications protocol. Since there are many different terminals in this class, we chose to support a subset of these that we feel represents the most popular models. The user is required to have or to purchase equipment which is compatible with the equipment listed below.

COMPATIBLE TERMINAL LIST

ADDS	Regent Models 20, 25, 40, 60, 100 & 200
DEC	VT52 and VT100
IBM	3101
LEAR SIEGLER	ADM1A, ADM2, ADM3A, ADM3A+, ADM32, ADM42
HAZELTINE	1400, 1410, 1420, 1421, 1500, 1510, 1520, 1552, ESPRIT, EXEC80, & MODULAR ONE
COLORGRAPHICS	MVI^{xx}100
TELEVIDIO	912, 920, 910, 950
HEWLETT PACKARD	HP2622A, HP2624A, HP2626A

Personal and Small Business Computers

The popularity of computers in the home and office has been such that many people who would wish to use our system might already have a computer. In addition, many people would wish to purchase a computer instead of a terminal so that it could be used for other things. The obvious question that one might ask would be: "Can I use my computer to connect to DMV instead of buying a separate terminal?" The answer depends on the type of computer that you have.

A computer system consists of two basic parts, hardware and software. The hardware is the actual computer itself: the keyboard, the screen, printer etc. The software are the programs that run in your computer.

The answer to our above question now becomes more simple. Is there software (a program) available for my computer, that will make my computer look like one of the terminals on the list of those supported? This is important. The program must make your computer emulate (appear to us as) one of the terminals on our list. In many cases this software is readily available. If so, all you need do is purchase this "program" from your computer vendor or computer store. To find out if a program exists contact your computer salesman, the store where you purchased it, or the manufacturer.

Modems

In order to dial in to the DMV system, you will also need a modem. The Modem is a device that enables your terminal to be connected to a telephone line and communicate with another computer. The word MODEM is derived from the function that the device actually performs. It MOdulates the signals coming from your terminal, and DEModulates signals coming into your terminal. There are two different types of modems that you can use to connect to our system. In generic terms, these types are the BELL 103, and the BELL 212. The Bell 103 operates at 300 bits per second (it transmits and receives bits of data 300 times per second). The Bell 212 operates at 1200 bits per second. The Bell 212 type of modems operate four times as fast, but the trade off is in the cost of the modems itself. It is up to you, the user, to decide whether the additional cost is worth it. Please do not be confused by the difference between Bell 212 and Bell 212A compatible modems. The "A" designation simply means that the modem had no automatic dial capability. This is a convenience item that you may or may not choose to pay for.

This is a SMALL list of these types of modems. It is here just to give you an example of a few different manufacturers. Any 300 or 1200 Baud or 2400 Baud Dial Modem that is Bell 103 or Bell 212 compatible will work.

Hayes Smartmodem
AST Reach
Codex 2222
Codex 2223
Van-Tel 212 Plus
Recal-Vadic VA212LC
Recal Vadic VA300v
Recal-Vadic VA212PA
Popcom X100

Printers and Printing

The Printer is an optional part of your terminal configuration. If you have the need for "hard copy" output, then you should make sure that the terminal that you choose has a screen image print capability. Some terminals have the ability to print all the date as it is received from the modem. This usually results (in our system) in an illegible output. The best method of printing would be to wait until the data you want to print is on the screen, then print that screen image on your printer.

Keyboards

This is a list of the key functions that you will need to know to use the system. Since the keyboards on all the different types of terminals are not the same, we will first describe the key functions themselves, they in the following pages you can find the key or key sequence that will perform these functions on your terminal.

CLEAR - You must use CLEAR at two different times during your session. First, when you initially connect to our computer, you are instructed to use CLEAR before entering your account number and password. Second, when you wish to log off of our system, you are instructed to use CLEAR before you actually disconnect with QUIT (quit is described below).

RESET - When your keyboard becomes locked (see the section that describes the status area), it is necessary to unlock it before any additional entry of data can take place. This is what the reset function does. Please note that after you reset the keyboard, it may be necessary to TAB (described below to the next field on the screen before any additional typing may take place.

TAB FORWARD - You use the tab forward function to move the cursor to the beginning of the next field on the screen. For example, after keying in a person's name you wish to key the date of birth. To move the cursor to the date of birth field you would press tab forward.

TAB BACKWARD - This is similar to tab forward, only it moves the cursor backwards. For example, when the menu appears on your screen, the cursor starts in the name field of the drivers license search section. If you wish to type in a motorist identification number, you can Tab Backward to the field.

QUIT - Quit is the last thing that you do when you are finished using our system. It will log you off of our system, and then hang up the telephone.

