CHAPTER 8

CHANGEABLE MESSAGE SIGNS

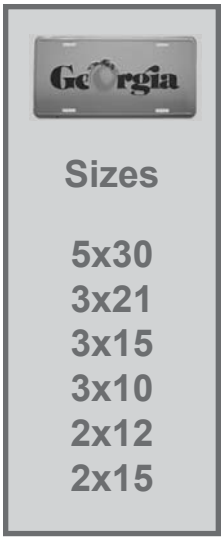
The Changeable Message Signs (CMS) are used to keep motorists informed on numerous conditions that affect travel. Some of this information is:

- Incident Information
- Travel Times
- Alternate Routes
- Lane Blockages
- Construction
- Special Events

SIZES

There are six different sizes, excluding the portable signs (Smart Zone). The size indicates the number of lines of text and the number of characters per line.

- 5 x 30: These are full matrix signs and are located on I-75/85 at University and Cofield Road
- 3 x 21: These signs are the most numerous



- 3 x 15: Some of the newer signs. These signs will not generate Response Plans (RP); you must make your own

- 3 x 10: These signs are located near the GA 400 Toll Plaza and over the HOV lanes. HOV signs come in pairs, such as 14th A and 14th B

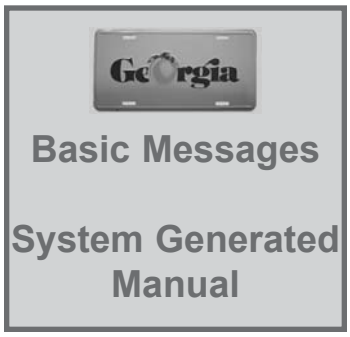
- 2 x 12 and 2 x 15:
  These signs are in Clayton (2 x 12) and Cobb (2 x 15)

TESTING SIGNS

When a new sign is installed a test message must run properly for 30 days and may only be used for emergencies during this time.

Field technicians may call into the TMC and request assistance from Operators. If requested, display test messages on sign at Override Priority. Use one of the test messages in the library and remove the test message as soon as possible.

MESSAGE TYPES



There are two basic types of messages used on the CMS:

- System Generated Message
- Custom Made or Manual Message

System Generated Message

A system generated message is automatically generated when an incident or other highway information is entered into the NaviGAtor system via a Response Plan (RP). The following may generate a message:

- Incident or Response Plan
- Travel times
- PDS system

Custom Made or Manual Message

You would use a custom message for the following:

- Special events
- Smog alerts
- Unusual circumstances
- Lane advice
- Received a bad RP message
- Weather alerts
- Amber Alerts (LEVI's Call)

Special Note

In order to change a sign message, you must save it to a new file. This is especially important when entering a "Levi's Call" message. After entering a "Levi's Call" message and saving it, make a note of the message name in the system and provide this information to the NaviGAtor Support Personnel On-Call so they can transmit to all applicable signs.

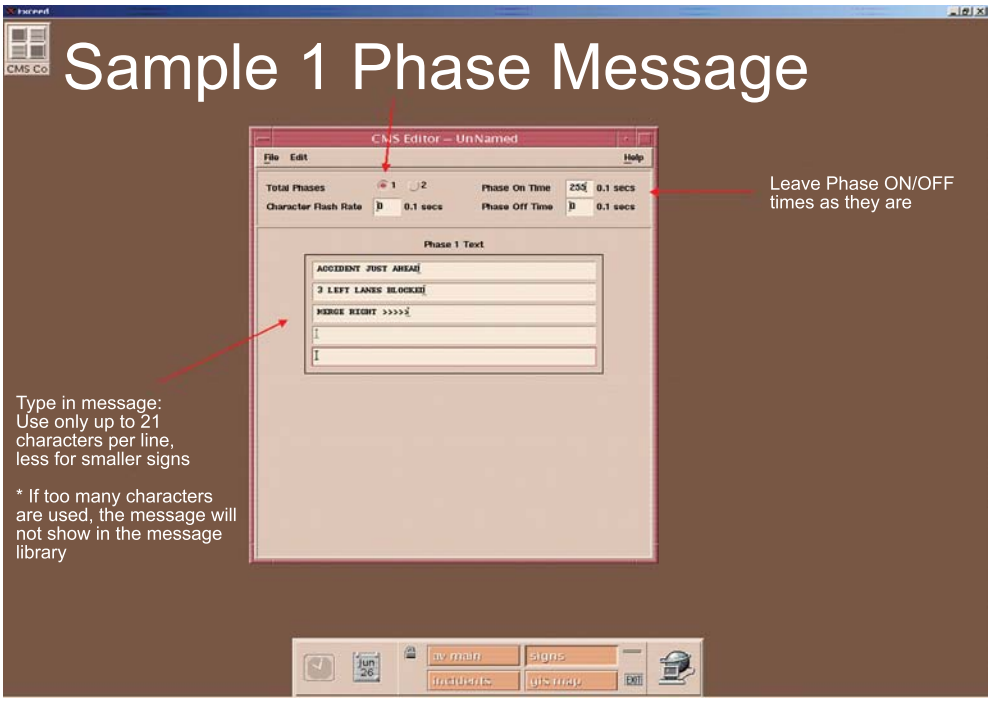
Lost Communications

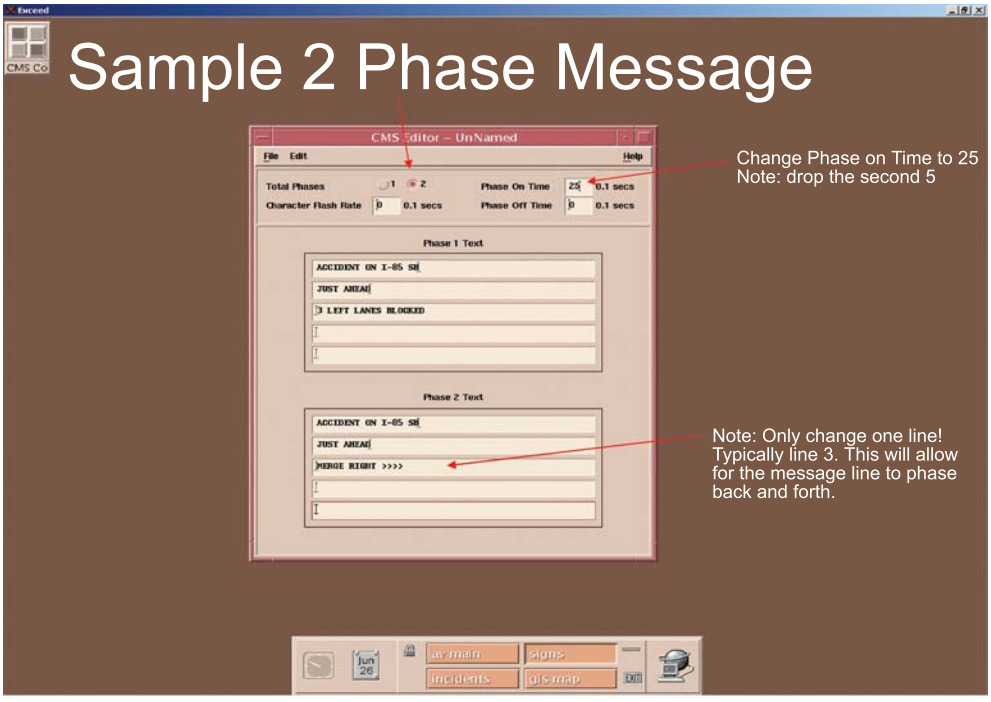
When a sign loses communication the software may still say that the sign is displaying the message, but the COMM STATUS changes to Lost Communications.

- The signs are set up to "time out" after 45 minutes of no communications
- Once a sign has "timed out", the signs will display a default message - in most cases AAA PIXEL
- HOV signs will display "HOV LANE ENFORCED 24 HOURS/DAY or something similar if they time out
- In the case of a "timed out" sign, the software WILL NOT tell you that the signs went to a default message
- If a message appears to be stuck on a sign because the sign lost communications while the message was displayed, the message is actually not likely to be on the sign, it is probably displaying pixel (if 45 minutes have elapsed)
- Verification by getting a HERO to check the sign in person or by using a camera
- If the message is actually stuck on the sign, then at that time, it is appropriate to contact a technician to take it down. In most cases that is not the case and therefore the operator should verify that the message is stuck before dispatching a technician.

ONE-PHASE VS TWO-PHASE MESSAGES

Most messages are one-phase messages. They are simple, short, and easy to read. In some cases, two-phase messages must be used. When two-phase messages are used, do not overload the motorist with too much information; allow only the third line to change phase.





MESSAGE COMPOSITION

Messages should be consistent. Using the messages in the library should always be your first choice and only if none are appropriate should you then consider making your own. Messages should be short with as few abbreviations as possible. Follow the RP style; do not use periods and remember there is no spelling or grammar checker, so double check your message prior to posting it.

Basic Accident Message

This is the approved look for a custom accident message. The first line of text tells the type of incident and highway/direction. The second line of text tells the location and the third line of text tells the number of and which lanes are blocked. If unsure of exact location, use the word "NEAR" on line two (NEAR CLAIRMONT RD).

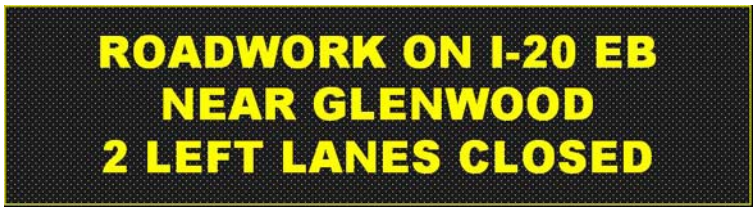
Basic Stall Message

This is the approved look for a custom stall message. The first line of text tells the type of incident and highway/direction. The second line of text tells the location and the third line of text tells the number of and which lanes are blocked. If unsure of exact location, use the word "NEAR" on line two (NEAR DELK RD).

Basic Debris Message

This is the approved look for a custom debris message. The first line of text tells the type of incident and highway/direction. The second line of text tells the location and the third line of text tells the number of and which lanes are blocked.

Basic Roadwork Message



This is the approved look for a custom roadwork message. The first line of text tells the type of incident and highway/direction. The second line of text tells the location and the third line of text tells the number of and which lanes are closed. Note the use of the word "Closed" versus "Blocked".

Basic Ramp Message

This is the approved look for a custom ramp message. The first line of text tells the type of incident and highway/direction. The second line of text tells which ramp and the third line of text tells the number of and which lanes are blocked.

Basic Shoulder Message

This is the approved look for a custom shoulder message. The first line of text tells the type of incident and highway/direction. The second line of text tells which ramp and the third line of text tells which shoulder is blocked.

