Automated License Plate Recognition (ALPR)

Basic Course

Contact for questions

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Outline

- APD Special Order
- BOSS Operations
- PAGIS Operations

APD Special Order : SO 11.10

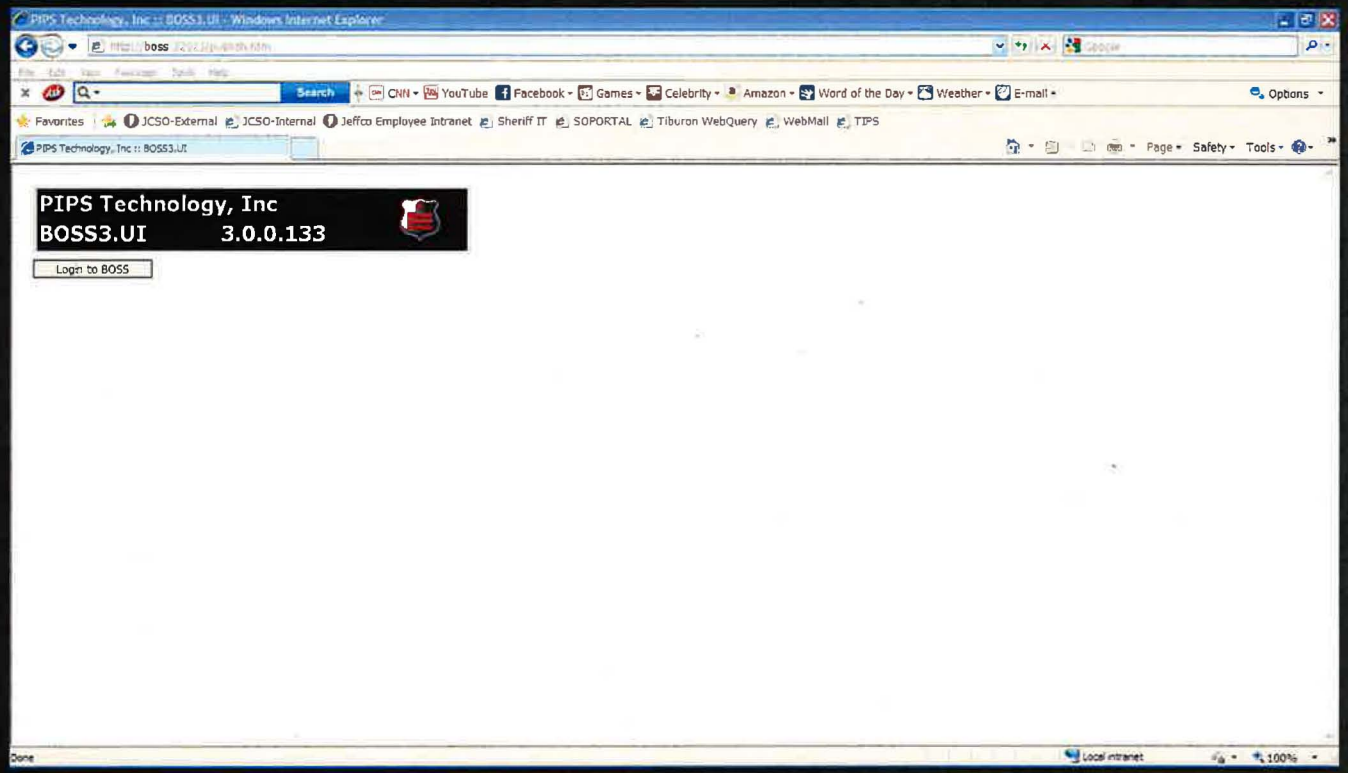
- Automated License Plate Reader (ALPR) technology provides automated detection of license plates. ALPR systems utilized by Aurora Police Department personnel are intended to gather data associated with vehicle license plates for official law enforcement purposes. The Aurora Police Electronic Support Section will administer the ALPR program.
- ALPR systems and the associated database are the property of the Aurora Police Department and are intended for use in conducting official business.
- ALPR plate scan information will be retained for a period of two years, except that plate scan information deemed as evidence in a criminal investigation may be transferred to the Digital Media Management System for further retention.
- Members are authorized to access ALPR data through the Back Office System Server (BOSS) for Law Enforcement investigative purposes only. Members are not allowed to disseminate any information outside of the Department without authorization from the Electronic Support Section .
- Concurrent use of the BOSS system is limited through user licensing. Members must log out of BOSS immediately after use.

APD Special Order continued

- The use of ALPR systems is restricted as outlined below. Department personnel will not use the ALPR equipment or database for any unauthorized purpose.
  - ALPR will be used only for official law enforcement business.
  - No Department member may operate the ALPR system or access the ALPR database without first completing Department approved ALPR training.
  - When receiving an ALPR alert, members must visually confirm the plate against the captured image and verify the validity of the alert through Public Safety Communications Department (PSCD) or MDC query when circumstances allow.
  - At the start of each shift, members must ensure that the ALPR system has been updated with the most current hotlist available from the Back Office System Server (BOSS).
  - The three mounted cameras are not adjustable. Members will not attempt to move or reposition the cameras. If a member believes that a camera is out of adjustment, the Electronic Support Section will be contacted.
  - Only Electronic Support Section personnel are permitted to make adjustments or corrections to the equipment or MDC software that supports the ALPR.

BOSS – Back Office System Software

- How to install the BOSS software on any Department Desktop.
  - Open the Explorer Web Browser
  - In the address bar type the following address: [redacted]
  - Press enter on your keyboard. The following will appear in the browser.

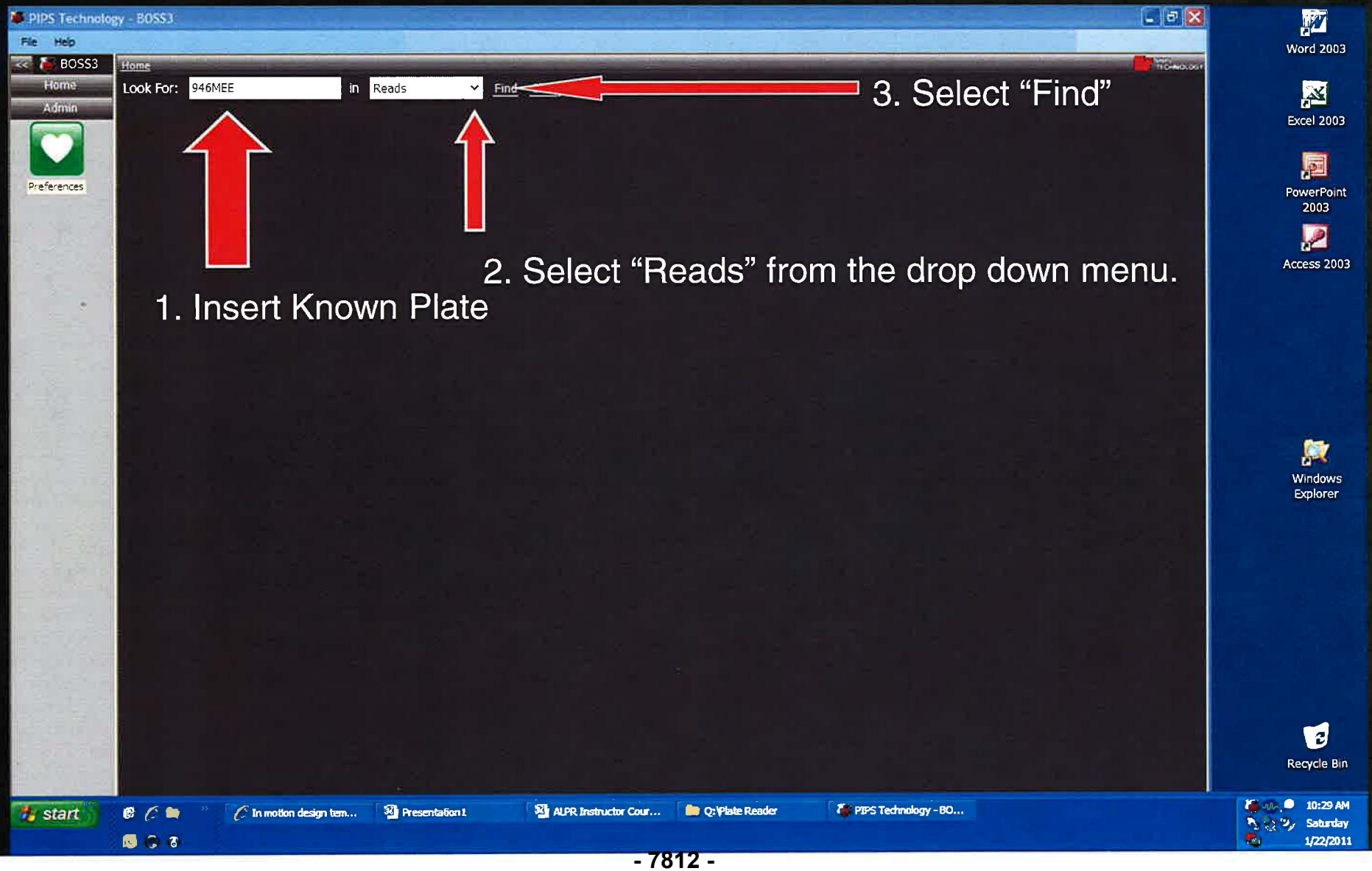


Boss Install continued

- Click on the Log on button and a new window will appear asking for you user name and password. Your user name and password will be the same as your network user name and password.
- Once the BOSS icon is on the Desktop of the computer you are using, you will not need to install the software again. Just double click on the icon and BOSS should log you on to the system.