Lear Siegler ADM 1A. ADM2. ADM 3A
ADDS Regent 20

FUNCTION	KEY(S)
CLEAR	CTRL AND W
RESET	ESC THEN Z
TAB FORWARD	CTRL AND I
TAB BACKWARD	CTRL AND B
QUIT	ESC THEN Q

ADDS Regent 25, 40, 60, 100, 200

FUNCTION	KEY(S)
CLEAR	CTRL AND L
RESET	ESC THEN Z
TAB FORWARD	CTRL AND I
TAB BACKWARD	CTRL AND B
QUIT	ESC THEN Q

DEC VT52 and DEC VT 100

FUNCTION	KEY(S)
CLEAR	PF3
RESET	ESC THEN Z
TAB FORWARD	TAB
TAB BACKWARD	CTRL AND R
QUIT	ESC THEN E

HEWLETT PACKARD TERMINALS

FUNCTION	KEY(S)
CLEAR	"CLEAR DISPLAY"
RESET	ESC THEN Z
TAB FORWARD	TAB
TAB BACKWARD	BACK TAB
QUIT	CNTL AND W

HAZELTINE TERMINALS

FUNCTION	KEY(S)
CLEAR	CTRL THEN W
RESET	ESC THEN Z
TAB FORWARD	TAB
TAB BACKWARD	CTRL AND B
QUIT	ESC THEN Q

IBM 3101 TERMINAL

FUNCTION	KEY(S)
CLEAR	"ERASE EOS"
RESET	ESC THEN Z
TAB FORWARD	TAB
TAB BACKWARD	ALT AND R
QUIT	ESC THEN Q

LEAR SIEGLER ADM 3a+, ADM 32, ADM 42

FUNCTION	KEY(S)
CLEAR	CLEAR
RESET	ESC THEN Z
TAB FORWARD	TAB
TAB BACKWARD	BACK TAB
QUIT	ESC THEN Q

TELEVIDIO TERMINALS

FUNCTION	KEY(S)
CLEAR	"CLEAR SPACE"
RESET	ESC THEN Z
TAB FORWARD	TAB
TAB BACKWARD	BACK TAB
QUIT	CNTL AND E

How to dial-in to the DMV System

Communications

The first step in dialing in to the system is making sure that your equipment is connected to a modem which, in turn, is connected to a working telephone outlet. Second, your computer has to know what it is connected to in order to properly transmit and receive data. In most cases, whether you have an ASCII terminal or a computer that emulates an ASCII terminal, this involves setting certain parameters that deal with communications. On some terminals, setting these parameters requires setting micro switches that are found on a circuit board inside the machine. On others, it is done via keyboard entry. In the case of computers running an emulator program, it is most often a case of filling in some menus or answering questions on your screen during system setup. In the back of this publication (Appendix B) are two examples of how to set up programs on an IBM-PC. This is not to say that the IBM model is the only one that will work, it is only there to give some basic guidelines that could be used for many computer types.

Below you will find a list of the parameters that you should be concerned with, and a recommended setting for each.

BAUD RATE - This one tells your terminal what speed that you will be communicating at. Set it to 300, 1200 or 2400 depending on what speed your modem operates at.

WORD FORMAT - This is sometimes called the number of DATA BITS. It represents the number of "bits" of data (or electronic signals) that it takes to make up one character. The choices are usually "7" or "8". Since the standard ASCII code uses seven bits per character the most logical choice is "7". We have found that "7" works best and recommend that you use "7" bit word format (or "7" data bits).

PARITY - Parity is a way for your terminal to check the integrity of the data it receives. Sometimes when communicating over telephone lines "noise" may be mistaken as data. By using parity checking, these errors can be detected and corrected. The typical settings for parity are "EVEN", "ODD", "NONE", "MARK", and "SPACE". We recommend that you set parity to "EVEN" or "ODD". NOTE +++ If for some reason you chose an "8" bit word format, then you must set parity to "NONE".

STOP BITS - When using asyncronous communication protocol, data is transmitted and received one character at a time. STOP BITS are electronic signals that mark the end of one of these characters. Also, it tells the terminal to start looking for the start of the next character. The choices for this parameter are "1" and "2". We have not experienced any difference in transmission errors when using "1" vs. "2", but recommend that you use "1" stop bit.

DUPLEX - Select "Full Duplex" or "Echo Off". Here's why, FULL DUPLEX means that data transmission can take place at both directions at the same time. HALF DUPLEX means that you can only transmit in one direction or ther other at a time. An example of full duplex transmission is your telephone. You both talk and listen at the same time (if you are very alert). An example of half duplex would be a C.B. radio. You can only talk while the button is depressed, and listen while it is not. When you apply this theory to asyncronous communications, it takes on another little twist. Let's say that you are operating in full duplex mode. When you type the letter "A" on your keyboard, it is transmitted to our computer, the data is examined and interpreted to be the letter "A" then our computer transmits the "A" back to your terminal and it appears on your screen. If you type the same "A" in half duplex mode, your terminal would place the "A" on the screen itself and then transmit it to our computer. Since our computer expects you to be operating in full duplex mode, two "A"s would then be on your screen (the one your terminal placed there, and the one our computer placed there). Obviously then you should select FULL DUPLEX. NOTE ++++ this is sometimes called "ECHO". If your terminal refers to this parameter as "ECHO", then you should select "ECHO OFF" which means do not echo what I type onto the screen because the computer that I am talking to will do it.