Acceptable Custom Messages

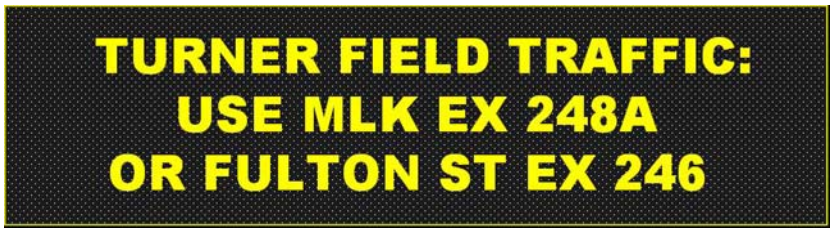
These are some additional examples of custom messages that are acceptable.

SPECIAL EVENTS

There are numerous special events that a CMS may be used for, but they are always traffic related unless specifically instructed by the Operations Manager. Some examples of special events are:

- Weather related circumstances
- Sporting events, concerts or conventions
- Ramp closures due to "cruising"
- Emergency roadwork
- VIP motorcades
- Abducted children/Amber Alert (Levi's Call)
- Acts of terrorism

Weather Related Messages



Sporting Event Messages

For the other special event messages, a supervisor will provide the wording depending on the circumstances. These special events include: acts of terrorism, ramp closures due to "cruising", emergency roadwork, VIP motorcades, and abducted children/Amber Alert.

Sports

Scores are never authorized on the signs.

SPECIAL CHARACTERS

The signs are capable of displaying many different types of arrows. The following keys make the indicated arrows:

	Display	Description	Key Stroke
•		Left Arrow:	<
•		Right Arrow:	>
•		Up Arrow:	~ (tilde) (next to 1 key)
•		Down Arrow:	` (next to 1 key)
•		Down to Left:	[
•		Down to Right:	]

FLASHING CHARACTERS

The signs cannot display flashing characters at this time. Ignore flashing character box (Character Flash Rate).

SPECIAL CIRCUMSTANCES

There will always be some signs that have problems; you should remain aware of these issues as some of them will remain for the life cycle of the sign. For example:

- Shallowford, Wesley and International Blvd sometimes do not accept two-phase messages
- Full matrix signs (University and Cofield) do not accept two-phase messages ever and often do not accept manual or overrides
- When signs go into "blank due to pixel failure" you can fix it by turning the sign off and then on and sending a new message
- CMS 402 is assigned to MARTA. DO NOT USE!

RESTRICTED MESSAGES

The CMS is designed for and only will be used for authorized ***traffic related information***, unless the Operations Manager tells you otherwise. Some of the prohibited items are:

- Advertising
- Sports scores
- Showing any kind of support for a sports team
- Offensive language
- Personal messages or greetings

Prohibited

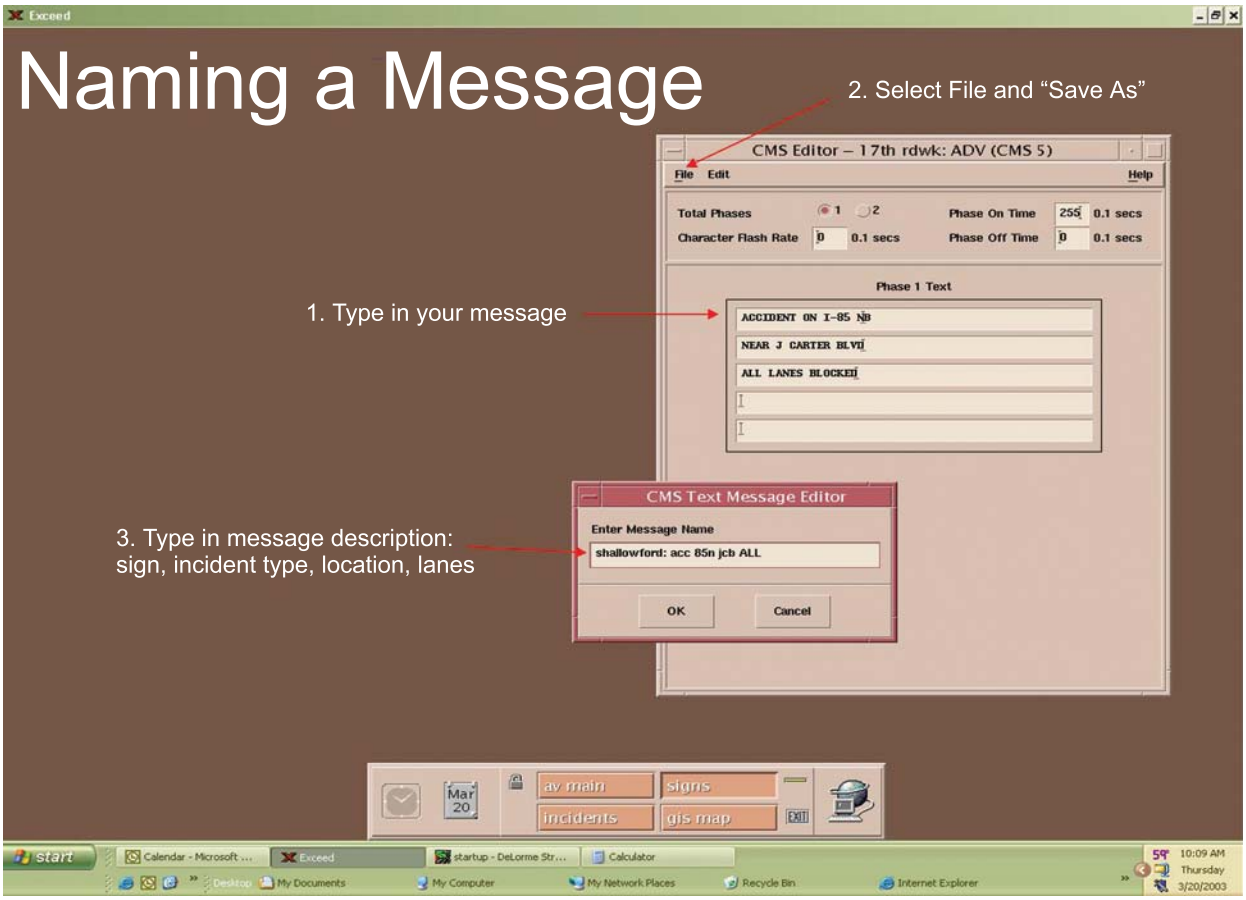
Advertising
Sport Scores or Support
Offensive Language
Buckle Up

NOTE! Requests made by the Governor or Commissioner shall be honored.

NAMING A MESSAGE

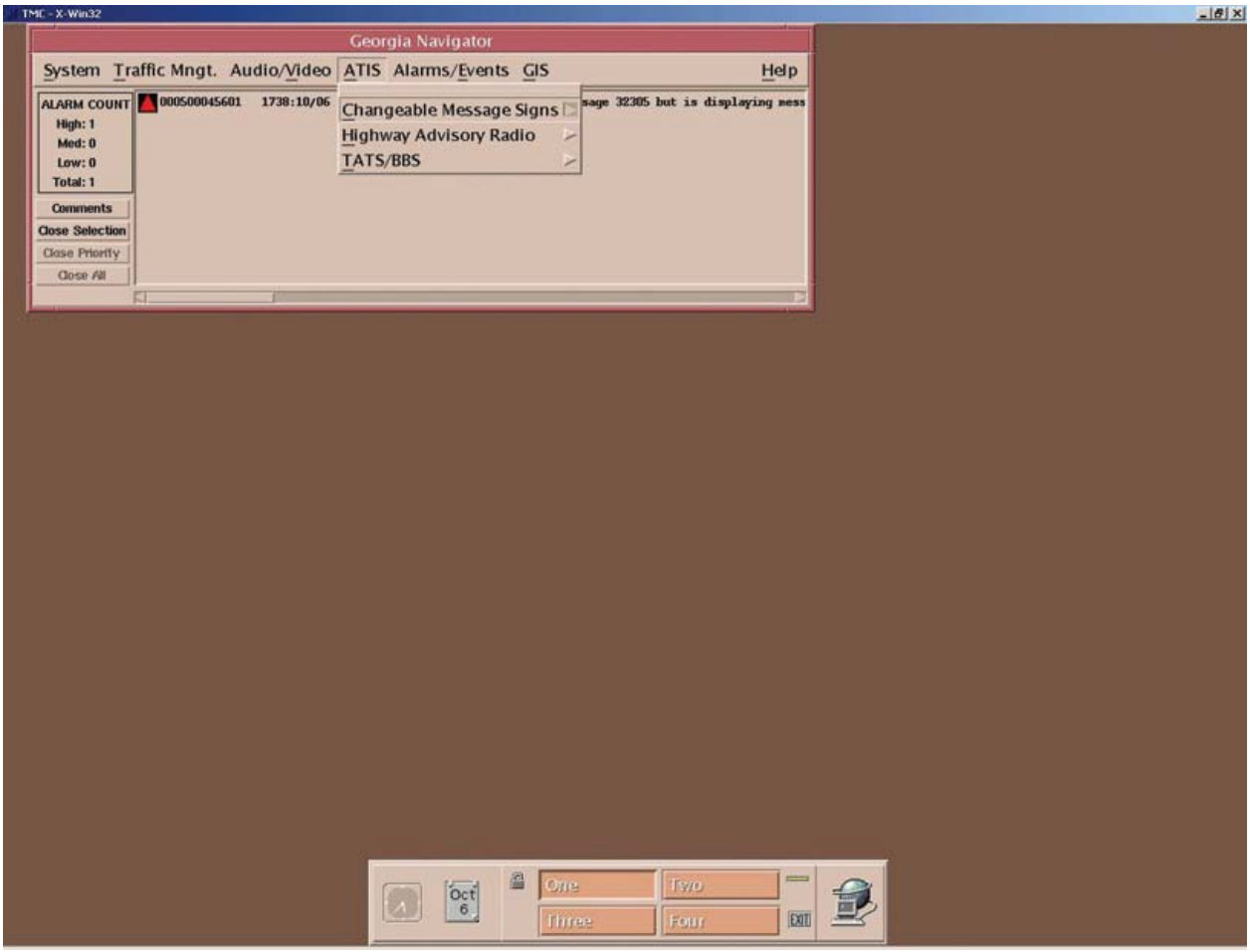
All manually created messages must be named with short and simple titles. Messages used often begin with capital letters. Messages used once begin with lower-case letters. Use the sign name in the title if appropriate. If you use commas in the title, you will not be able to delete it from the library when done with it. Some examples are:

- Good message titles (sign, incident type, location, lanes)
  - shall-acc:jcb:2ll
  - collier-stall:windy
  - roswell-rdwk for 4/19
- Not so good message titles (too long, caps, commas, etc.)
  - ACC::675::2LEFT::FRI:MAR2
  - ashford::stall::2ndleftlane:whitecamry::thurs
  - OPER12::575:41::4/18::ST
  - Const,75sb,mp 218