BOSS Operations

Known Query

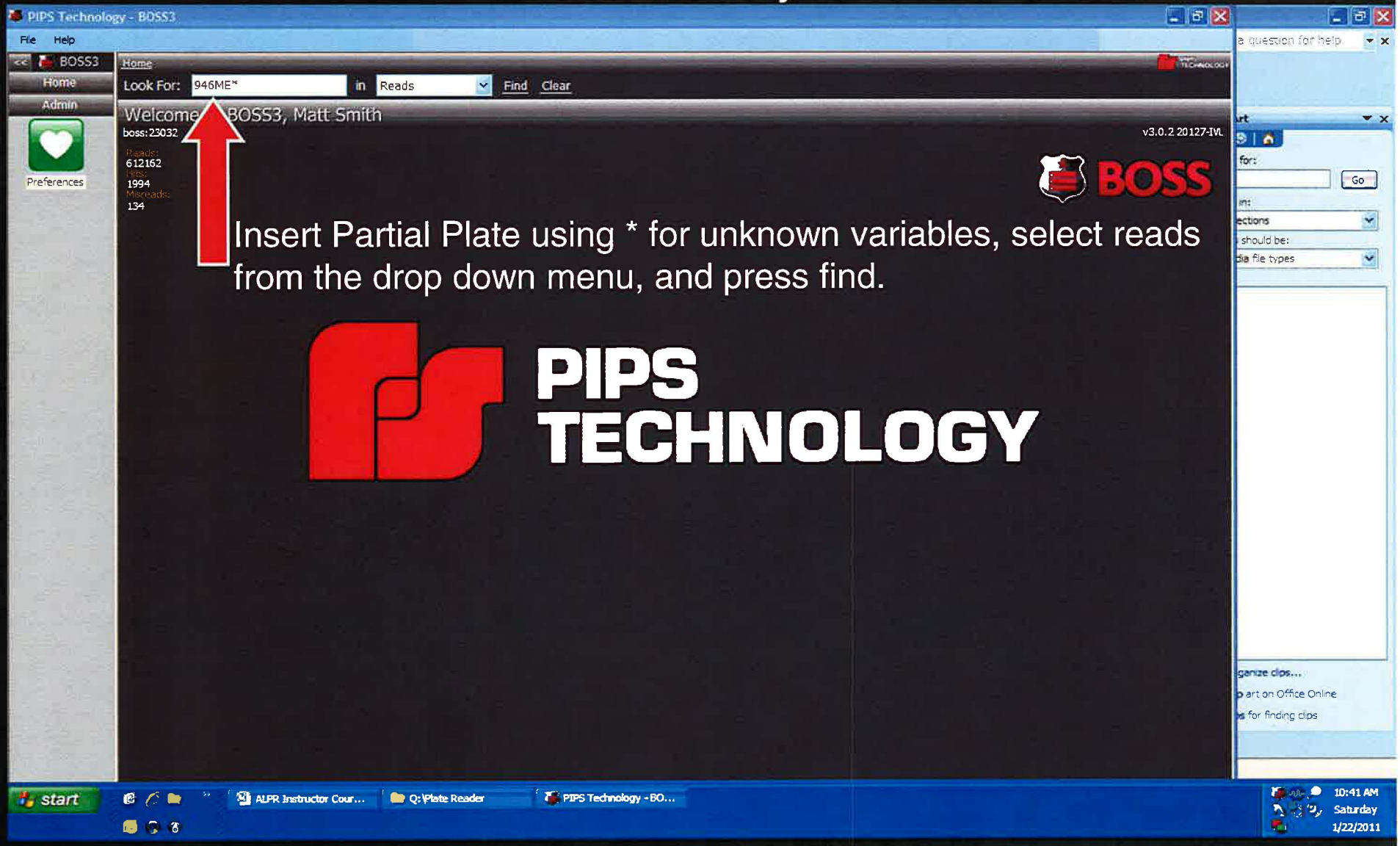


BOSS Operations

Known Query

BOSS Operations

Partial Query

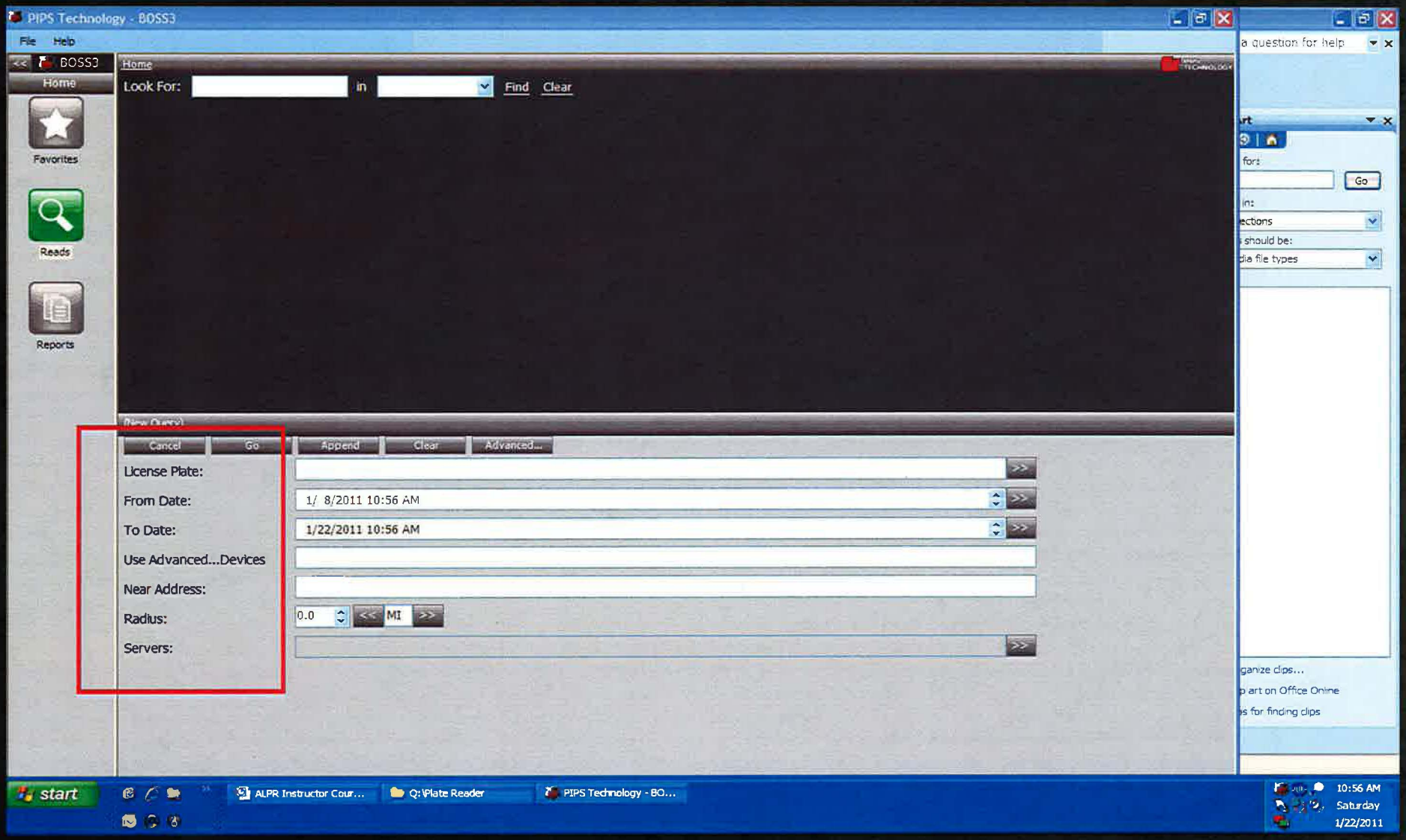


BOSS Operations

Partial Query Results

BOSS Operations

Specific Query Continued



Searching

- Search using date and time using drop down screens
- Search area using 100 block such as 15300 E 6th Ave
- Select how wide you want the search to be such as 1 mile, 5 miles, etc.

BOSS Operations

Questions??

PAGIS Operations

PAGIS is the operating system that acts as the user interface to the ALPR system. This is where the user controls the ALPR system in their respective vehicle.

PAGIS Operations

CBI Files

When beginning watch the ALPR operator should give the system approximately 5 minutes to boot up and automatically download the CBI files that contain the current hotlist.

Currently those files are uploaded by the Electronic Support Section .

A program will be written to automatically download the file every hour. The operator can update the file every hour by clicking on begin shift in the Pagis software 2 times.

PAGIS - Mobile System

PIPS TECHNOLOGY
A Federal Signal Company

the most advanced license plate recognition systems in the world

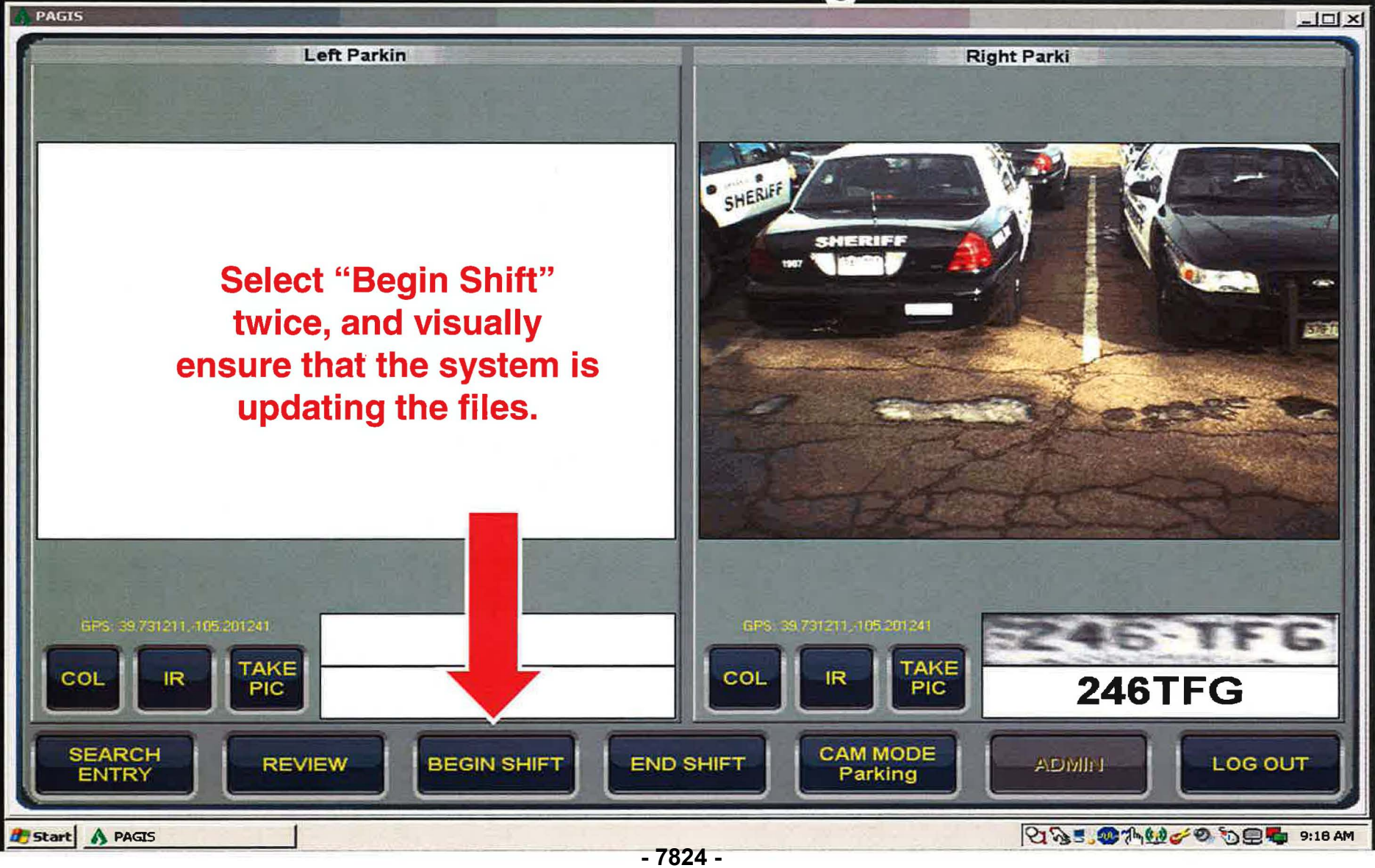
PAGIS Operations

PAGIS Login

When logging into the PAGIS system the user should attempt to be located in a hot spot. The hot spots are located in the parking lot at the District stations, any Fire station, and the fuel pumps at all of the City shops. This is to insure a good connection to the network for a faster download. However it is possible to update the software as long as the vehicle is connected by the air card and netmotion.