Step-by-Step Instructions for Dial-In

1. The computer's telephone number is (518) 436-0678. Your first step, of course, would be to dial this number.

2. When our computer answers the phone you will hear a high pitched tone called "answer tone". What you do next depends on your equipment configuration. If you have an acoustic coupler, you than place the receive into the coupler. If you have an external modem (a stand alone unit that is not part of your terminal), you would then press the "data" button on the modem. If you have an internal modem (one that is a circuit board inside of your terminal, you need not do anything at this time.

3. Next, slowly enter 5 upper case "U"'s followed by an upper case "I". Do not be concerned if these characters do not appear on your display. After entering these, the message "ENTER ID" will appear. If it does not, repeat the entry of the "U"'s and "I" until it does.

4. Next, you must enter a "user-id" that tells us that kind of terminal you are using. From the list below, find the user-id that matches your terminal type, then enter it onto your screen and press "RETURN".

User-ID	Terminals
ADDS1	ADDS 20
ADDS2	ADDS 25
ADDS3	ADDS 40, ADDS 100
ADDS4	ADDS 60, ADDS 200
DECO1	DEC VT100
DECO2	DEC VT52
ADMO1	ADM 1A, ADM 2
ADMO2	ADM 3A, ADM 3A+
ADMO3	ADM 31, ADM 32, ADM 42
HAZO1	HAZELTINE 1400, HAZELTINE 1410
HAZO2	HAZELTINE 1420, HAZELTINE 1421, EXEC80, ESPIRIT
HAZO3	HAZELTINE 1500
HAZO4	HAZELTINE 1510, HAZELTINE 1520
HAZO5	HAZELTINE 1552
HAZO6	HAZELTINE MODULAR ONE
IBMO1	IBM 3101
CGRX1	COLORGRAPHICS MVI**100
TELE1	TELEVIDIO 912, TELEVIDIO 920
TELE2	TELEVIDIO 910, TELEVIDIO 925, TELEVIDIO 950
HPOO1	HEWLETT PACKARD HP2622A, HP2624A, HP2626A

5. After you have successfully entered the user-id, the message "READY TO BEGIN SESSION" will appear. If it does not, repeat the entry of your user-id outlined in the previous step.

6. Now you must perform the "CLEAR" function. Please refer to the "Keyboard" material in the previous chapter on equipment to see how this is done on your type of terminal.

7. Successful invocation of the clear function will cause the message "TERMINAL SIGNED OFF, PLEASE SIGN ON OR DISCONNECT" to appear. You are now ready to enter your account number and password.

8. Enter your 7 digit account number and 4 digit password with no spaces between them, then press the "RETURN" key.

9. If you keyed your account number and password correctly, the message "SIGN ON COMPLETE. PLEASE PRESS ENTER TO DISPLAY THE TRANSACTION MENU" will appear. If so, press the "RETURN" key, and the search menu will display. Refer to the "Using the System' section of this manual for instructions on how to perform actual DMV inquiries.

10. When you have completed all your searching, you MUST do two things, SIGN-OFF, and DISCONNECT.

11. To sign-off, simply perform the CLEAR function as you did in step 6. After you have done this the message "TERMINAL SIGNED OFF, PLEASE SIGN-ON OR DISCONNECT" will appear.

12. To disconnect, perform the "QUIT" function as outlined in the previous "Keyboard" material. After you have successfully done this, the message "LOGGED OFF" will appear, and the telephone will have been hung-up.

Using The System

The Menu

When you receive the "Sign-On Complete" message and press "enter" (step 10 of connect instructions), a search menu as depicted below will display on your monitor screen.

```
(_)  (____)                                          BALANCE: _________________

                    - ENTER SEARCH ARGUMENTS BELOW -

**  LICENSED DRIVER FILE SEARCH  **

MOTORIST IDENTIFICATION NUMBER:
            ****  OR  ****
NAME:                              DATE OF BIRTH:              SEX:
*********************************************************************************************
**  VEHICLE REGISTRATION AND PLATE FILE SEARCH  **

PLATE NUMBER:              TYPE:
            ****  OR  ****
NAME:                              DATE OF BIRTH:              SEX:
*********************************************************************************************
**  VEHICLE IDENTIFICATION NUMBER FILE SEARCH  **

VEHICLE IDENTIFICATION NUMBER:  YEAR:                  MAKE:
*********************************************************************************************

FOR PASSWORD MODIFICATION TRANSACTION PLEASE ENTER AN "x" HERE:
```