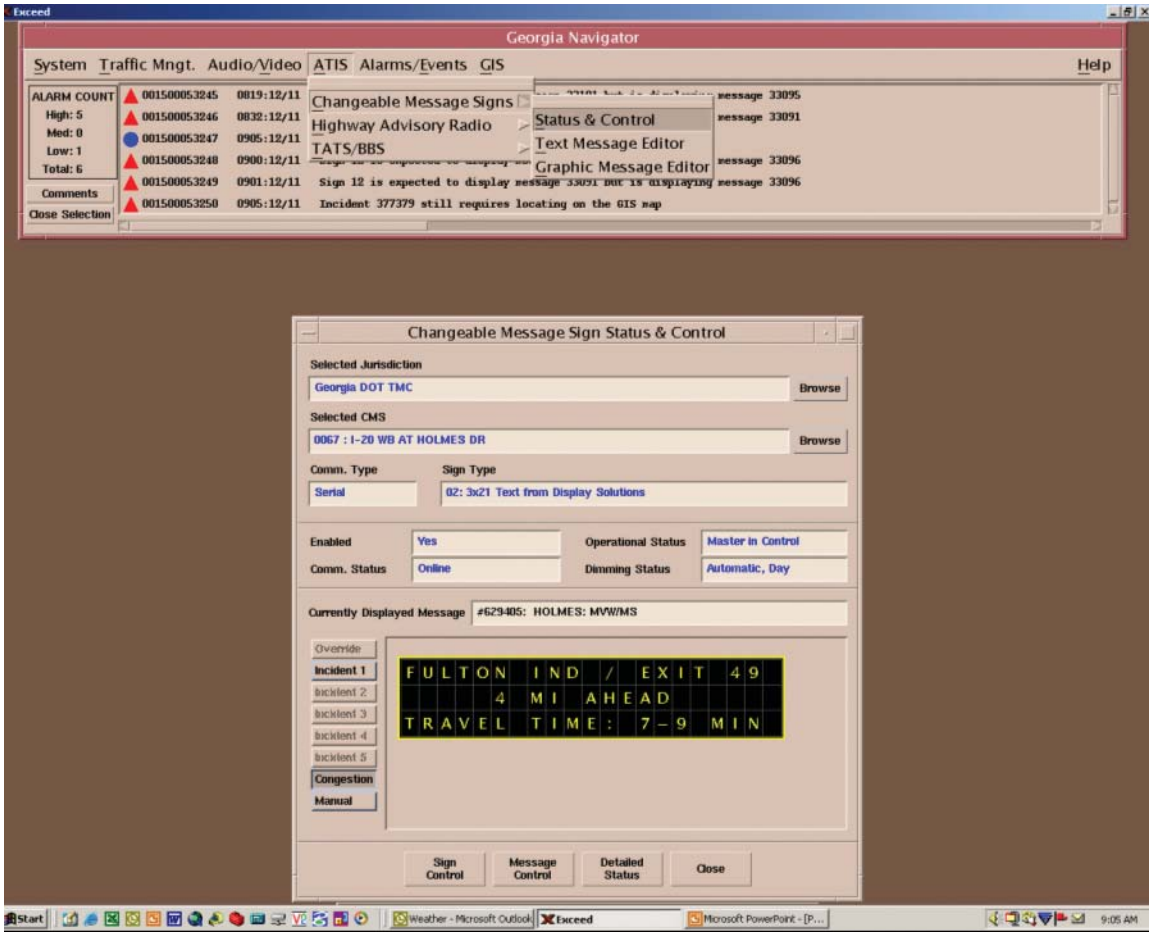


DISPLAYING A SIGN

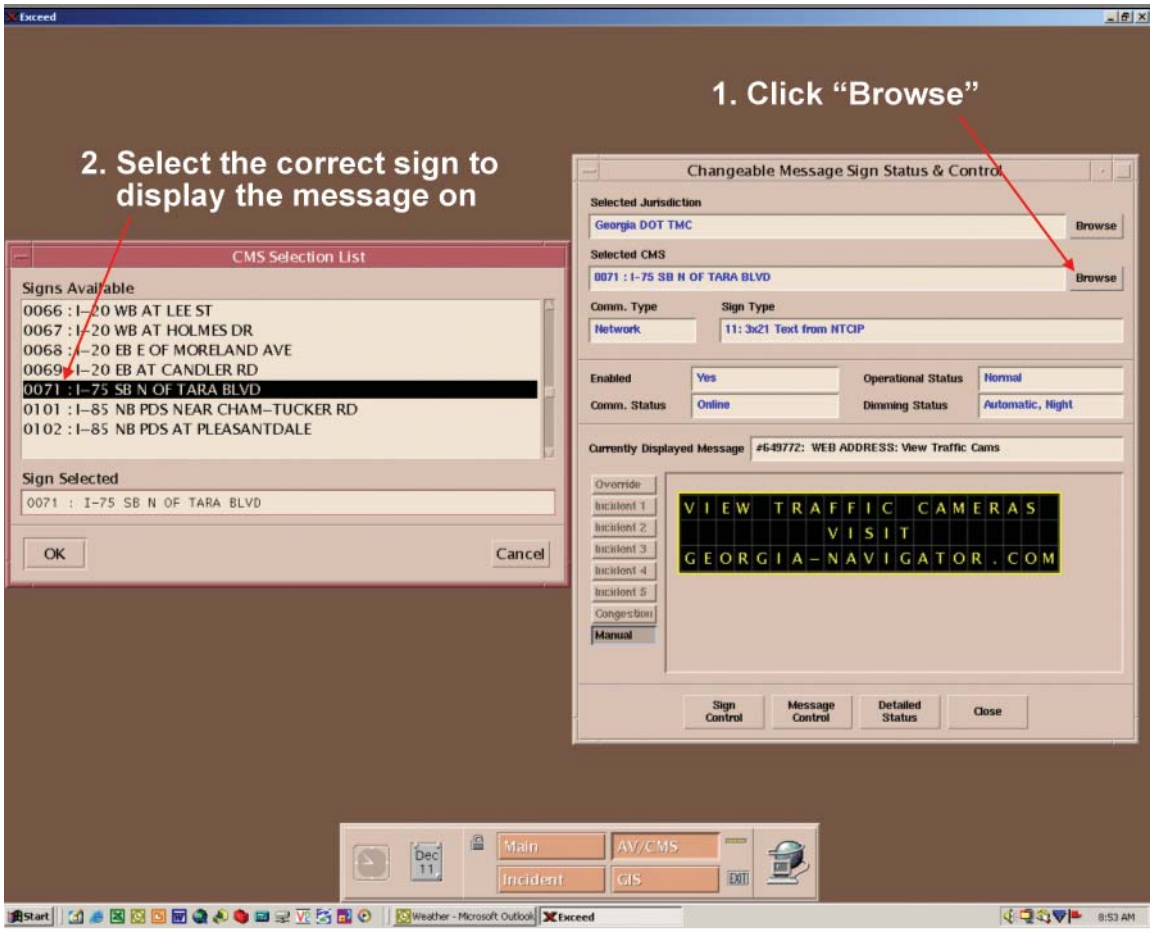
To display a sign correctly you must first bring up the Changeable Message Signs Status & Control screen. To do this, from the main menu, click on ATIS, then click on Changeable Message Signs. If you completed your intial setup at the beginning of your shift, then you can simply click on “Quick Access 3”.



Next click on Status & Control.

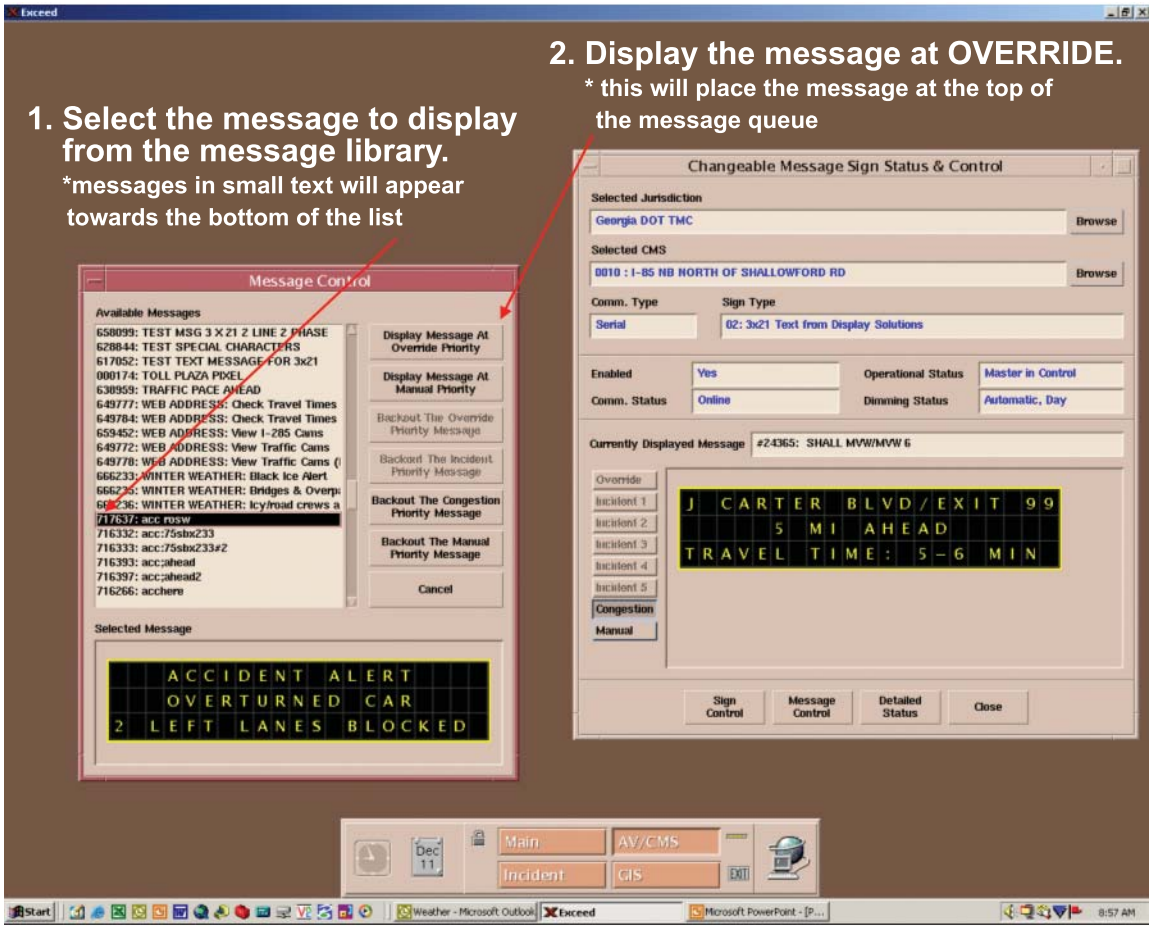


Click on Browse, then select the correct sign to display the message on.