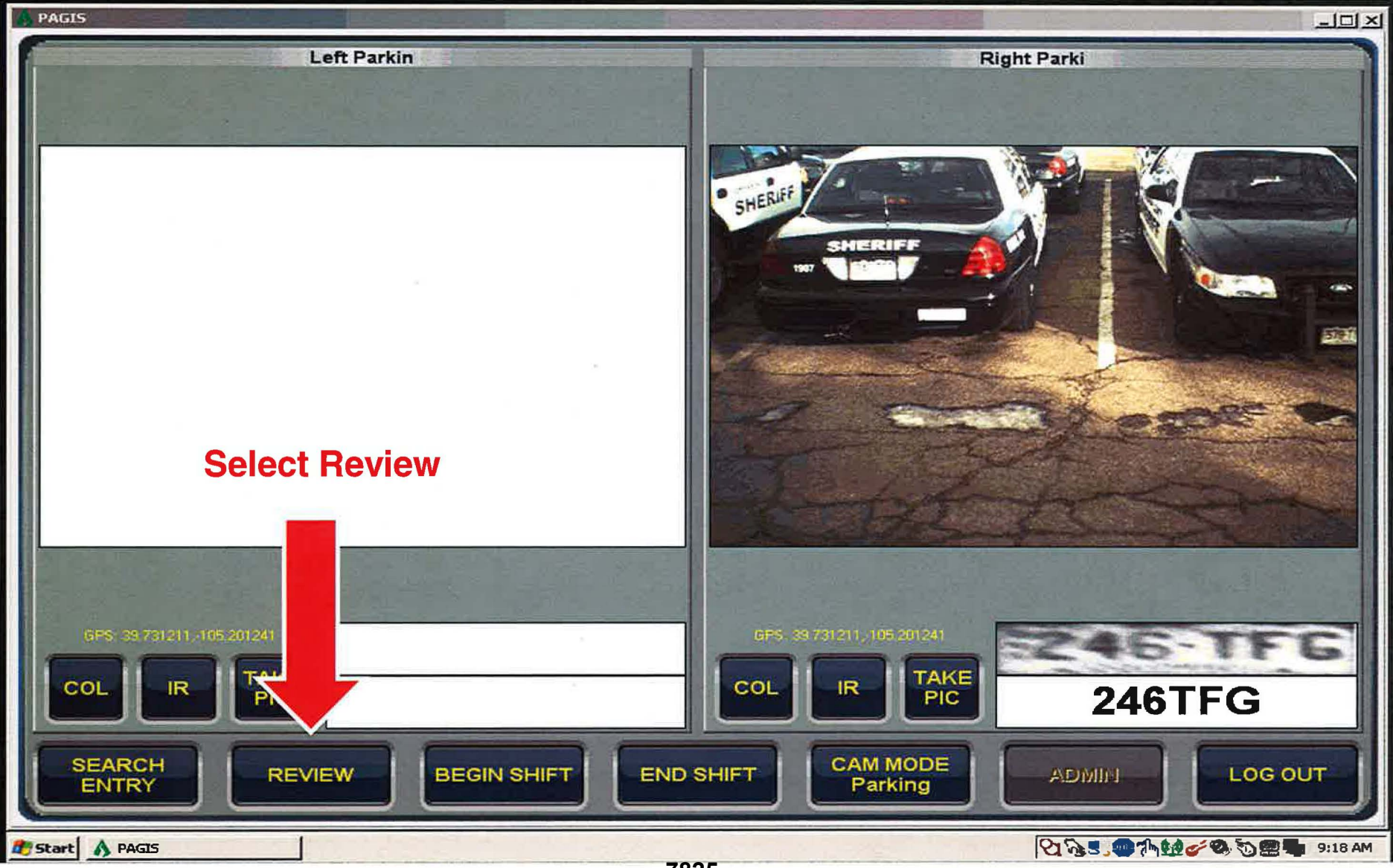
Badge No: is your network user name
Password: is your 7 digit ID number

PAGIS Operations
Click Twice on Begin Shift



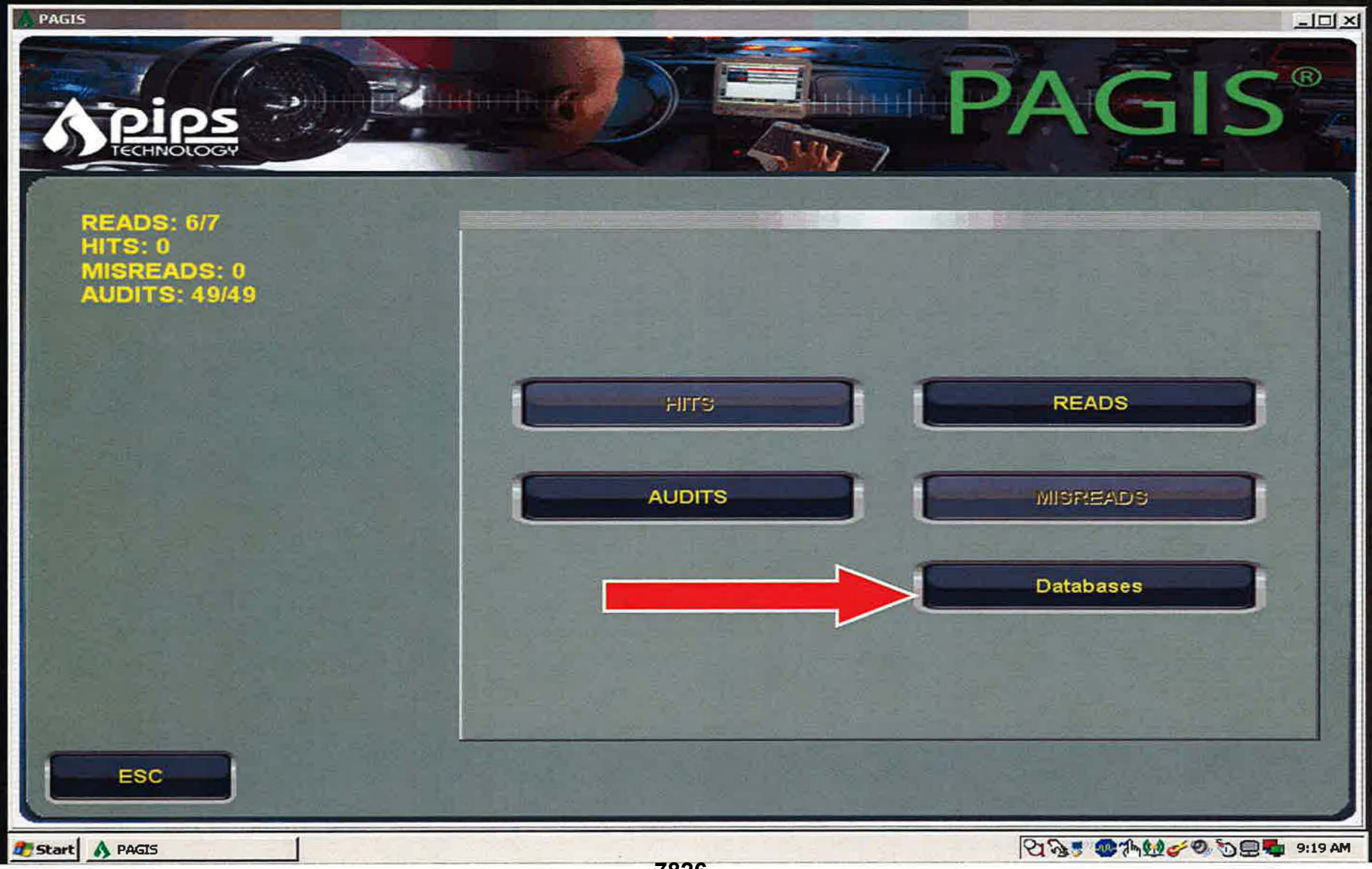
PAGIS Operations

Check Database Update



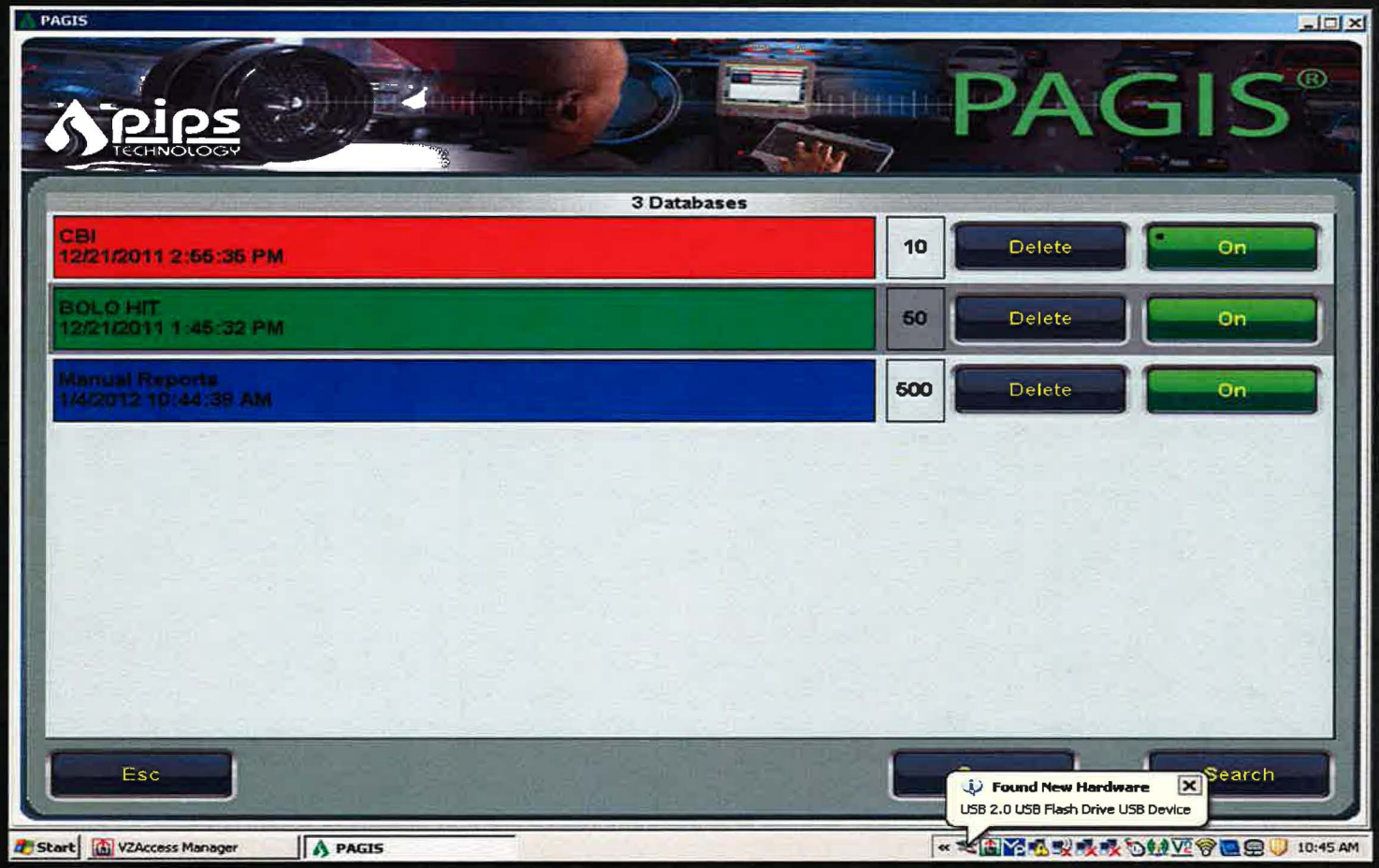
PAGIS Operations

Check Database Update



PAGIS Operations

Check Database Update for current date and time indicating, that the sync was successful