At the top left-hand corner of your screen you should see two sets of brackets. This portion of the screen is known as the "status area". The status area is a means for us to provide you with some important information about your session with our computer. It tells you the following:

- If the DMV system is available for use
- If your keyboard is locked
- The reason your keyboard is locked

Each of the two sets of brackets contains some information. The first set can have an "A" to indicate that the system is "available," and or an "I" to indicate that your "input has been inhibited." The second set of brackets contains the reason that you are "input inhibited." These "inhibit messages" are explained as follows:

ATT - you have attempted to enter data in an inappropriate part of the screen
PRO - same as ATT
INV - an invalid character was keyed
NUM - you keyed a letter where only numbers are allowed

If your keyboard becomes locked ("I" in the first set of brackets and a reason in the second set), then you must reset the keyboard using the key sequence described in the previous chapter on "Keyboards" for your terminal type. After resetting your keyboard, tab the cursor to the field in which you want to enter data.

In the right-hand corner at the top of the screen is a line showing the balance remaining in your account. This balance will be diminished in $4.00 steps, for each search that you request as outlined in the material on fees.

Below the balance figure, you will find a mask divided into three portions for entering search data for the license, registration, and vehicle identification number (VIN) files, respectively. A line of stars or asterisks separates each portion of the mask. In searching, data is entered in any

one of the three mask portions to access the contents of the desired file. A bright line or blinking square called a "cursor" should appear positioned after the "NAME:" field in the "licensed Driver File Search" portion.

At the very bottom of your menu screen, there is a line which reads "FOR PASSWORD MODIFICATION TRANSACTION PLEASE ENTER AN ' 'X' HERE:". You would enter an "x" after is line if you wished to modify your password, as described in the previous material on security.

Getting Used To The Menu

First, refer back to the material presented on "Keyboards" to determine which key or combination of keys may be used to tab the cursor forward and backward among the various fields within the mask. (If your terminal is not listed, consult your owner's manual.) Experiment with your keyboard until you feel confident in moving the cursor to the beginning of each field in each of the three search portions of the mask. Notice that each field to be entered starts one space away from the colon (:) which defines the end of the field label.

Next, choose any random symbol from your keyboard (any letter or number will do) and fill in all the fields with it, without pressing the "return" or "enter" key. Doing this will show you the maximum length of each field which may

be entered for a search. Now, press your "return" or "enter" key to send the "data". You should see the following message appear at the top of your screen.

NO, YOUR ENTRY WAS INVALID

Notice also that your balance amount remains unchanged. If the system cannot process a search from the data entered, there is no charge. That's comforting to know, however, it still pays to be cautious when entering data, especially with spelling. If the data is entered correctly, and a search results, your account will be charged, even if no record can be found to match the search data you entered.

Want to try changing your password? Using the space bar, erase any data you may have entered, and tab the cursor forward to the "PASSWORD" field and enter an "x".

*** Please not ***

It is important to use only the space bar when erasing fields. This assures that empty fields will be filled with "blanks" instead of "nulls". There is a difference. For an analogy, you can compare a field filled with "blanks" to a shelf filled with empty bottles, and one filled with "nulls" to an empty shelf. Some keyboards may have special keys, such as an "erase end-of-field" which should not be used since they may erase the necessary blanks and cause the error message "INCORRECT SEARCH INFORMATION ENTERED" to appear.)

****

When you enter the "x", a mask appears requesting you to enter your account number followed by your primary password and then your new secondary password. You may change your password now if you wish. If not, perform the "clear" function and sign on again using your old secondary password.

License Search

Now, using the space bar, erase any data you may have entered, and we will begin a license search.

When doing a search, you will be able to enter data in only one of the three mask portions at a time. Data entered in the license fields is accepted first. If there is no data to b found in the license fields, the computer will look at the registration fields. If no data is found there, it will then look at the VIN fields. For license and registration file searches, data entered in subsequent mask portions will be ignored.

This department has set up a number of records for you to use in training personnel. Accessing these records will not affect your cash balance. To look at a group of these records, move the cursor to the name field of the license portion of the mask and key in "dial, test". Do not include the quotation marks, and there is no need to capitalize any part of the name (unless you want to). Also, do not put a space after the comma. Your entry should look like this.

NAME: dial, test

We are about to access any license records which show a last name of "Dial", and the first name "Test". Press the appropriate key to enter the transaction, and see what happens.

Five license "headers" appear. Each header is just a portion of a complete record stored on the DMV files. Notice that the cursor has moved to the bottom of the screen, to the last position of an entry field which had been prefilled with the letters "EXP#". (On some terminals, this field may appear highlighted or color coded.)