Select the message to display from the message library. If you are looking for a manually created message, small text will appear towards the bottom of the list.

Next click on Display Message at Override Priority. This will place the message at the top of the message queue.



Signs have a message queue with corresponding seniority. Only one message can be displayed at a time.

- Override
- Incident 1
- Incident 2
- Incident 3
- Incident 4
- Incident 5
- Congestion
- Manual

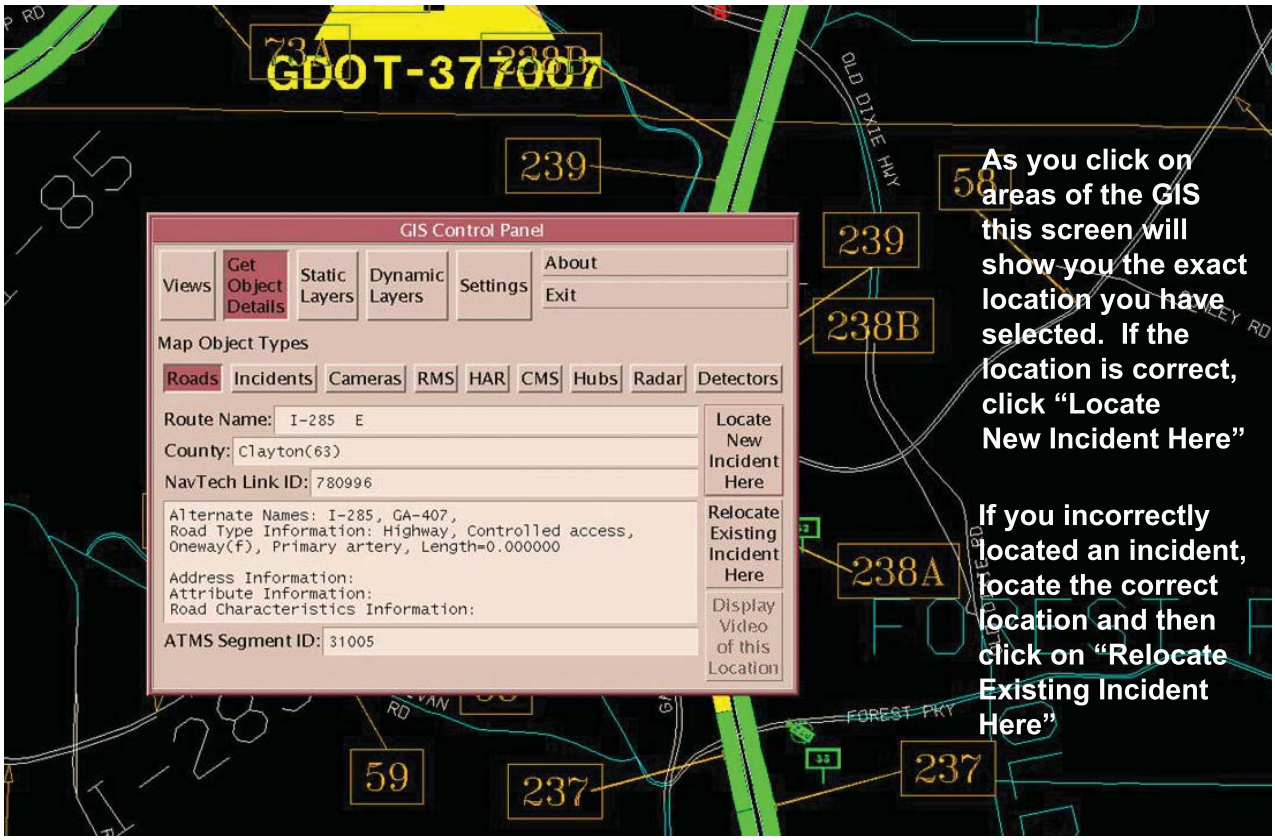
LOCATING AN INCIDENT

To get a Response Plan you must first locate the incident on the GIS after you have entered it in the incident tracking.

Steps/Procedures

From the GIS Control Panel click “Get Object Details”, then click “Roads”. You will now see the GIS Locator Screen.

Locate the incident by clicking on the correct area of the GIS; this may take a few efforts, depending on the area and the amount of layers at that location. It is very important that you correctly locate the incident and, therefore, you may have to remove a layer or more in order to obtain a clearer view of the area.

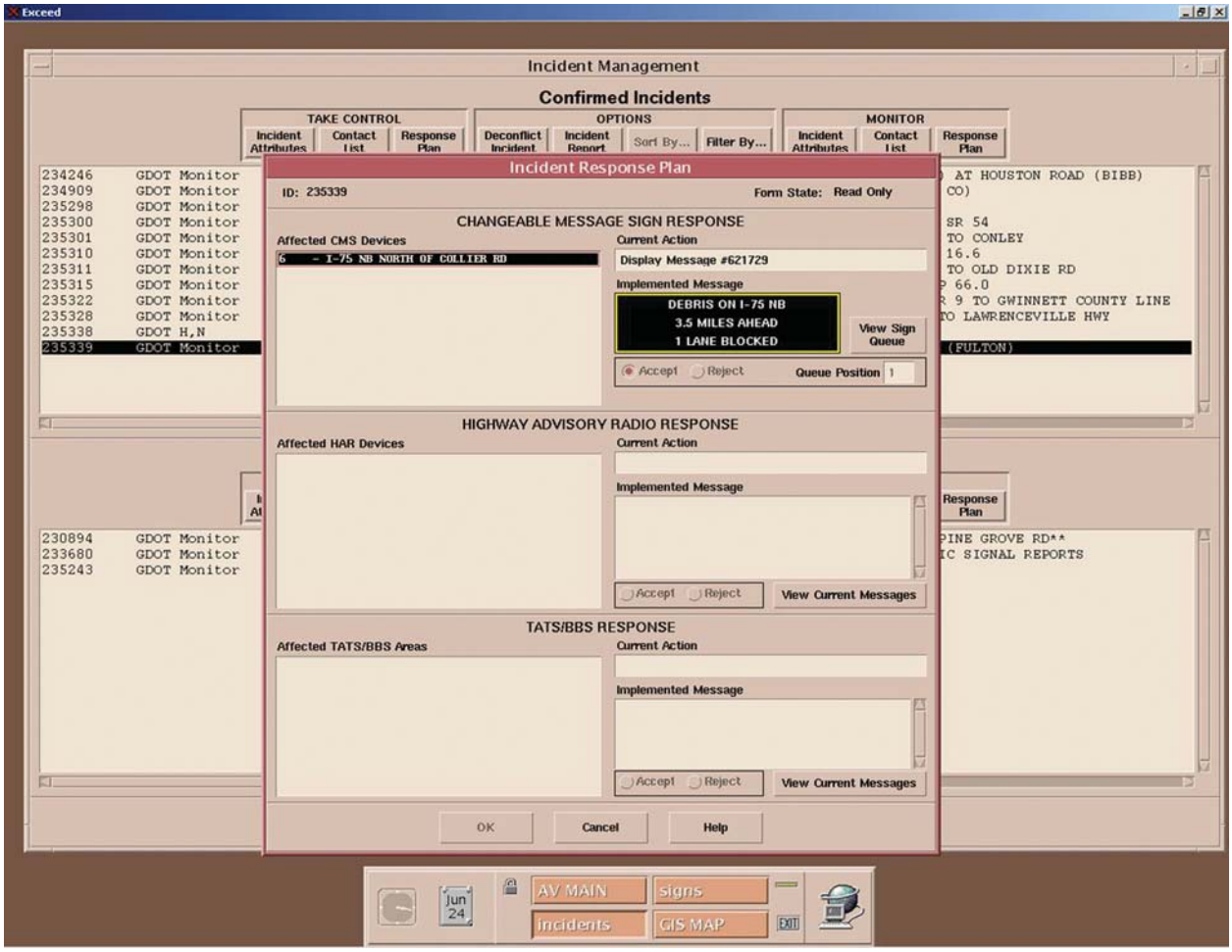


Once you have located the correct location for the incident, highlight the incident and click “OK”.

If you incorrectly located an incident, locate the correct location and then click on “Relocate existing incident here”; highlight existing incident, click “OK”.

RESPONSE PLANS

When you have entered an incident into NaviGAtor, the system, in most cases, will generate an automatic Response Plan (RP). After you click on Response Plan, the Incident Response Plan screen will appear and then you will have to decide whether to display the message as is or reject it and create your own. Some things that you will need to do are:



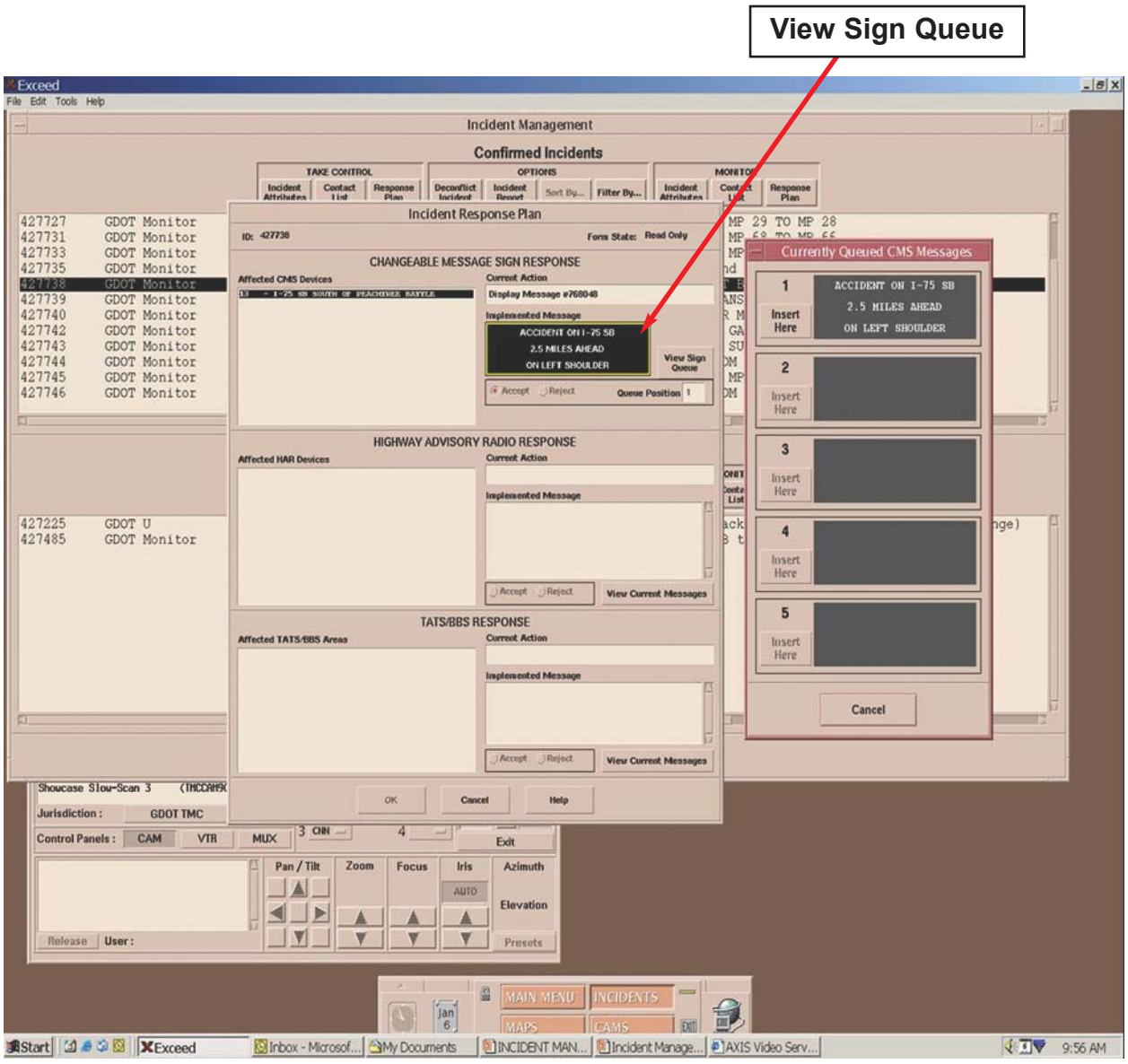
- Read each message before accepting
- Do not hesitate to reject the message if it does not make sense or you believe that you can generate a message that will be clearer to the traveling public
- If you do reject a message, create your own custom message
- Read carefully, paying attention to whether the system is suggesting to Display, Replace, or Remove a message