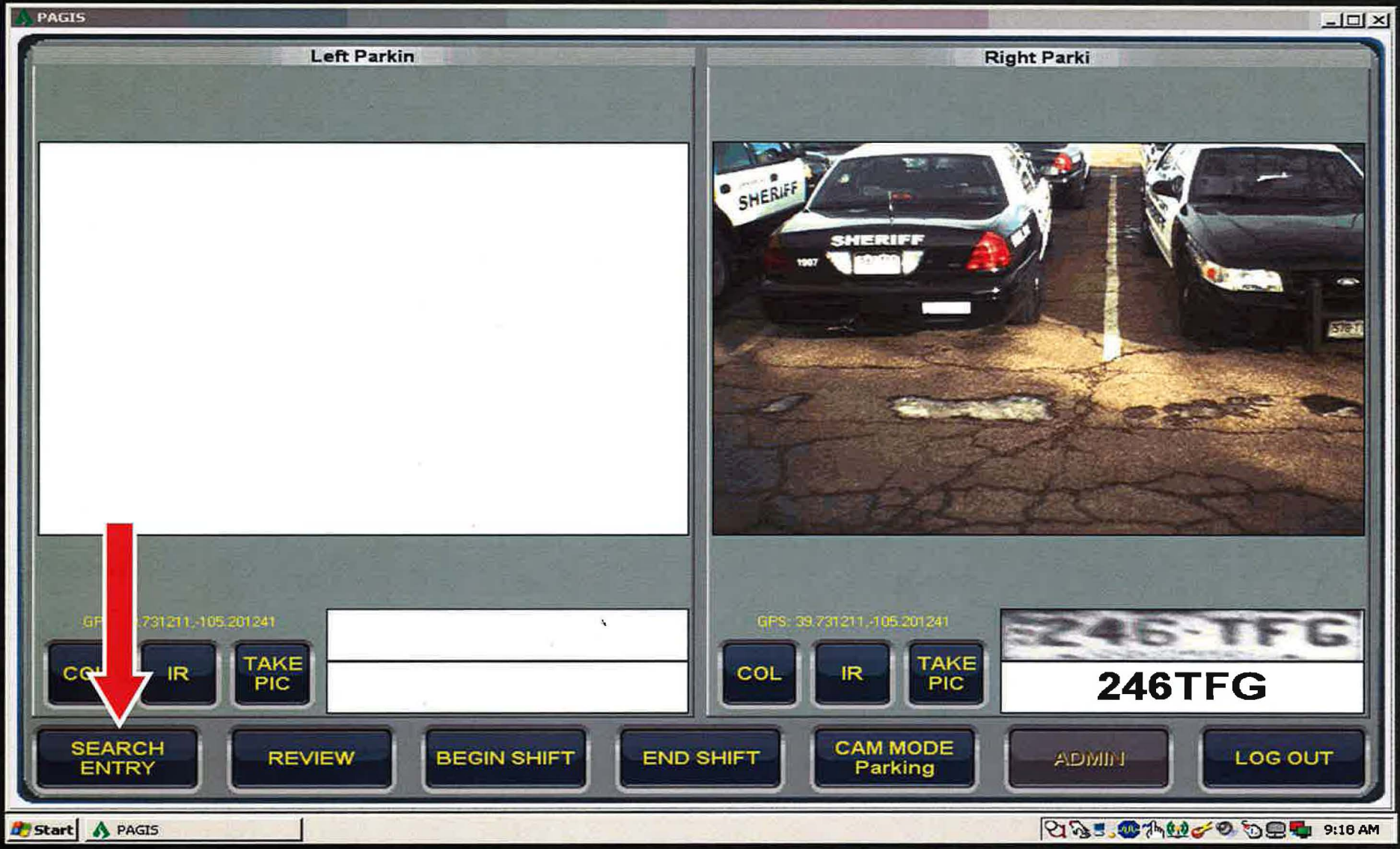
PAGIS Operations

Manual Entry

The PAGIS system utilizes the CBI file to compare the captured license plate from the ALPR system. However, there are times when a license plate of interest may not be in the CBI file. For example, when a BOLO is received from dispatch, or a vehicle is stolen after the CBI file was last downloaded. The user needs to be able to manually enter license plates of interest into the PAGIS system.

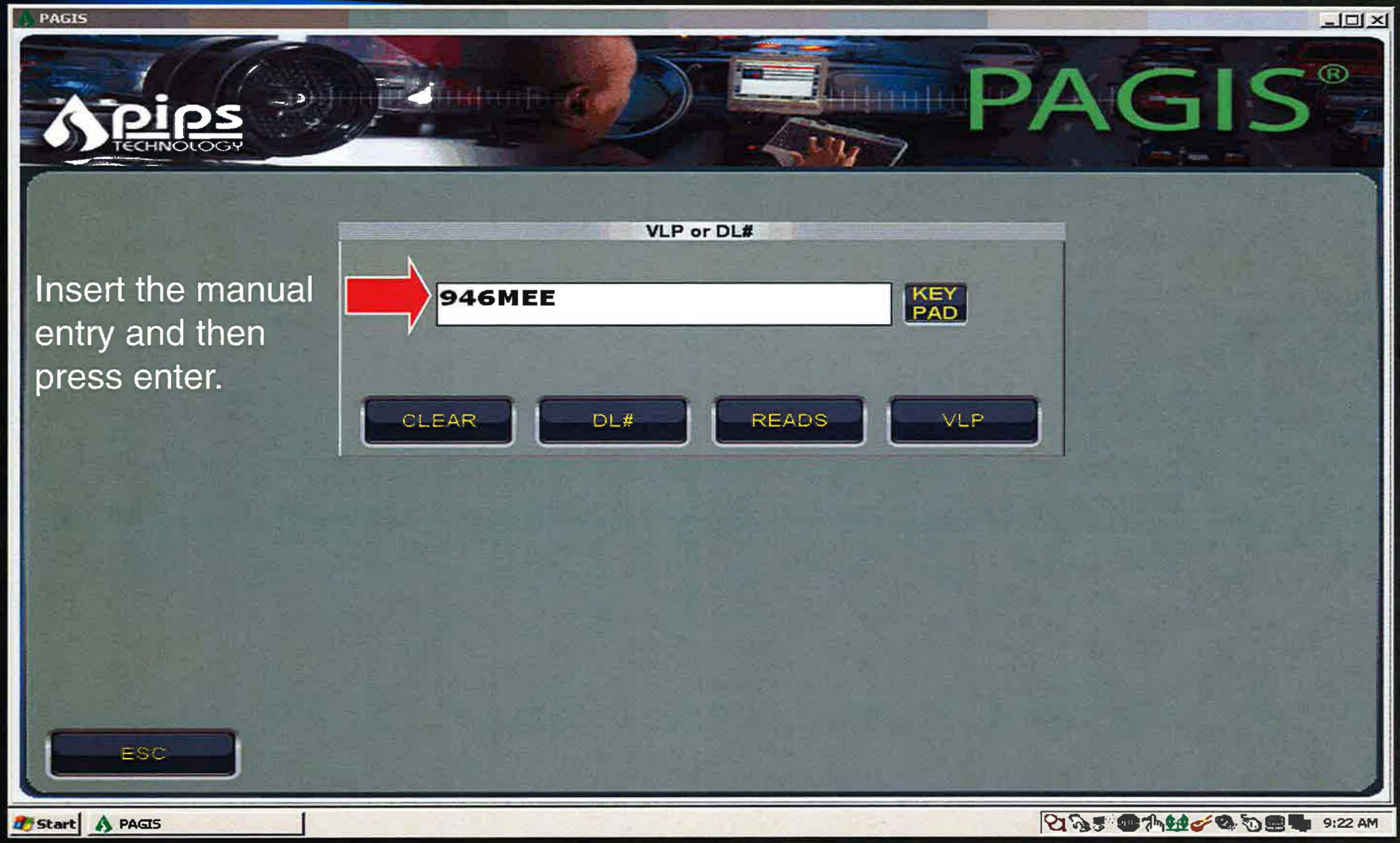
PAGIS Operations

Manual Entry – Click on Search Entry



PAGIS Operations

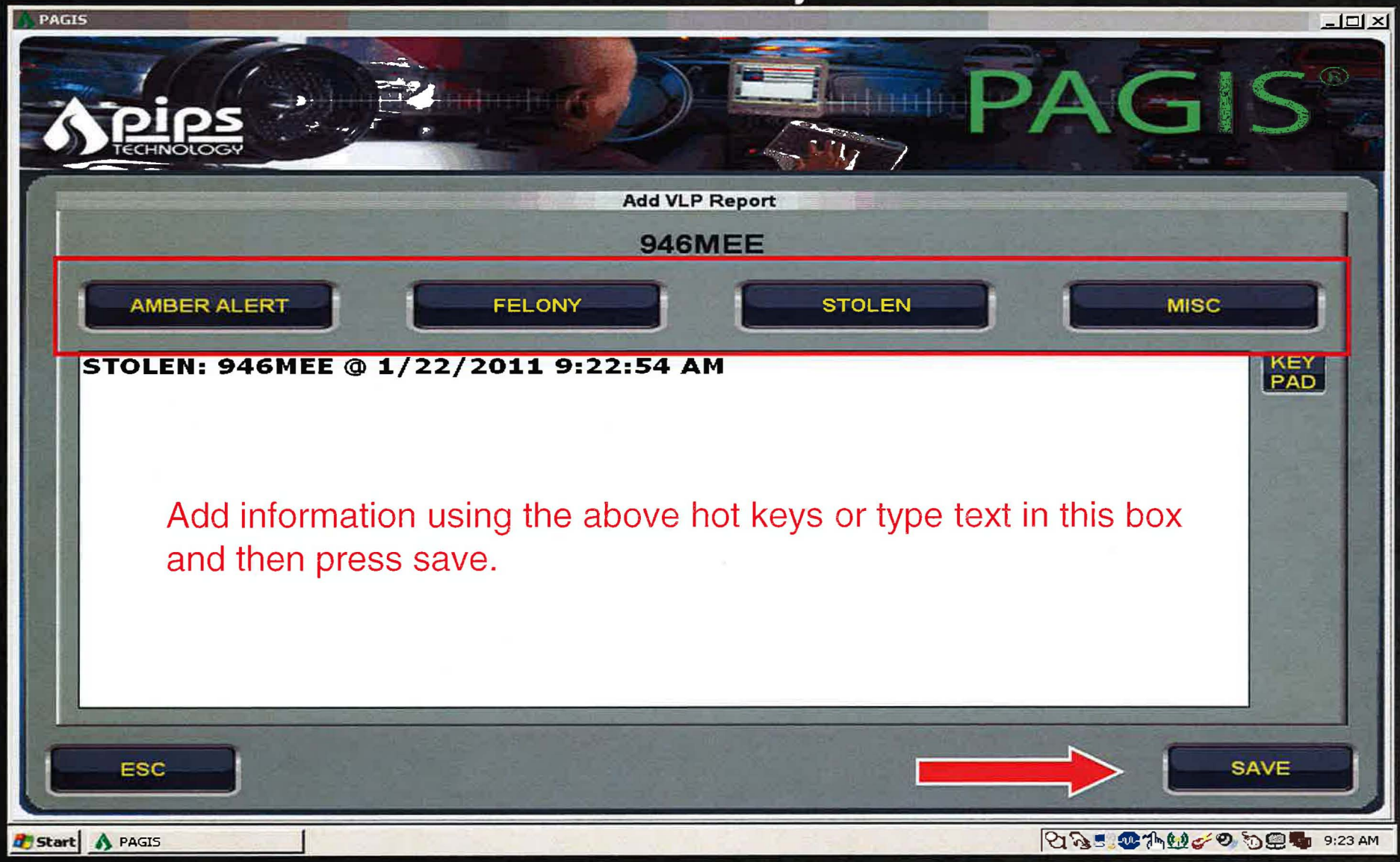
Manual Entry



Insert the manual entry and then press enter.