This four position field at the bottom of the screen is the only field in which you are allowed to enter data. To look at a complete license record, rekey over the "#" symbol in the " EXP#" field with the number of the record you wish to EXPand (1,2,3,4 or 5). Then press the appropriate key to enter the transaction, and the expanded record will appear on your screen.

For your convenience, all of the fields of data have been labelled on the expanded record and should be self-explanatory. The sample records have been set up to show you a variety of displays. Expanding each of the first five headers displayed (just key "exp1", "exp2", etc. over the word "menu" displayed in the entry field after each display and enter), and the following samples will appear:

exp1 - above a sample of a conditional license issued, and also of a military extension (when license does not expire normally, due to the licensee serving in the military)

exp2 - shows a "clean" license. The licensee has a multiple class license (1 + 2 + 7a). A full listing of license types may be found in appendix A.

exp3 - shows a licensee with both the "other" and "court probation" restrictions. "Other" simply means that the licensee has an unusual restriction for which there is no DMV code. But watch for the "court probation" restriction. A license with this restriction has lost all driving privileges.

exp4 - shows a record with no valid NYS license. This message commonly appears in conjunction with conviction records and would appear if the person had a valid out-of-state license but had been convicted of an infraction in New York State.

exp5 - shows a licensee with a restricted license and also shows an example of an accident trailer.

Please bear in mind that these test records have been set up for the purpose of giving you an idea of what the displays look like, but they may not, in all cases, display the same degree of logical integrity you would expect to find when accessing "real" motorist records on the files. For example, if a real motorist had a conditional license issued (as in "exp1"), we would expect to see some conviction activity and at least one previous suspension on the file.

Also bear in mind that if the previous transactions had accessed real motorist records, the balance in your account would have been diminished by $20. The first search argument, resulting in the five headers, would have cost $4. "EXP1" would have processed for free, since you get one free expansion from each group listing. The remaining 4 expansions would have cost $4 each. If you wish, you may refer back to the fee chart on page 5, in which all of the charges are fully explained.

Having looked at the first five records, let's look at the next five. Key "more" into the entry field over the word "menu" and enter this command.

Another five "headers" appear and, once again, "exp#" appears in the entry field with the cursor positioned at the "#". Key in a "1" and enter.

This time, notice that the word in the entry field is not "menu", but "next". This means that the license record is more than one page. Press enter to see the next page.

This time the command word changes to "menu", but, if you'd like to look at the record again, key over the command with "redo" and enter. "Redo" brings us back to the beginning of a record with more than one page. There is no additional charge for this review. Try it.

Notice that the "exp1" record we have accessed says "TIE RECORD" on the first page. This is a situation that exists when more than one motorist on file has the identical name, date of birth and sex. "EXP2" shows the other record with which this record is tied. The other examples you may see from this second page are:

exp3 - shows a class 5 licenses with one conviction.

exp4 - shows a motorist who has surrendered his New York State driver's license to the state of New York in order to obtain an identification card with no driving privileges. If the notes were to show surrender to another state, it would be possible for the motorist to be holding a valid license issued by that state. This is also a two page record.

exp5 - shows a person who has never had a New York State license, but has been issued a non-driver identification card. The license type is listed as "ID".

When you've finished looking at these, key the "more" command again and enter it. This time, just two header records appear. Want to go back to the previous page? Key over the "EXP#" with the command "prev", enter, and the previous page displays. The "prev" command is useful, but there is one limitation, though. If you enter "PREV" more than once, the system cannot redisplay more than one previous page of a multipage display. At this point, you cannot use "prev" to return to the first page. An error message will appear. For this reason, you may find it useful to transmit each of your pages to a printer when doing group searches involving more than one "MORE" page.

Enter "more" again to return to the final screen and enter a "1" in the "exp#" command to see the first expanded record. This one shows a record that is in "approved for original only" status. The person whose record shows this may have once held a valid NYS driver license, but, due to the nature of his/her convictions (sorry - these would display on a real record, but they don't on this sample) can no longer receive a license without starting from scratch and taking the driving tests.

The last sample record (exp2) is what is known as a "cross-reference" record. The original name of this motorist was "Dial, Test," however, a name change amendment was processed. The department keeps track of the old motorist identification number, so it you go in searching with the old name, the motorist's record with the new name will appear.

To review the commands we've learned so far, key over the "menu" command with the letters "help" and enter it.

A display appears listing all of the command options which are available. If ever you cannot remember a command, you can always enter "help".