VIEWING THE SIGN QUEUE

Before accepting a Response Plan, check to see if other messages are already on the sign. If there is a message already there, it will be shown.

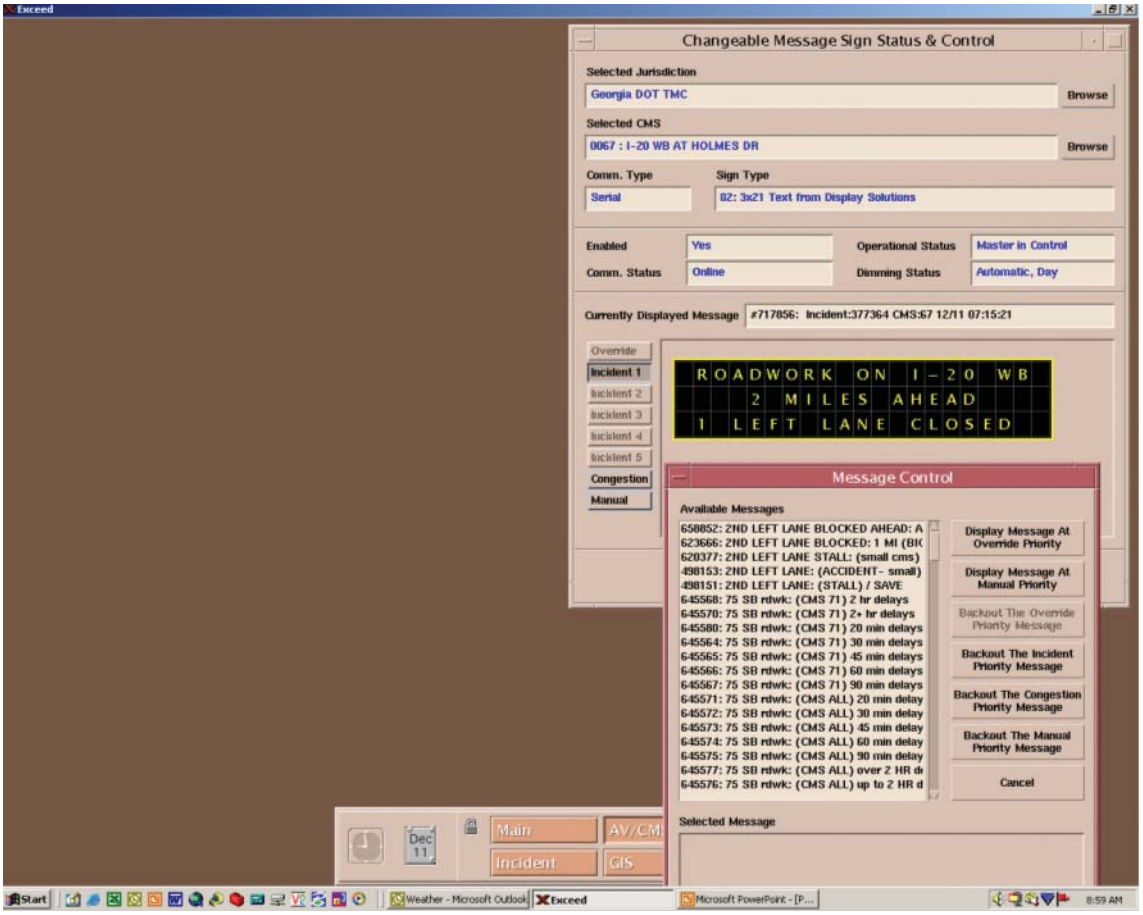
Decide if your message is more or less important than the one currently displayed

If your new message is more important then create override message



Overriding a Message

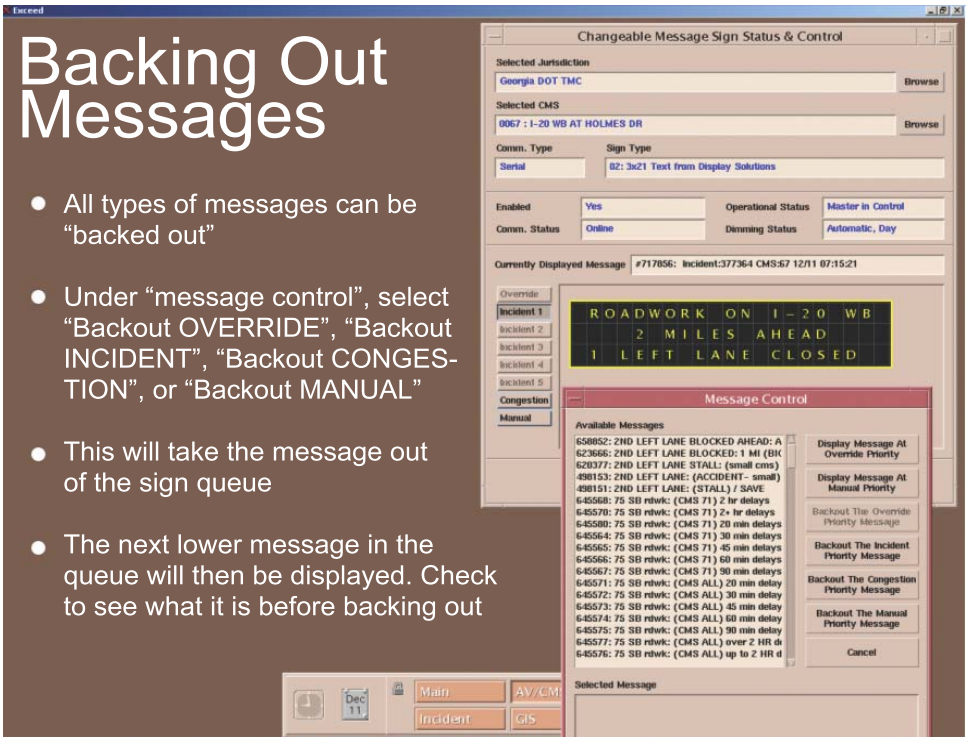
At any time you can override the currently displayed message with a custom one. This is accomplished by using "message control;" select Display Message At Override Priority.



- Override messages can only be bumped out by another override
- Remember to read the message carefully before displaying it, checking for proper grammar and spelling. Additionally, does the message make sense?

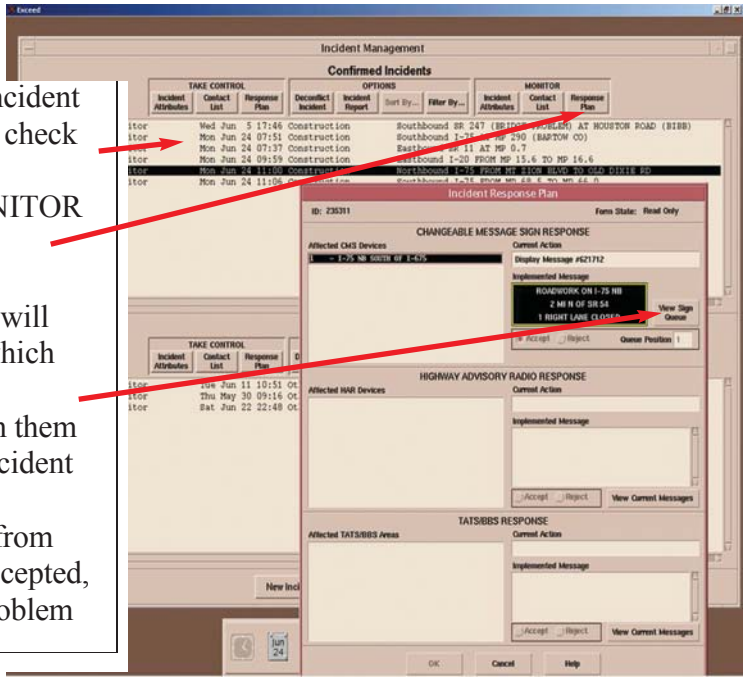
Backing Out Messages

All messages can be "backed out", which will then allow the next lower priority message in the queue to be displayed. You should check this next message before you complete the backing out process to ensure it is a valid message to be displayed.