PAGIS Operations

Manual Entry



PAGIS Operations

Manual Entry

The manual entry is now stored into the PAGIS system, and PAGIS will alert the operator if the plate is captured.

PAGIS Operations

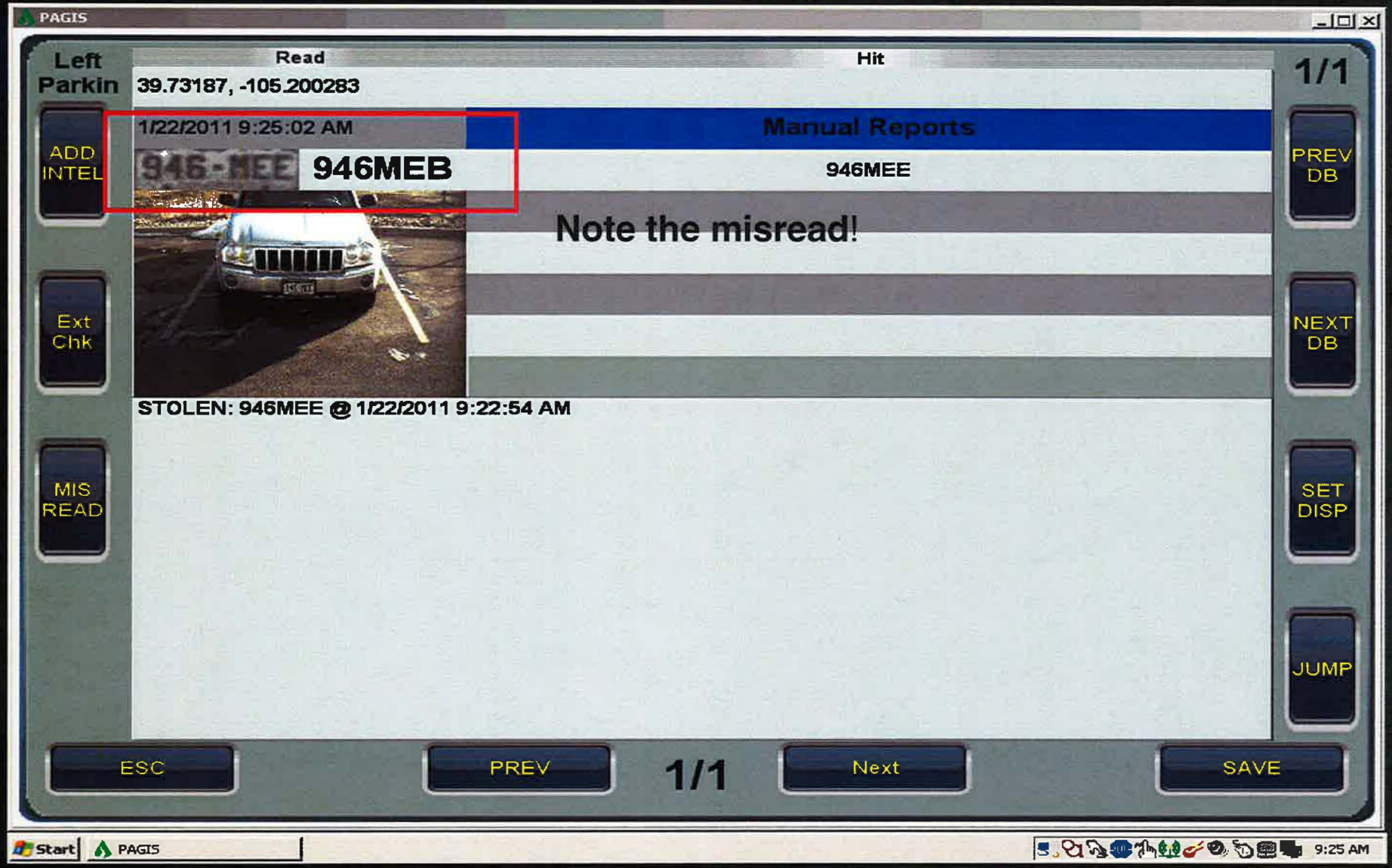
Misreads

The ALPR system has a 97% accuracy rate, and will generally read the captured plate correctly. However, there are times when the system does not read the plate correctly and performs a "misread."

It is imperative that you know how to properly handle a HIT when the system has misread the license plate.