The system also has edits to prevent you from entering an inappropriate command accidentally. If a command is misspelled, you will receive the message "NO, INVALID CODE, TO LIST FUNCTION, TYPE "HELP"". The other "error" messages you may receive are:

command entered in error	message
EXP#	SORRY, THERE IS NO RECORD TO EXPAND
NEXT	SORRY, THERE IS NO FURTHER INFORMATION TO DISPLAY
PREV	SORRY, THERE IS NO PREVIOUS GROUP TO DISPLAY
REDO	SORRY, THERE IS NO PREVIOUS INFORMATION TO DISPLAY

Looks like the only command we haven't used so far is "menu", so let's key in "menu", return to the menu, and this time access a single record by keying in a full name, date of birth, and sex.

The date of birth format consists of six digits. The first two digits represent the month of birth, the next two represent the day, and the last two represent the year. For example, April 3, 1956 would be entered as "040356". The entry in the sex field must be either "m" or "f" (male or female). Let's try one for a Mr. Test Dial born April 3, 1956. Our input should look like this:

NANE: diasl,test DATE OF BIRTH: 040356 SEX: m

What happened? There is no record for a "Dial,Test 040356 m", that's what. This is the message you will get if your entry is accidentally misspelled. Bear in mind that you caused a search to be performed. If this were not a "dial,test" record, your account would be billed.

Let's return to the menu and this time key in the following search argument for a Ms. Test Dial born February 2, 1902:

NAME: dial,test DATE OF BIRTH: 020202 SEX: f

This time when we enter, we get only one record, fully expanded. This is the way it is supposed to look.

Editing the Name

o Name searches are limited to the first five letters of the last name, the first three letters of the first name, and the middle initial. You say enter more of the name if you wish, however, the extra letters are ignored by the search program. This is the reason why a search argument for a name like "John,Martin", for example, may occasionally turn up additional records for such names as "Johnson,Mark", and vice-versa.

o To use the date of birth and sex fields for a search argument, it is necessary to start at the beginning f the date of birth field by entering the first two digits for the month of birth. If the year of birth, for example, is not known, it is possible to just enter the month and days and the argument will be accepted. If only the month is known, it is possible to just enter the month. It is not possible, though, to use sex as an argument without entering the date of birth, or to enter only the day or year portions of the date of birth field without starting from the beginning. Such attempts at a partial search will not cause an error message, however, the improperly entered conditions will be ignored.

o If a registrant has only one name, try using the ",NFN" code after the single name entered. This is the code used by the department to edit records with No First Name.

o Do not enter spaces after the commas separating the names. This is not accepted and an error message will result. It is not necessary to

capitalize the first letter of an entered name, but you may do so without problems if you prefer.

o Quote marks and spaces are eliminated from edited names. Thus, "O'Leary" becomes "OLEARY", "D'Amato" becomes "DAMATO", and "Van Buren" becomes "VANBUREN". Use of the period (.) is permitted only to abbreviate the word "Saint", as in "ST.JOHN". Dashes are permitted to separate a hyphenated last name, as in "DUFFY-SMITH"; however, both the period and the dash may not be used in an editing combination.

o Last names always come first, with two exceptions: Oriental names, and religious names. "Sing Ho Lee" would remain "SING,HO,LEE" when edited, and "Sister Mary Joseph" would be edited as "SISTER,MARY,JOSEPH" (You could access these records with "sing.ho.1" and "siste,mar,j", respectively, if you prefer to abbreviate your search arguments).

o A number may appear in the last position if it is part of a person's title. "Reginald Van Gleason III (the third)" would be stored on files as "VANGLEASON,REGINLD.3"; however, it is not possible to enter a number as part of an individual's name in a search argument. To access the above record, we would simply enter "vangl,reg" in the name portion of the argument.

Using the MI Number

Having experimented with long group searches and misspellings, you may be wondering: "Is there a better, more efficient, more cost-effective way to search the license file?"

The answer is - Yes! Return to the menu and tab the cursor back to the "MOTORIST IDENTIFICATION NUMBER" field. Key in the number as in the example below. Be sure to put in the spaces where shown.

MOTORIST IDENTIFICATION NUMBER: D09031 12865 340658 21

The result? A single license record, already expanded. One advantage of using this search method is that while the input editor for the "NAME" field cannot spot your misspellings (Who knows? Maybe someone really does spell their name "SMITX"), the editor for the motorist identification number in many cases can. Check digits are present in the "MI" number, so that if one or another of the digits is miskeyed, you will see the error message:

NO, YOUR ENTRY WAS INVALID

No erroneous search will result and your account will not be charged. Please note, however, that if the initial letter (which matches the first letter of the last name) or last 2 digits (which match the last two digits of the year of birth) of the MI number are miskeyed, an erroneous search may still result.)