Checking the Response Plan Status

- Select the incident you want to check
- Under MONITOR click on RP
- The system will show you which signs have messages on them about the incident
- If different from what you accepted, there is a problem

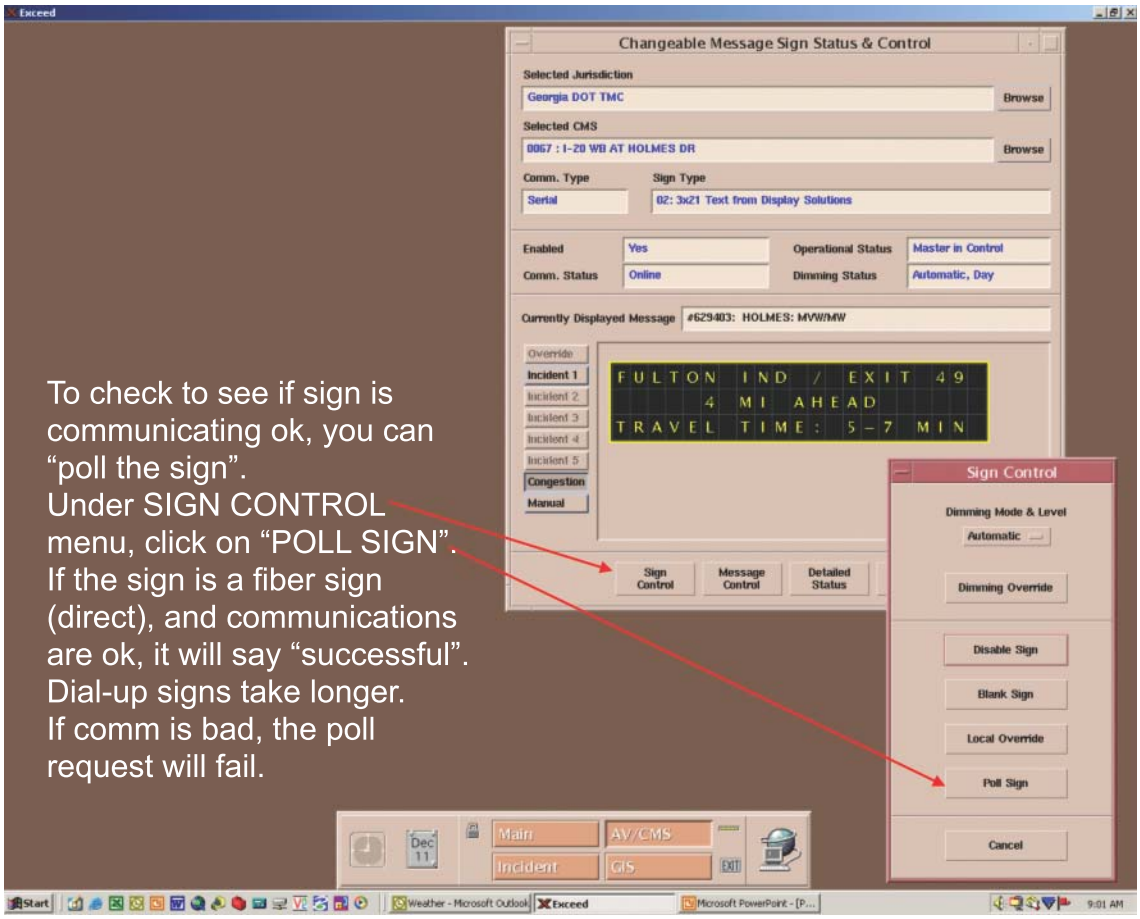


After you have completed the RP acceptance process, you should go back and check the RP status. This is done from the Incident Management screen. Check each sign that you accepted a plan for to ensure that all are displaying the correct message.

RECOVERING FROM AN ERROR

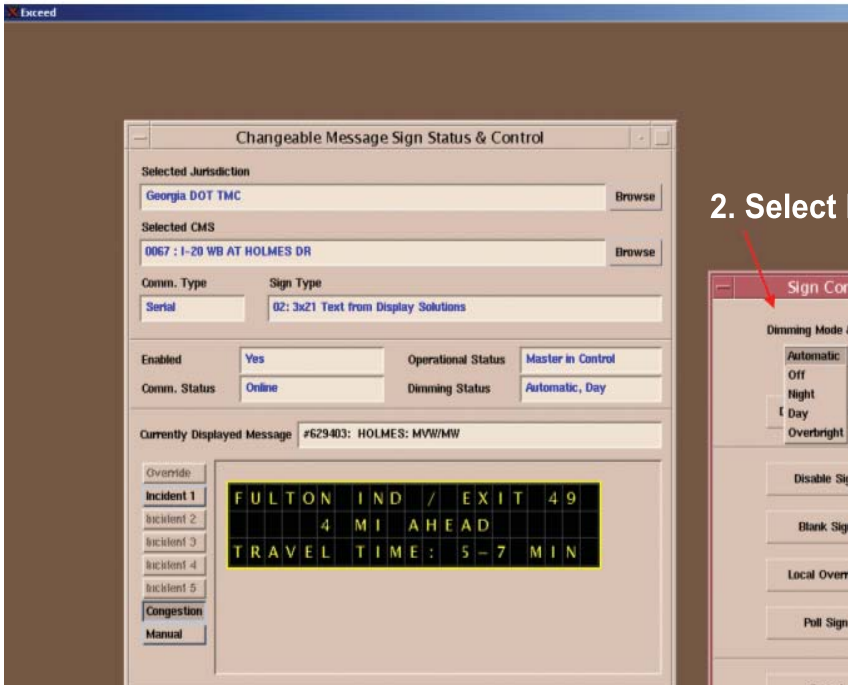
There will be occasions where a sign fails to clear the message after the incident clears. When you select a sign with a problem, it will say, "Failed to Display Message". You must disable (turn off) the sign, then re-enable (turn on) the sign. Then you will display AAA PIXEL. This should clear the problem and the sign should start displaying the travel time.

POLLING THE SIGNS



SIGN BRIGHTNESS LEVELS

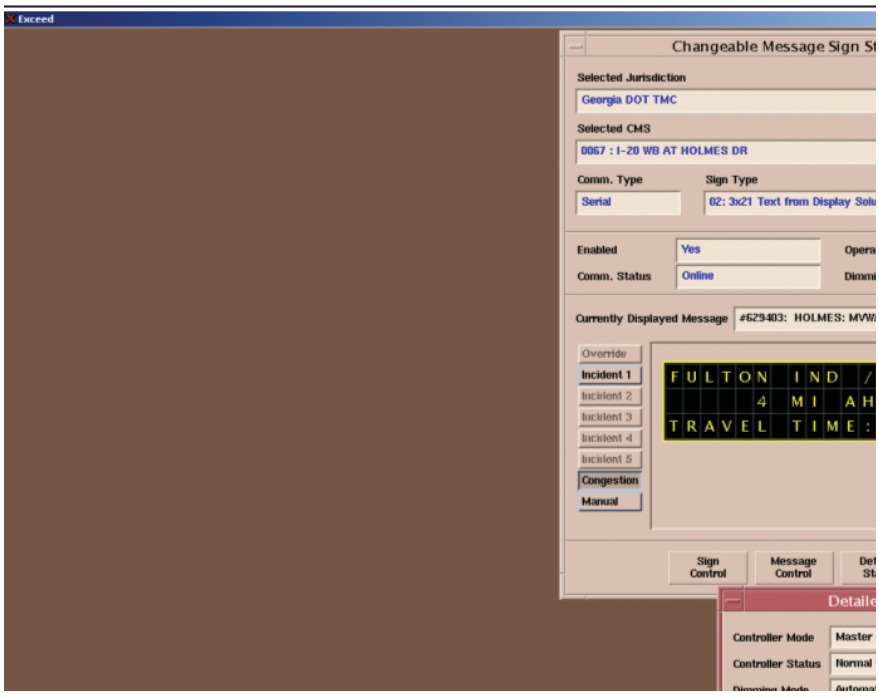
The signs have three levels of brightness: Night, Day, and Over Bright. The sign is designed to automatically adjust based on the light levels. If for any reason the sign fails to adjust adequately, you can override the brightness by going to Sign Control, Dimming Mode and Level; then select brightness level. After you have selected the level you want, click on Dimming Override.



Georgia

Brightness

Night
Day
Over Bright



VIEWING SIGN STATUS

You can obtain a detailed status of a sign including the temperature, number of failed lamps, and light levels.

Remember that for dial-up signs it will take longer for them to respond.

VIEWING SIGNS WITH CAMERAS

Many signs are viewable on camera, especially the newer signs. You can use these cameras for absolute confirmation that your message is up and displaying correctly. This method can also be used to check that your incident messages are backed out correctly.

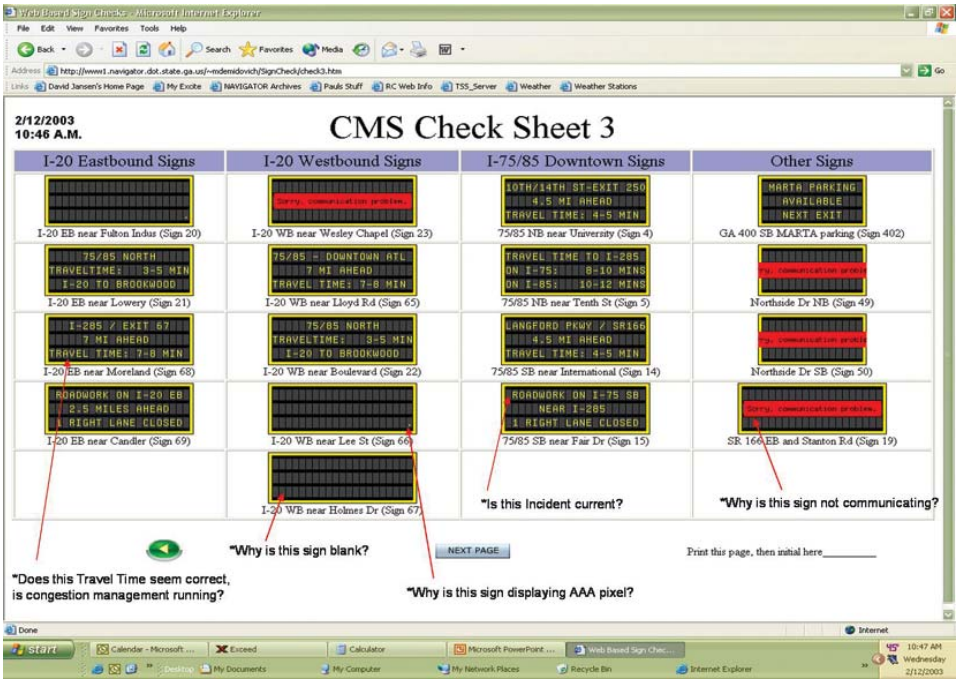
CMS CHECKS

The CMS must be routinely checked to ensure that messages are accurate and up-to-date and that outdated messages or inaccurate messages are not being displayed. To perform CMS checks, access the following web site: http://www1.navigator.dot.state.ga.us/~mdemidovich/SignCheck/Index.htm.