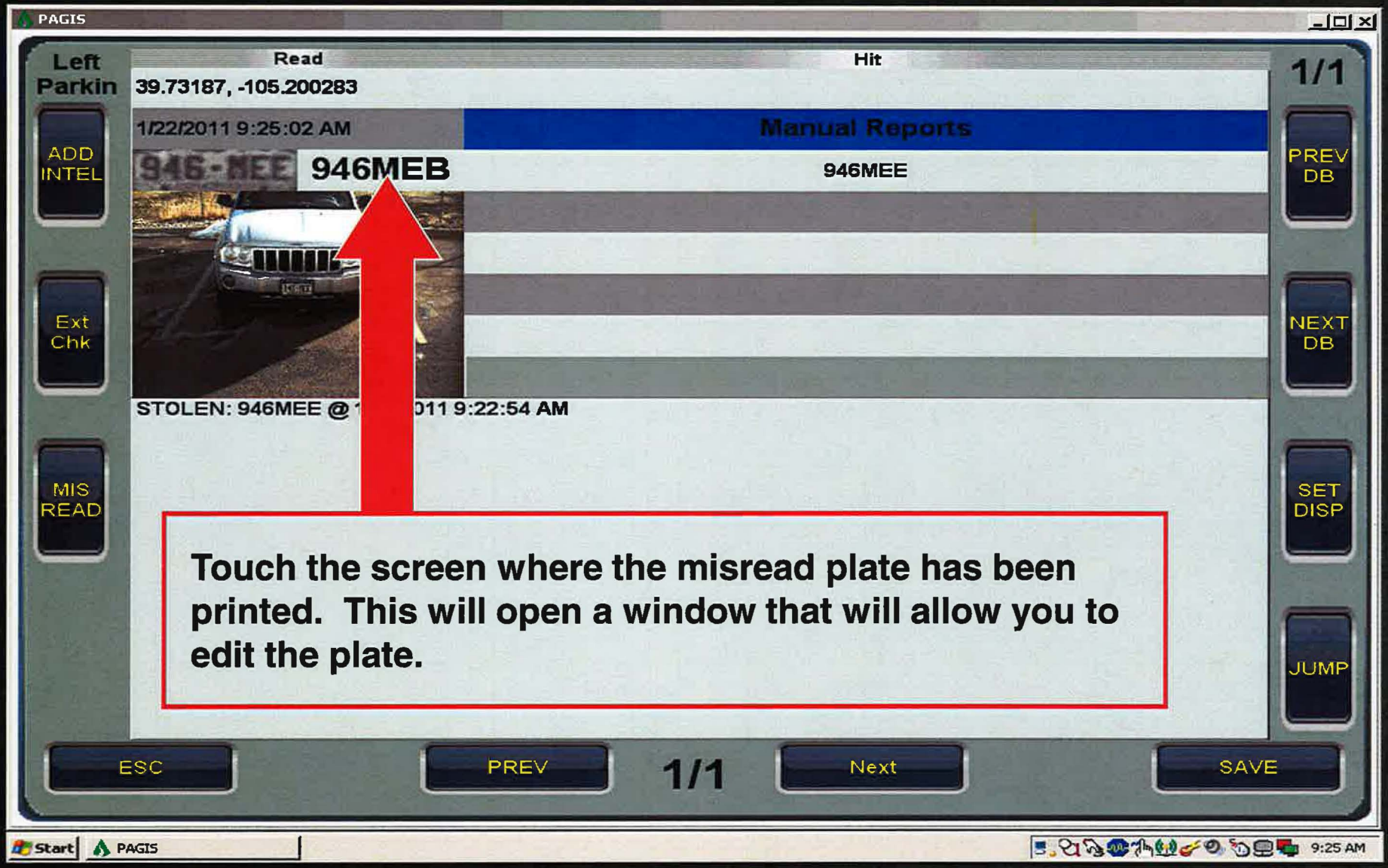
PAGIS Operations

Misread



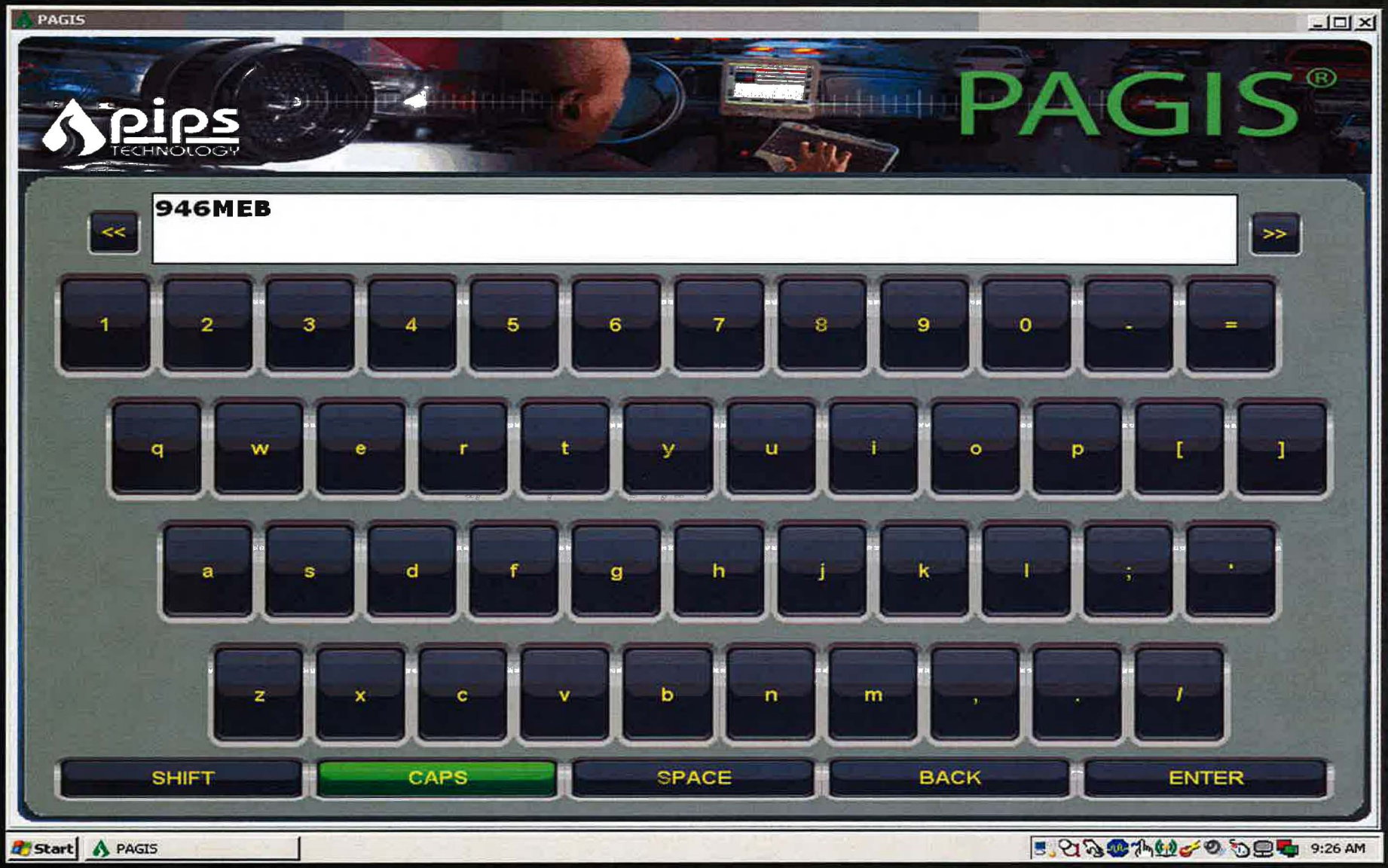
PAGIS Operations

Misread



PAGIS Operations

Misread



PAGIS Operations

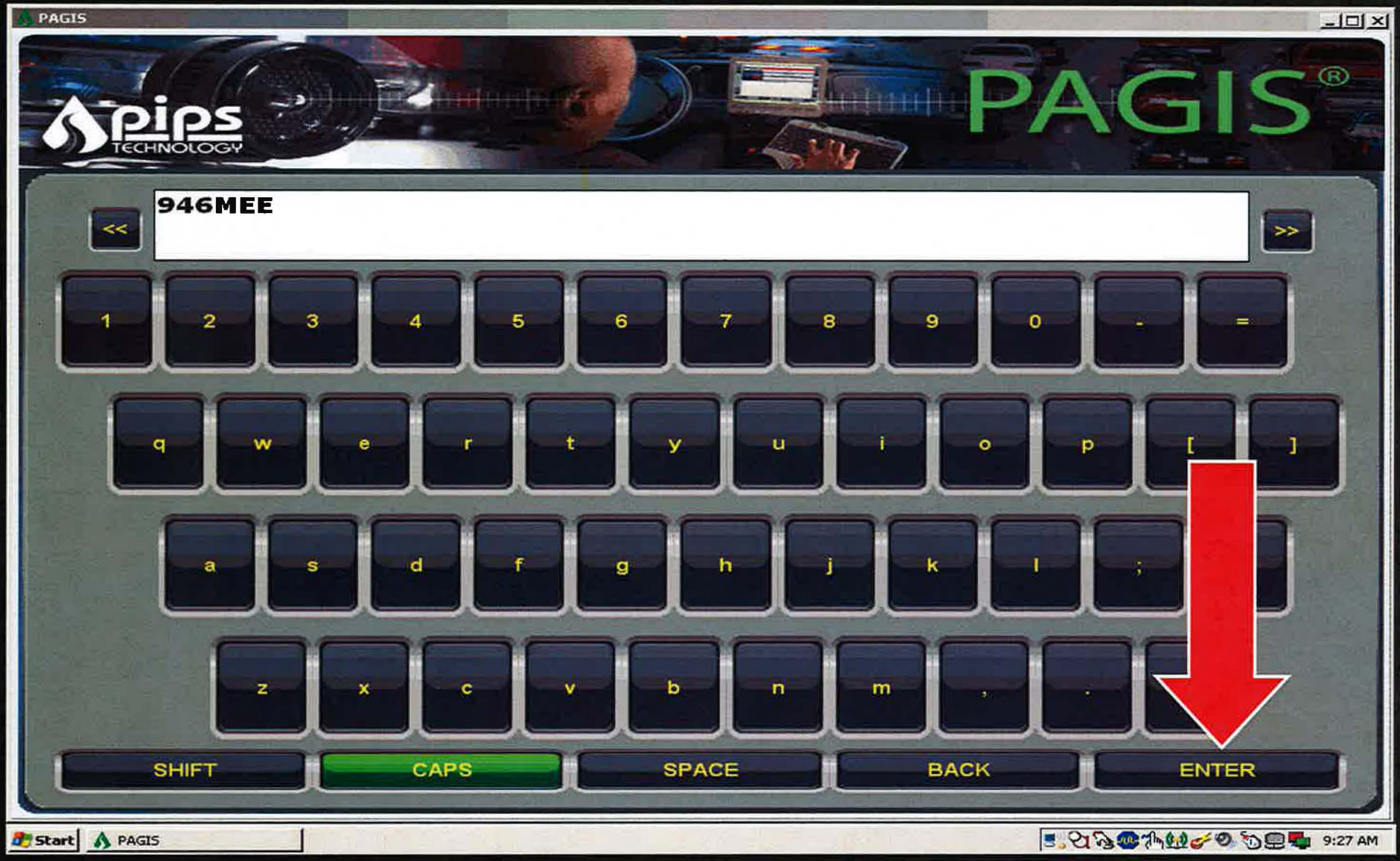
Misread

You can either use the touch screen keyboard or the laptop keyboard to correct the misread.

Once you have updated the correct license plate, press the on screen “Enter” button.

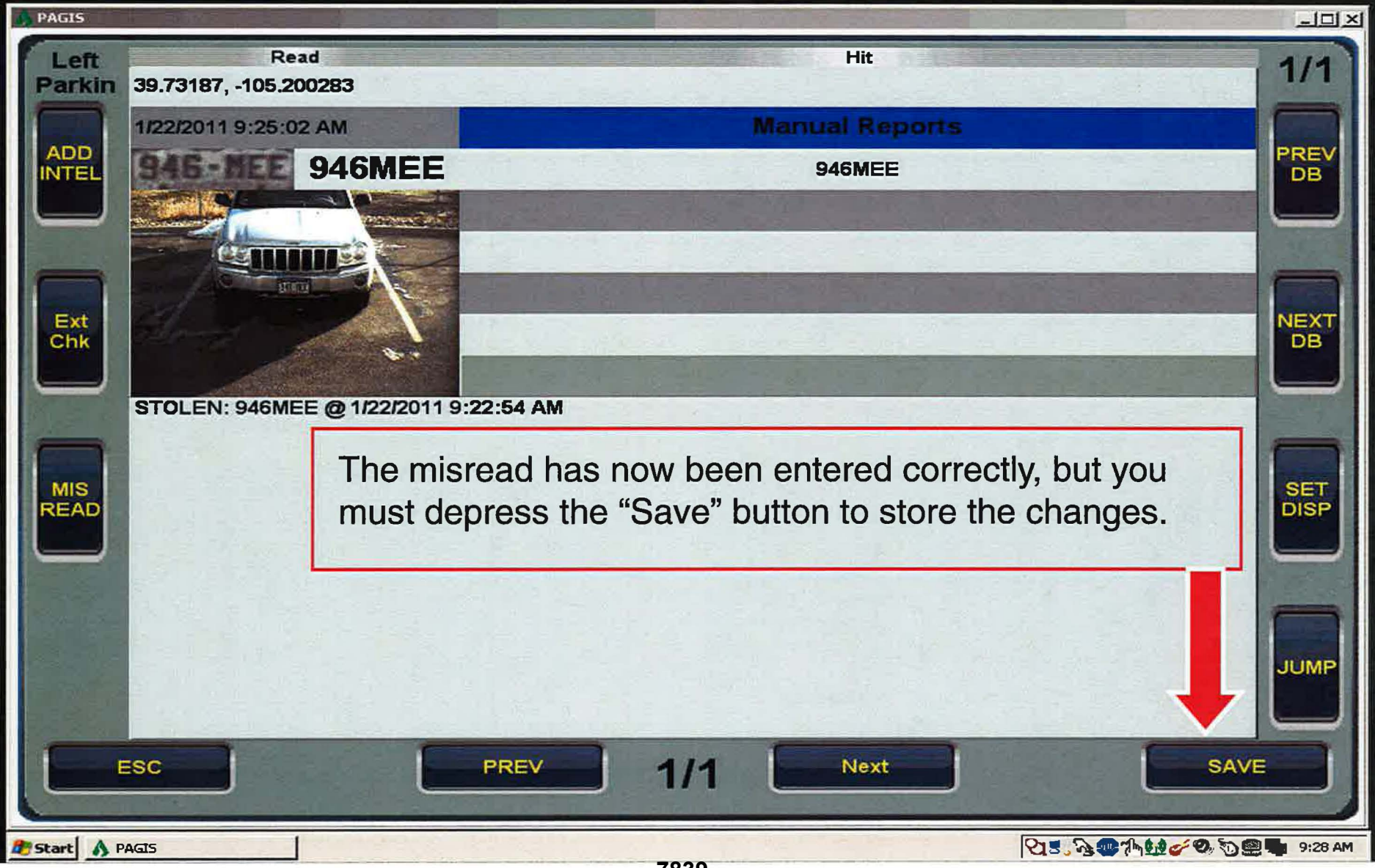
PAGIS Operations

Misread



PAGIS Operations

Misread



PAGIS Operations

Misread

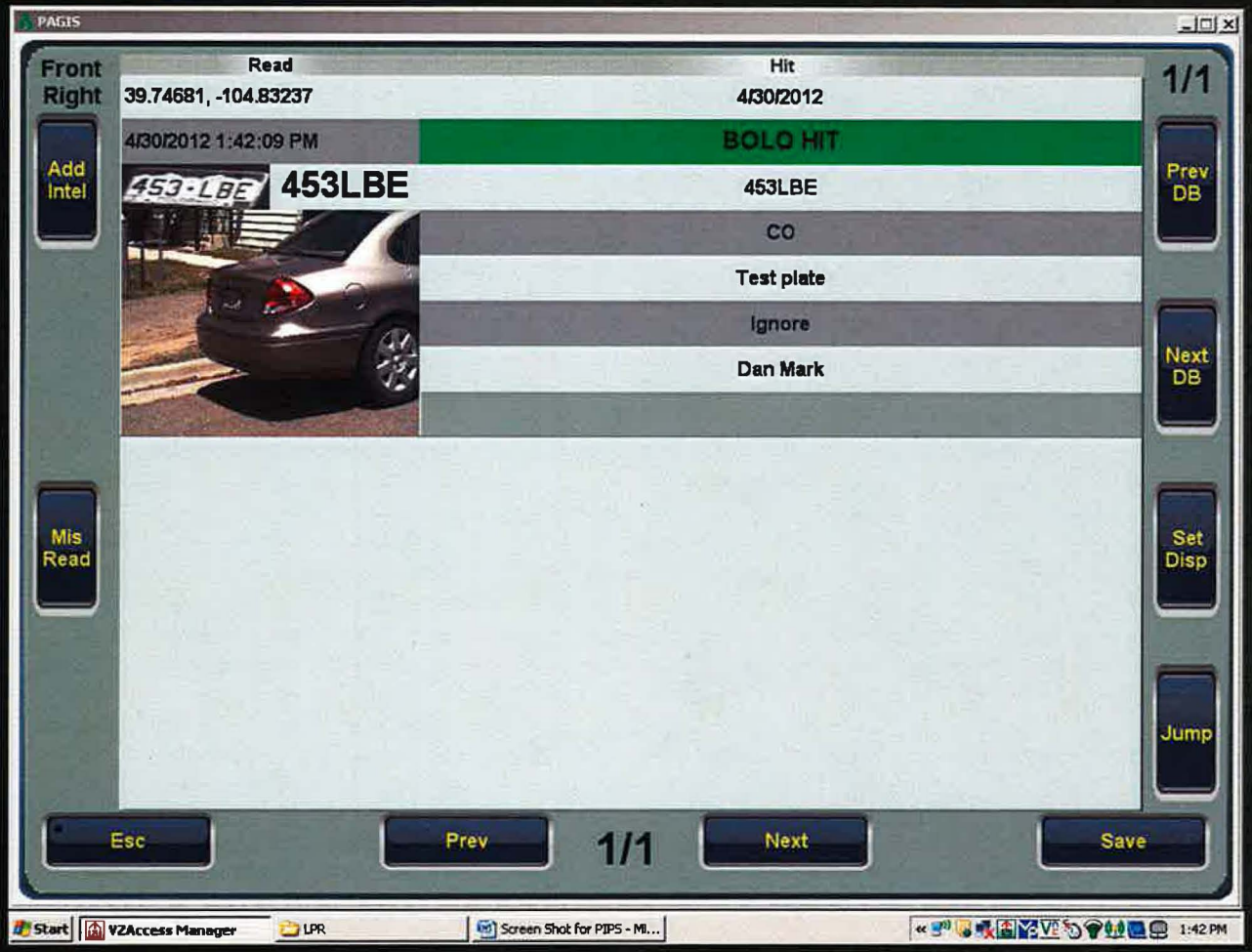
DO NOT USE THE MISREAD BUTTON!