In the relatively rare cases where tie records exist on the license file, you will save a step by using the MI number to access the particular record you desire. To use the tie record example we looked at before, a full name, date of birth and sex argument for "DIAL,TEST,E 030568 F" would return a group display showing both of the headers which match the search argument. Try entering this argument, and expand the first record (exp1). Notice that the motorist identification number in the resulting display is three digits longer than usual. There are three extra zeroes preceding the final two digits representing the year of birth. These three digits are known as the "tie breaker" portion of the MI. To directly access this record, we could have keyed in its full MI, including the tiebreaker. Let's do this for the second header. Return to the menu and key in its full MI, as shown below:

MOTORIST IDENTIFICATION NUMBER: D09031 12865 392006 00168

While NAME/DATE-OF-BIRTH/SEX searches are invaluable in cases where only partial information may be available, cost-conscious users will search using the "MI" number whenever it is available.

One final note: Always use spaces from the space bar when spaces are called for in your entry. As we noted before, "special" keys should not be used since they may erase the necessary spaces and cause the error message "INCORRECT SEARCH INFORMATION ENTERED" to appear.

Registration Search

A search of the registration file is accomplished in a similar way, using the same commands (ie, EXP#, HELP, MENU, MORE, NEXT, PREV, and REDO) as the license search.

Registration file searches may be performed either by entering a plate number or the name of the registrant. In most cases, entering a plate number and registration type, or a registrant's name, date of birth and sex will bring up a single expanded record. However, multiple records may result if, in the first case, the plate number exists for more than one class ("TYPE") or has been manufactured more than once, or, in the second case, if the registrant has more than one vehicle registered on our files. When multiple records do result, the MORE, PREV, and EXP# commands function the same as they do for license searches to find and expand the single record desired.

For plate number searches, key in the plate number and type (PAS for passenger, COM for commercial, etc. - a complete list follows in appendix A). If you don't know the type, it is possible to just enter the plate number. Let's try one. Return to the menu and enter the following:

PLATE NUMBER: dmv503 TYPE: pas

An expanded registration record appears. As on the license file, all the fields have been labelled for your convenience. An exception is the body type. The "ZDSD" which appears just before the entry for "WEIGHT"

shows that this is a two door sedan. A full list of body types appears in appendix A. Another field which may require explanation is the one labelled "VALD". The date shown in this field is the date that the registrant's most recent registration document was issued.

To look at a search argument which brings up two registration test records, return to the menu and this time key in "DMV507". "EXP2" will bring up an interesting record which shows a voluntary plate surrender, as well as a cleared suspension (for insurance lapse). Want to see a double pager with lots of previous vehicle and plate activity? Return to the menu and key in plate "DMV511".

Next, let's try to name search of the registration file. Again return the menu, only this time move the cursor forward to the "NAME," field in the "VEHICLE REGISTRATION AND PLATE FILE SEARCH" portion of the mask and key in the following:

NAME: dial,test,C DATE OF BIRTH: 010101 SEX: m

Similar to the license search, isn't it? Only when we enter this name, two registration headers appear, since this registrant has two vehicles registered on our files. Notice that one of these vehicles is registered as a livery vehicle. When we do an "EXP2" to expand this record, we notice something else interesting - the vehicle appears to weigh six pounds! No, this isn't an error. Buses, taxis, and livery vehicles are registered according to the number of passengers (excluding the driver) they hold. This

information is stored in the weight field, so what we really see here is a passenger livery vehicle.

If you'd like to take a look at all the registration test records, do a group search for "NAME: dial,test", making no entry in the date of birth and se fields. When the first five registration headers appear, key a "1" in the "EXP#" field to see a sample "history" record. A "history" record is one for which no registration activity has been processed for at least five years. You may also access this record with a plate search for DMV504 (pas).

Name Edits

Name searches of the registration file are a bit more complicated then those for license, since, in addition to individuals, a vehicle may be registered to:

* a corporation
* a partnership
* a trustee, lessee, executor, etc.

Each of these types of ownership is coded and edited differently on the registration files. In many cases, registration file names will extend onto a second line. However, the "5-3-1" format discussed for editing license name search arguments will also apply for registration file searches.

Names of individuals are edited using the same criteria as on the license file. Follow the same entry edits as you would to do a license search. To do a name search for a corporation, however, you must

separate the name with semi-colons, rather than commas. In addition, the corporate name search should not be coupled with a date of birth. Also, corporate names may contain a number as either the first or last word (examples: "VIVATRON;SYSTEM;21" or "300;CLUB"). If a number should occur in the middle of a corporate name, however, it should be spelled out, as in "A-ONE;AUTO;REPAIR".

Corporate names may contain a dash (-) or "&" sign if it is part of the corporate name. Spaces, however, are not permitted before or after the "-" or "&". The only place a space is permitted is after the letters "US", "NYS", or "NYC". Periods, commas, or other symbols may not be used. The semicolon (;) may only be used. The semicolon (;) may only be used to separate words and may not appear at the end of the line. Some examples of properly edited corporate names would be: "BF;GOODRICH", "DODD&JONES:INC", "U-DO-IT;CORP" and "US DEPT;OF;HEALTH". Search arguments to access the above records would be "bf;goo"; "dodd&inc", "u-do-;cor", and "us de;of;h", respectively.