- Check to make sure the sign is working properly
- Try to correct any problem, report any CMS that is in LOS COMM or not enabled
- CMS checks are performed using the Daily CMS Checklist and Alarms Checklist (Appendix G) at:

0015	0315	0615	0715
0915	1115	1315	1515
1715	1915	2115	

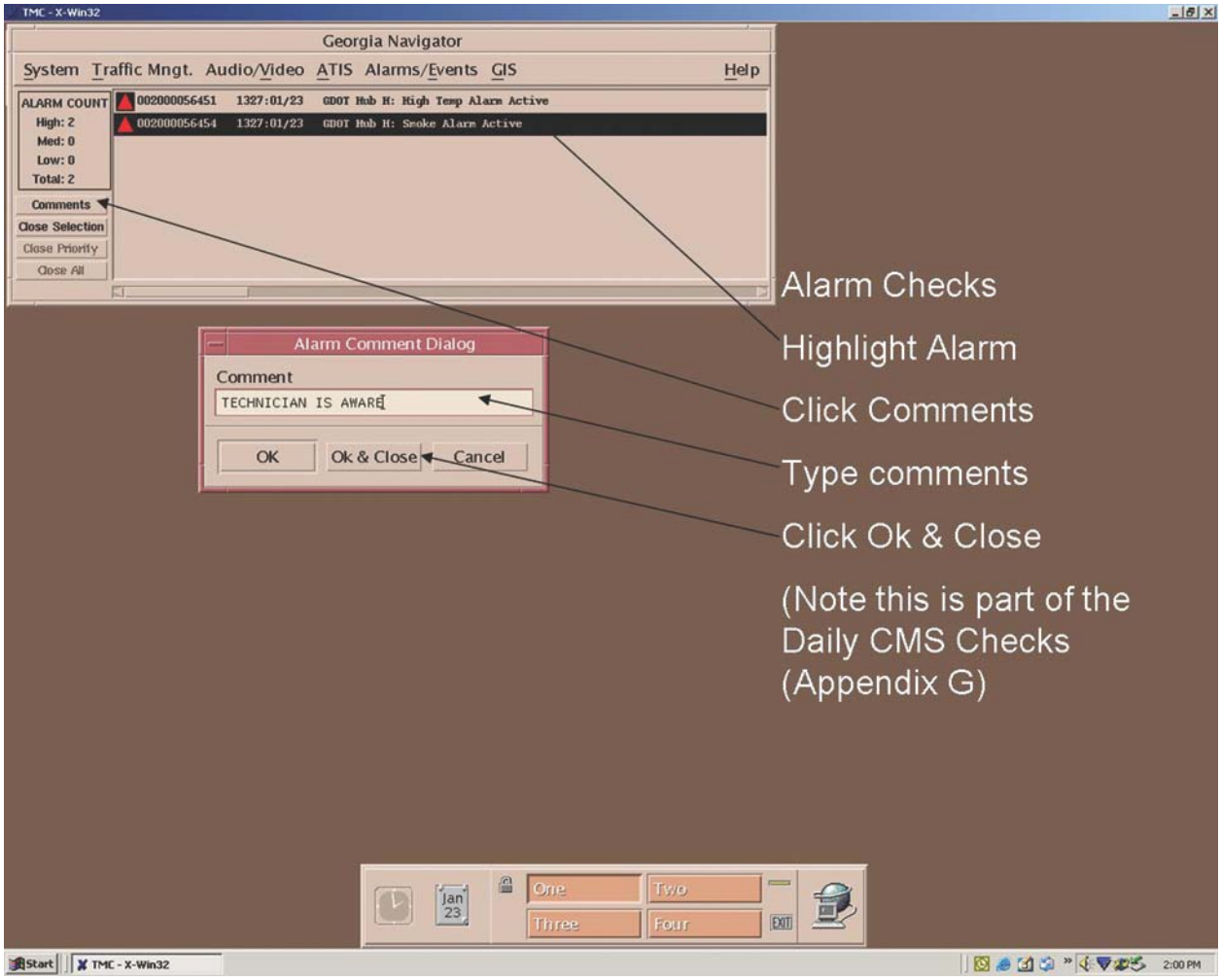
- Examples of what you should look for when performing CMS checks:



- Thoroughly review all signs, remove any old or outdated messages, examine "offline" and "lost comms" signs

Alarm Checks

These are done at the same time as CMS checks and the checklist is included in the CMS checklist located in Appendix G.



Steps for conducting alarm checks:

- Highlight the alarm
- Click comments
- Type in any comments, such as “Technician Notified” etc
- Click OK and close

LEVI'S CALL (AMBER ALERT)

This section outlines the policies and procedures in regard to the use of Changeable Message Signs (CMS) in case of the activation of Levi's Call. The term Levi's Call is defined as Georgia's Emergency Missing Child Alert (known nationwide as the Amber Alert).

Established January 1, 2002, Levi's Call is a voluntary partnership between law enforcement, emergency management, and broadcasters to activate an urgent bulletin in child abduction cases. Levi's Call uses the Emergency Alert System (EAS) to deliver vital information to broadcasters and the public about a missing child and an abductor.

The preliminary investigation and verification of information can only be conducted by law enforcement officials. The Georgia Bureau of Investigation (GBI) is the originator of missing children alerts, or Levi's Call, in Georgia. The Georgia Emergency Management Agency (GEMA) will be contacted to activate the alert. GEMA will contact the TMC should they feel the use of CMS may be helpful. This will prompt the TMC staff to advise the shift supervisor and management of the possible Levi's Call Alert.

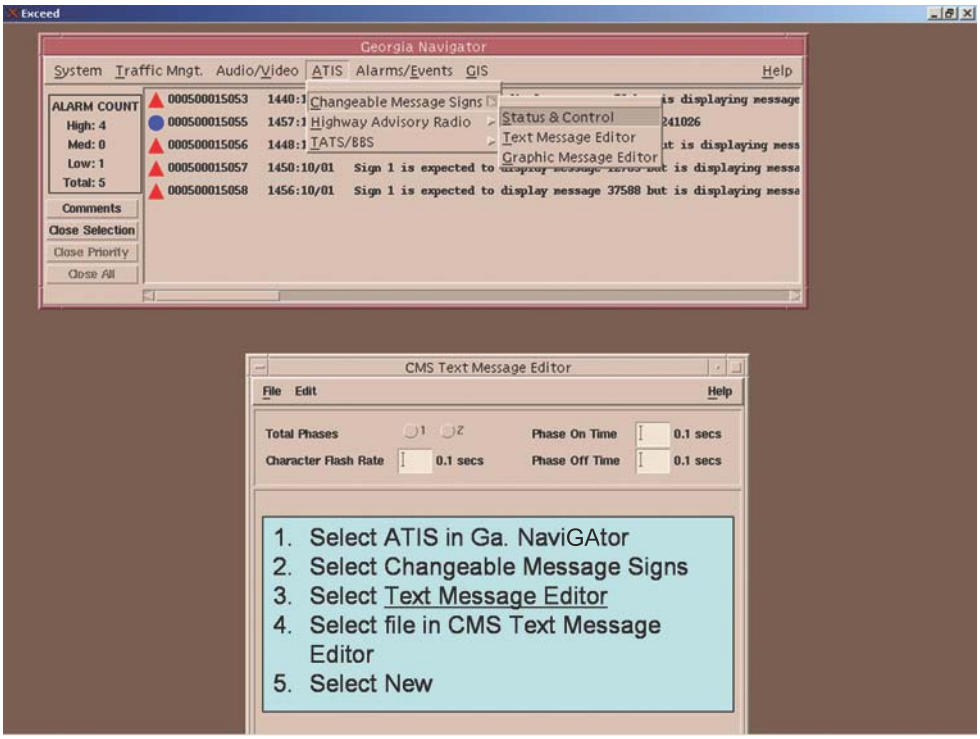
Operational Procedures

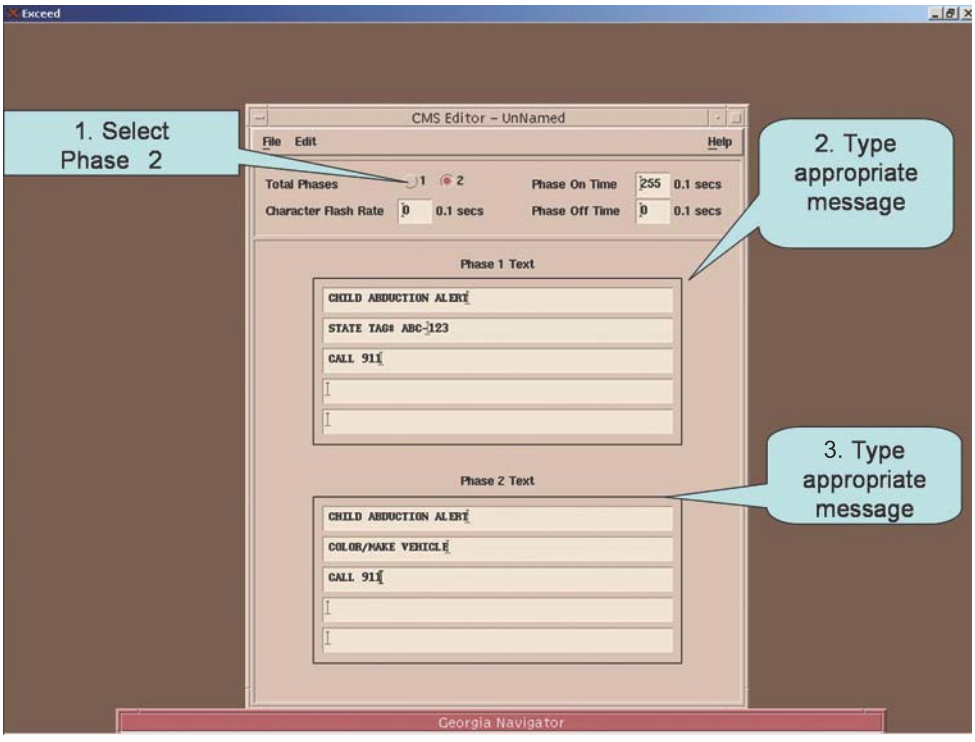
If Levi's Call is activated, GEMA will send an alert bulletin with the exact information that is being broadcast by the EAS operational area or through statewide broadcast. GEMA will contact the TMC by phone to ensure they get the fax and have activated Levi's Call.