PAGIS Operations

Misread

SERIOUSLY, DO NOT USE THE MISREAD BUTTON!

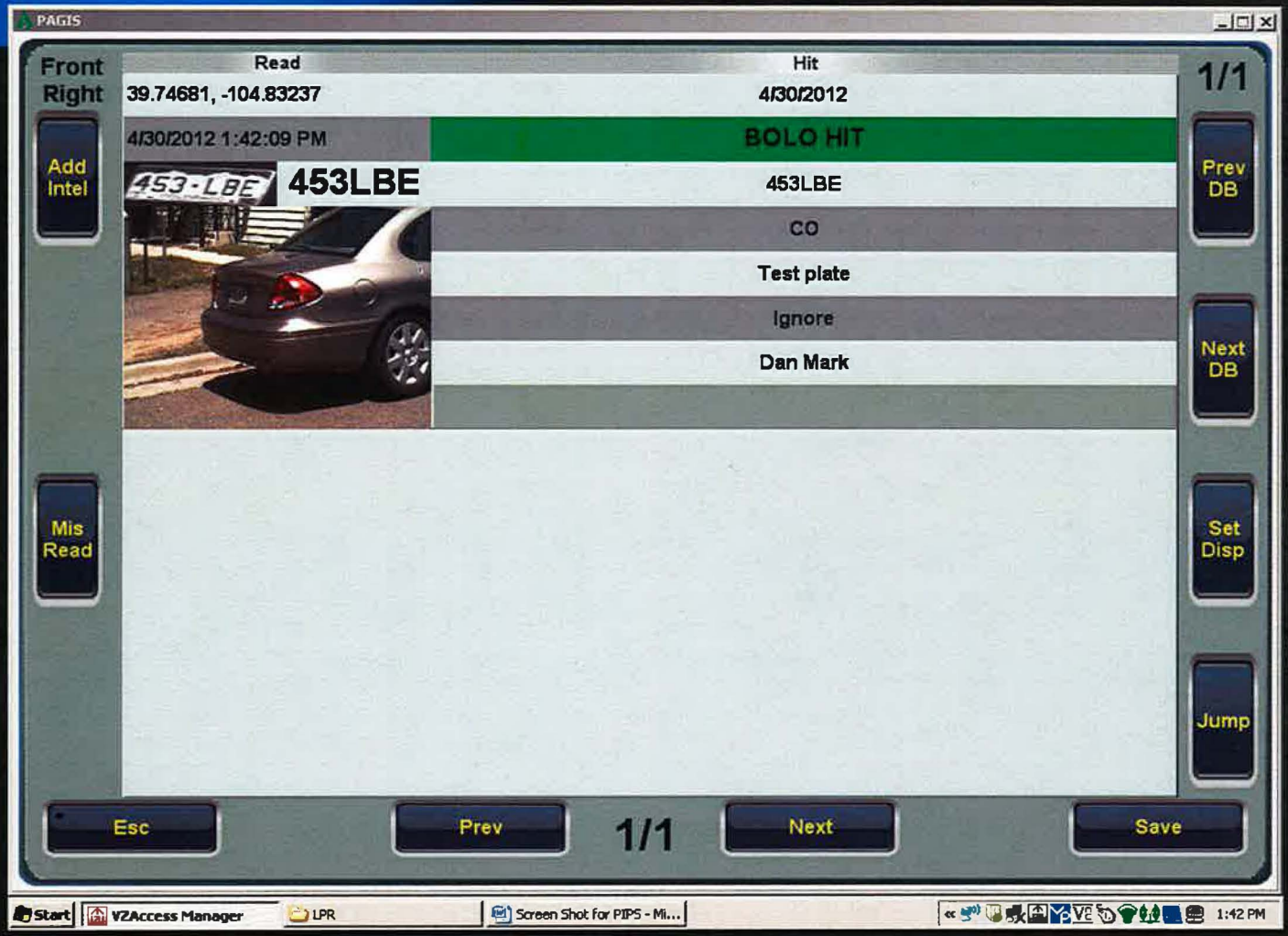
New window will appear when there is any type of hit!



You need to complete a disposition!

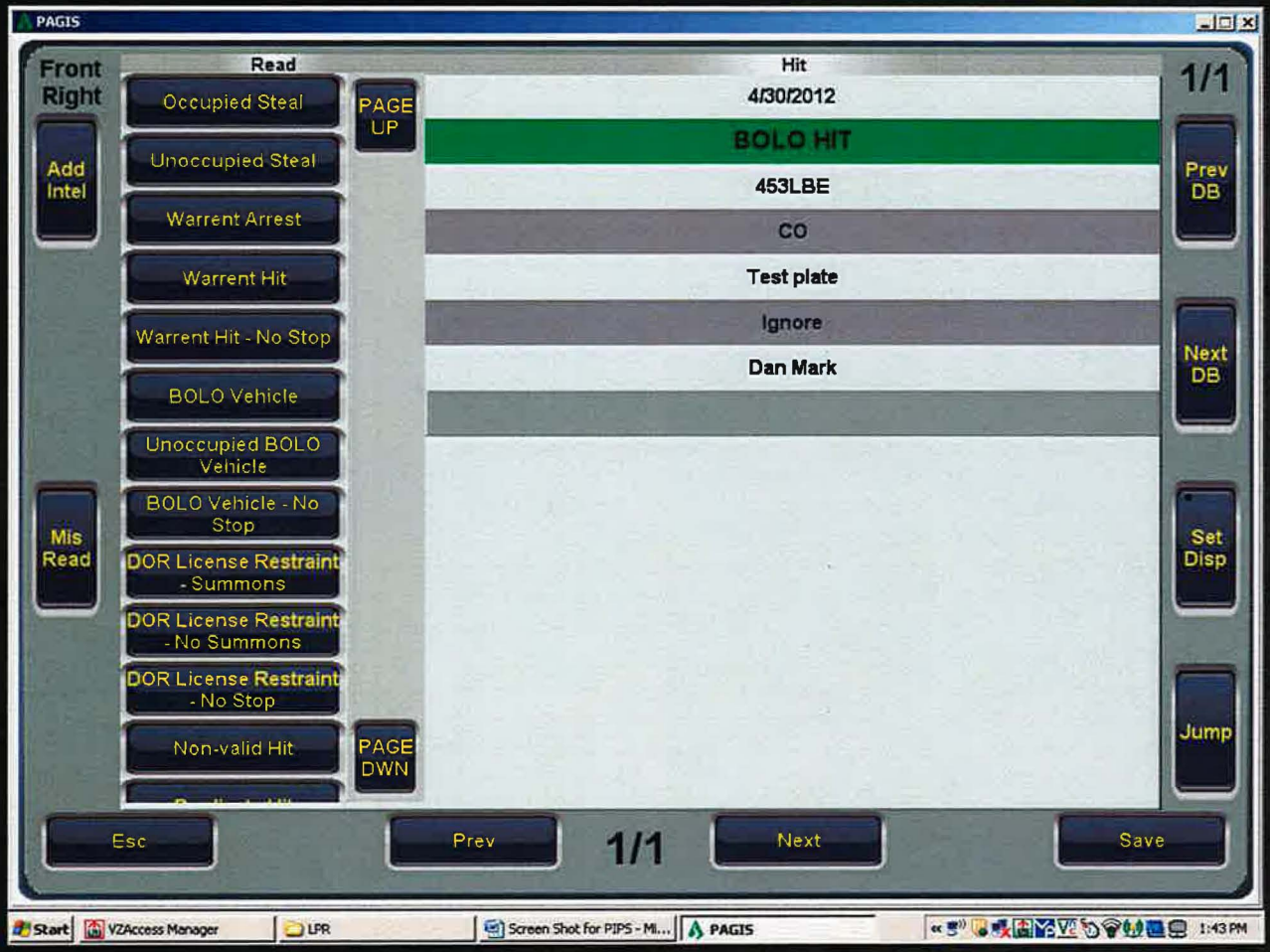
- You can complete the disposition at the end of your shift (not recommended)
- 3 easy steps to complete disposition
- Click on “Set Disp” and a new window will appear

Click Set Disp

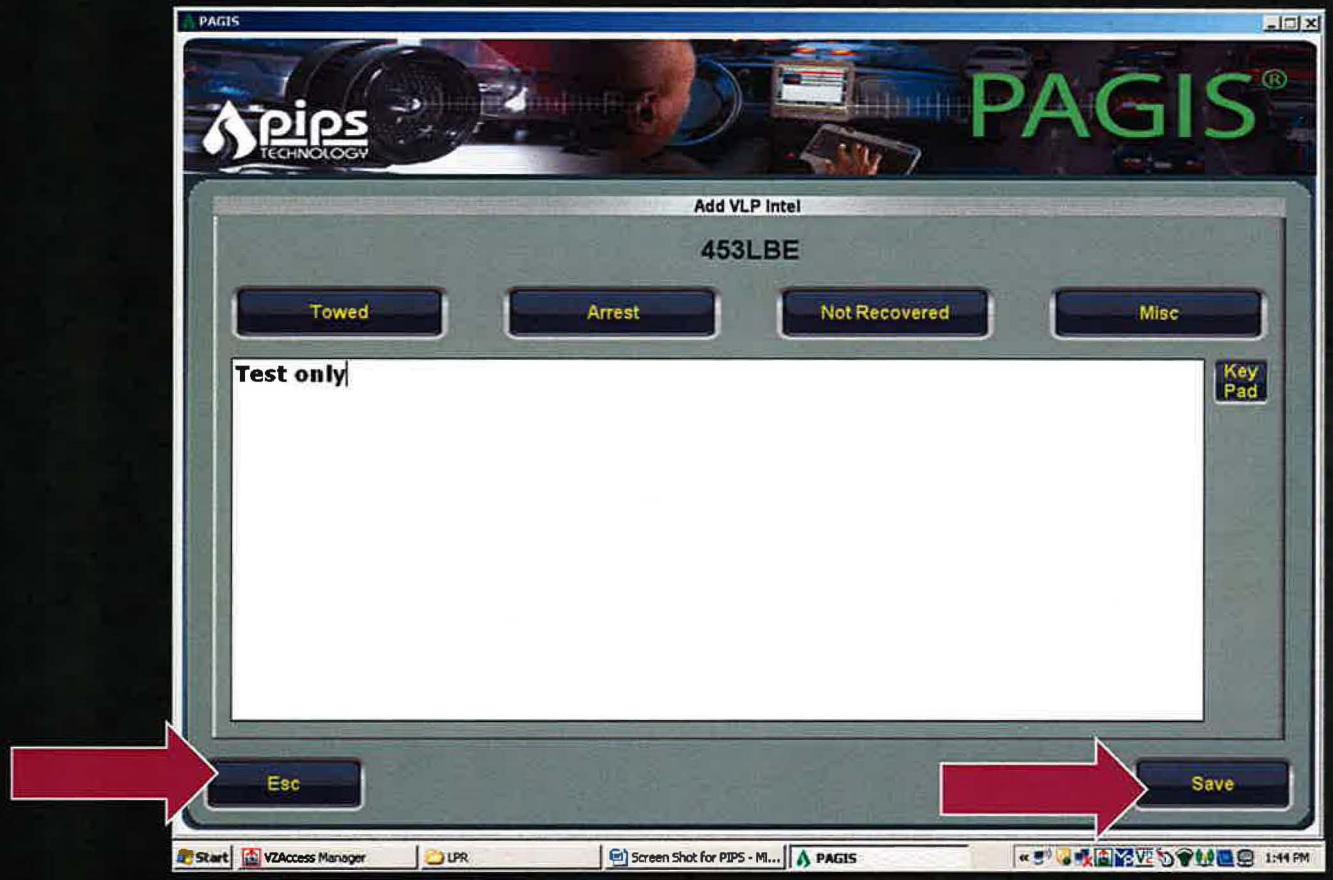


A new window will appear with a list of dispositions. Choose the most appropriate!