Partnership names are entered in the same way as individual names; however, only the date of birth of the first partner is maintained on the file. A slash "/" is used to separate a lessee (/LSE), trustee (/TR), administrator (/ADM), bailee (/BAIL), committee (/CMTE), guardian (/GDN), executor (/EXEC), or referee (/REF). The slash is simply a designation which appears on our files, but it should not be used as part of the search argument. Thus, a search argument for "AVON;REALTY/LSE" would be simply "avon;rea".

The percent sign (%) may be used with any of the above "slashed" records to designate "in care of"; however the percent sign would appear on the second line of the name and would never be part of a search argument.

One last note: Occasionally, the name of an individual may appear in a slightly different format on the registration file than it does on the license file. This could occur, for example, if a motorist applied for a license using his/her middle initial, but failed to do so when applying for a registration. Entering less of the name to do a "group" search may be necessary to find the desired record in these situations.

It is not possible to use the MI number to search the registration files.

Vehicle Identification Number (VIN) Searches

Searching the VIN file is accomplished using the same commands with which we have already become familiar by searching the license and registration files.

The VIN file, like the registration file, contains vehicle and registrant information. However, the focus of this information is different, since the focal point of the registration file is on the registrant, whereas the focal point of the VIN file is on the vehicle. If we wanted to determine a registrant's previous plate number, for example, we would look at the registration file. If, on the other hand, we wished to determine whether the owner of a particular vehicle might be different from the registrant, or if the vehicle had prior owners or liens against the title, we would look at the VIN file.

Accessing the VIN file requires you to enter the vehicle's identification number along with the year and make. The "vehicle identification number" any consist of up to 17 letters or numbers in any combination. For vehicles manufactured after 1981, the VIN is always 17 digits long and check digits are included in it. However, the input editor will not be able to reject those which are misspelled, so do be careful. The vehicle "year" consists of the last two digits of the model year designated by the manufacturer, or, if no model year is designated, the last two digits of the year of manufacture. The "make" normally consists of the first five letters, the entire name is used, and, in cases where the manufacturer's

name consists of two words, the first two letters of each word are used, separated by a slash (/). Thus, "Chevrolet" is edited as "CHEVR", "Ford" is edited as "FORD", and "Mercedes Benz" is edited as "ME/BE".

To look at a sample vehicle on file, bring up the menu, move the cursor to the "VEHICLE IDENTIFICATION NUMBER:" field, and enter the following:

VEHICLE IDENTIFICATION NUMBER: dialtest12 YEAR: 86 MAKE: tovot

It is also possible to do a group search of the VIN file. To look at all of the test records which are available, return the menu and simply key "dialtest" in the "vehicle identification number" field and leave the "year" and "make" fields blank. When you enter this data, a group listing of VIN headers will appear.

Quick Reference Sheet

Commands

MENU	RETURN TO THE SEARCH MENU
MORE	DISP LAY NEXT GROUP OF RECORDS
PREV	DISPLAY PREVIOUS GROUP OF RECORDS
REDO	REDISPLAY THE EXPANDED RECORD (Returns 1st page)
NEXT	DISPLAY THE NEXT PAGE OF THE EXPANDED RECORD
EXP#	EXPAND RECORD NUMBER "#"
HELP	DISPLAY THE COMMAND OPTIONS (THIS LIST)

Error Messages

INCORRECT SEARCH INFOR-MATION ENTERED	You used editing keys which deleted spaces Retry your entry.
NO. INVALID CODE, TO LIST FUNCTIONS, TYPE "HELP"	You miskeyed a command.
NO, YOUR ENTRY WAS INVALID	You used unacceptable symbols or otherwise failed to edit your search argument properly. -OR- you miskeyed an MI number. Recheck your editing and retry your entry.
SORRY, THERE IS NO RECORD TO EXPAND	The "# portion of the EXP# command was entered incorrectly.
SORRY, THERE IS NO FURTHER INFORMATION TO DISPLAY	Self-explanatory.
SORRY, THERE IS NO PREVIOUS GROUP TO DISPLAY	The PREV command only works for <u>one</u> previous page. To go back 2 pages, you would need to return to the menu and rekey the search argument.
SORRY, THERE IS NO PREVIOUS INFORMA TION TO DISPLAY	The REDO command only works within an expanded record of more than one page.

Status Area Messages

ATT you attempted to enter data in an inappropriate part of the screen
PRO (same as ATT)
INV An invalid character was keyed
NUM You keyed a letter where only numbers are allowed

APPENDICES

A. License Types

B. Emulator Programs

   a) IBM's 3101

   b) Microstuf's "Crosstalk"