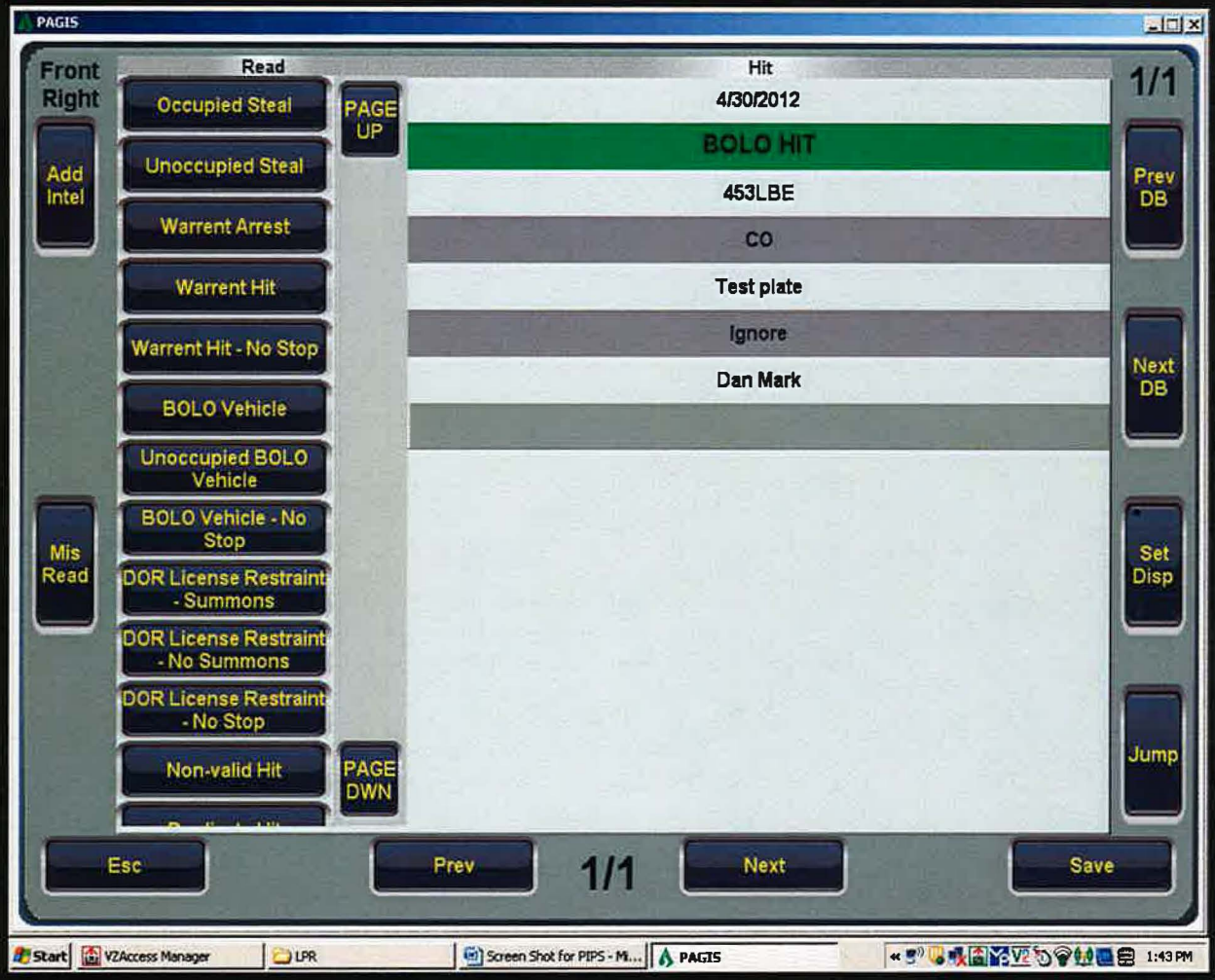
Add remarks using Add Intel – they can be very brief such as "1 arrest made see # 2012-12345"



Click the most appropriate dissposition and add your remarks. Make sure to Save your work before you Esc



Again make sure to Save your work before you Esc



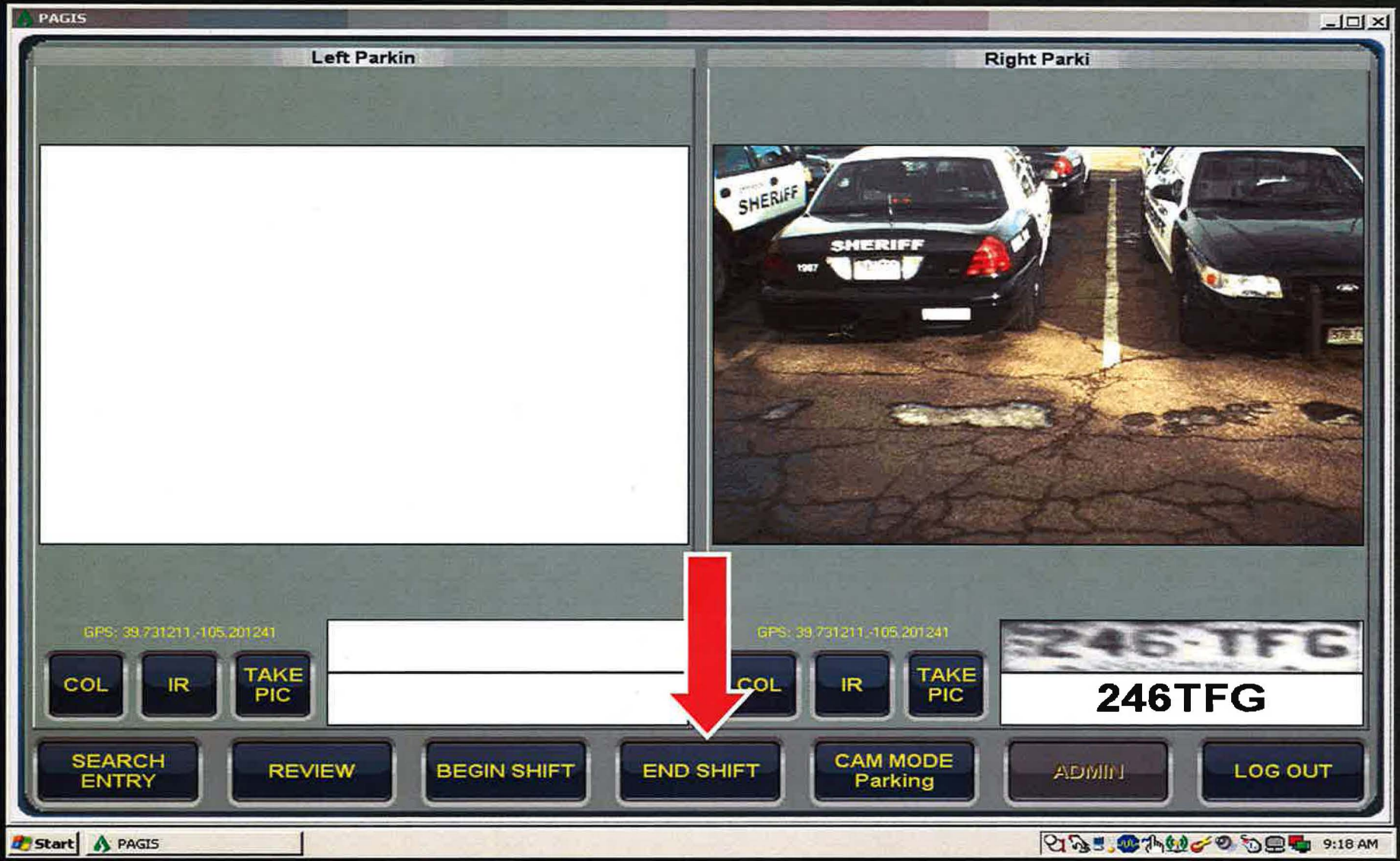
PAGIS Operations

End Shift

At the end of the shift, the user needs to successfully transfer the captured images to the BOSS system. This is accomplished by pressing the on screen button “End Shift” twice. The system will then transfer the files, and allow the user to log off.

PAGIS Operations

End Shift



Do's and Don'ts

- Don't clean the camera lens with alcohol or ammonia based cleaners. No Windex!
- Do be careful with the equipment.
  - Expensive
  - No funds are available to replace the equipment.
- Don't share the fact that you have an LPR system.
- Don't run the car through a car wash with brushes. It will damage the camera and the lenses.
- Do let us know if there is any type of issue that you experience with the equipment or logging in to the system. We can fix it.

ALPR Considerations

ALPR HITS

When the ALPR system indicates a "hit", the officer will:

•see a photograph of the license plate with an indication of the type of hit (i.e., attempt to locate (ATL), sex offender, associated felony and misdemeanor warrants, stolen vehicle and/or license plate with no additional information.

•confirm the license plate by visually checking the actual plate against the captured image.

•validate/confirm the hit by utilizing CCIC. This can be accomplished via the MDC or by making contact with dispatch.

-upon verification of the "hit" via CCIC the officer may take enforcement action pursuant to APD Policy and Procedures.

Troubleshooting

ALPR/PAGIS Common Errors

1. The CBI files are not loading into PAGIS.

   Solution: Contact the Electronic Support Section .

2. The screen goes blank, and the cameras will not display.

   Solutions:

   Close the program. Restart the PAGIS system. If this does not remedy the issue, Close the program and then turn off the car. The computer controlling the PAGIS system gets it's power from the car while running only.

   Contact the Electronic Support Section if this does not fix the issue.

3. PAGIS will not synchronize after pressing "End Shift."

   Solution: Contact Electronic Support Section .

4. The camera is not reading license plates.

   Solution: Contact Electronic Support Section .

PAGIS Operations

Questions??

Do not call the MDC Help Line

Contact the Electronic Support Section

Monday through Friday

0730 hours to 1630

Contact for questions

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