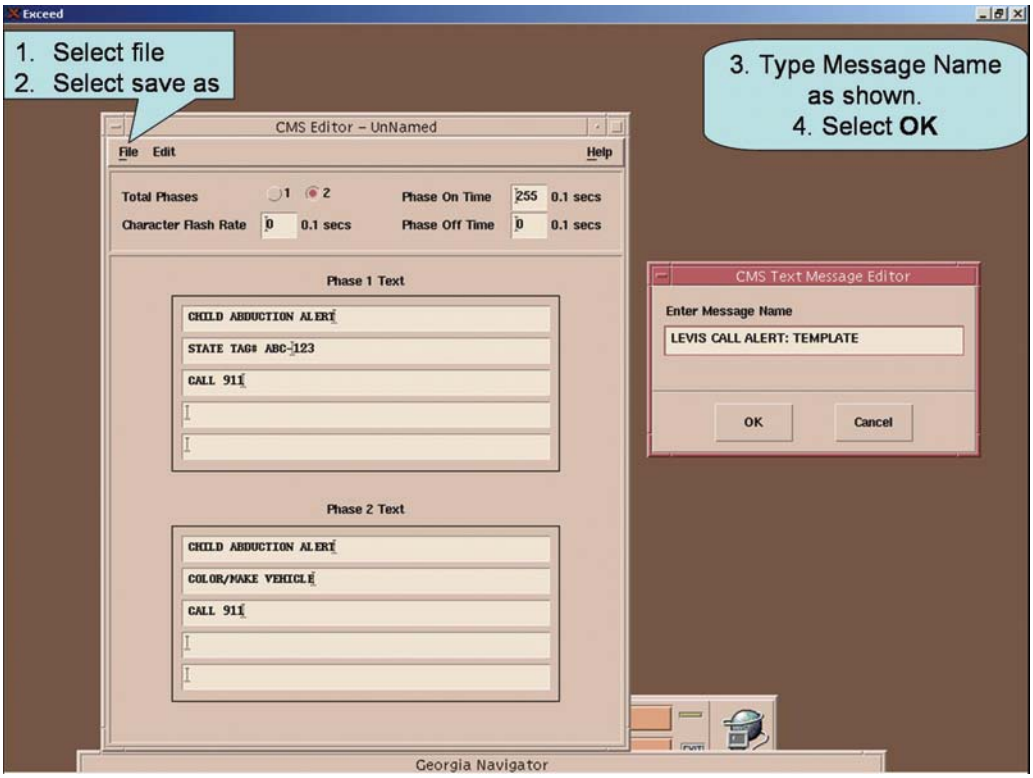
- Georgia DOT will have no role in activating Levi's Call and will not handle incoming tip information
- It is essential that the public understands that tip information needs to go to law enforcement agencies as quickly as possible
  - This will be re-enforced by displaying "Motorists Call 911" on the CMS
- Follow the step-by-step guidelines to edit the CMS Text Message for both phases
  - During the absence of a Supervisor, contact the On-Call Supervisor and the TMC Operations Manager by phone
  - Alpha page the Levi's Call Group and the applicable District Engineer(s)
    - Do not Alpha page the NaviGator groups
  - Enter the incident into the system; update every 15 minutes
  - Once terminated:
    - Make a copy of the incident
    - Attach the original fax and your completed checklist form to the incident and place all in the in-box
  - The CMS should NOT be changed in areas displaying necessary traffic information
  - For any doubts or uncertainties ask the shift Supervisor for a decision
- To activate the applicable signs in the case of a Levi’s Alert, page the On-Call NaviGAtor Support Person and provide him with the message number

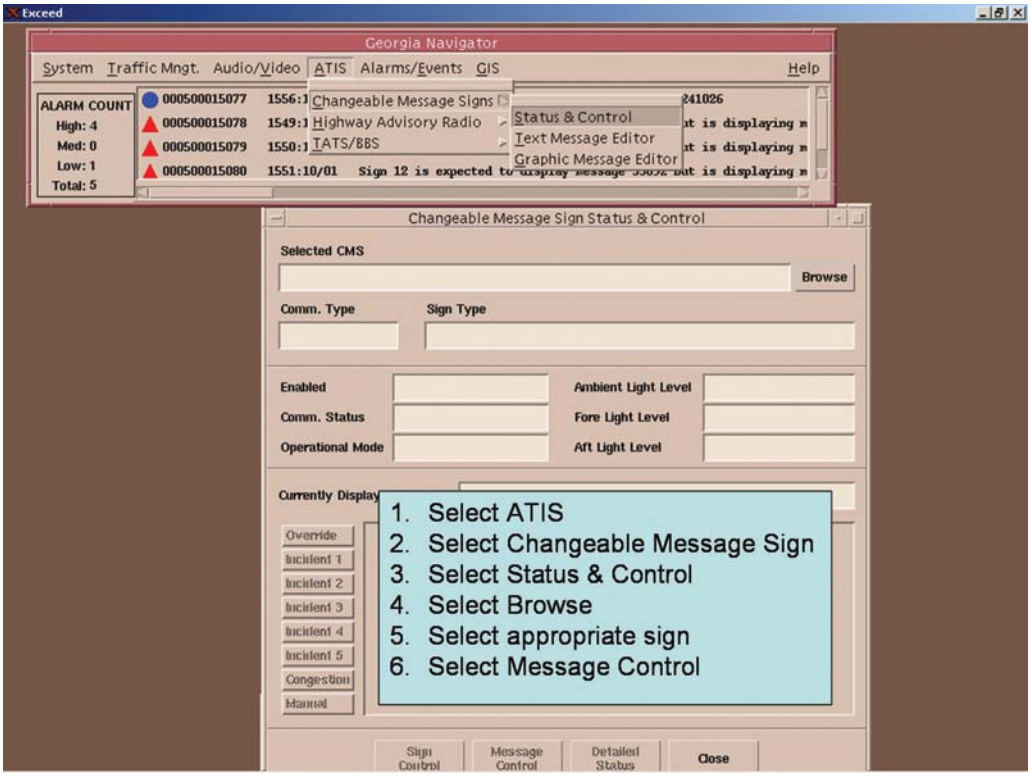
CMS PROCEDURES

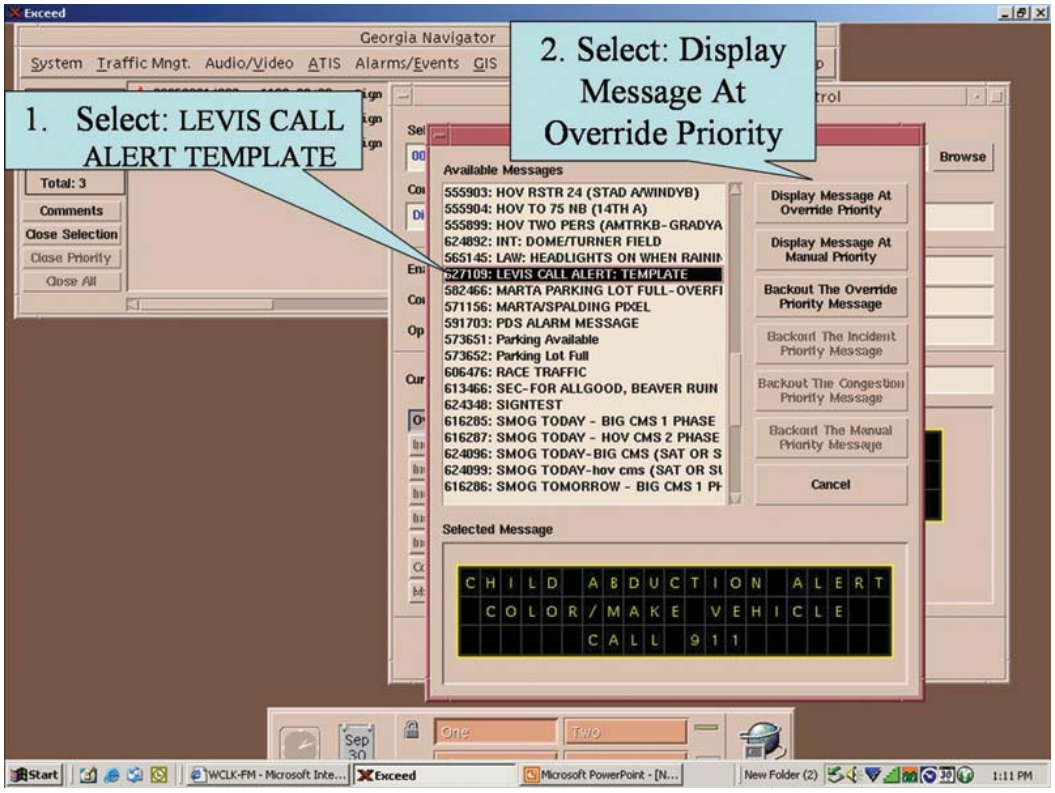
The following procedures are in place to assist you in the CMS preparation. There is no absolute answer to every possible situation, so if in doubt, ask the Supervisor.





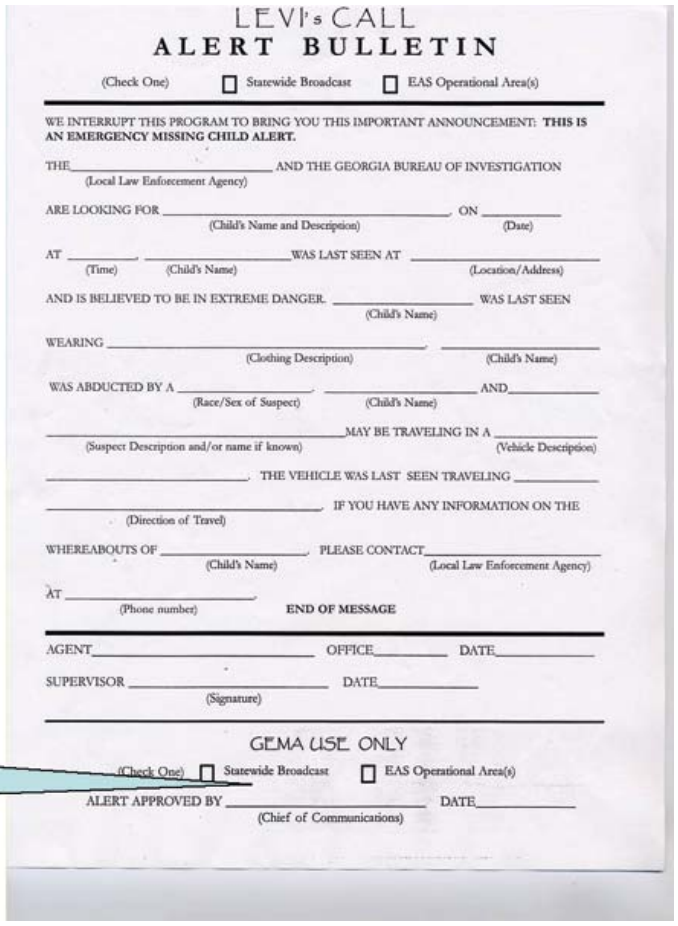

1. Select file
2. Select save as
3. Type Message Name as shown.
4. Select OK
CMS Editor – UnNamed
File Edit Help
Total Phases 1 2
Phase On Time 255 0.1 secs
Character Flash Rate 0 0.1 secs
Phase Off Time 0 0.1 secs
Phase 1 Text
CHILD ABDUCTION ALERT
STATE TAG# ABC-123
CALL 911
Phase 2 Text
CHILD ABDUCTION ALERT
COLOR/MAKE VEHICLE
CALL 911
CMS Text Message Editor
Enter Message Name
LEVIS CALL ALERT: TEMPLATE
OK
Cancel
Georgia Navigator


Georgia Navigator
System Traffic Mngt. Audio/Video ATIS Alarms/Events GIS Help
ALARM COUNT
High: 4
Med: 0
Low: 1
Total: 5
Changeable Message Signs
Highway Advisory Radio
TATS/BBS
Status & Control
Text Message Editor
Graphic Message Editor
Changeable Message Sign Status & Control
Selected CMS
Browse
Comm. Type
Sign Type
Enabled
Comm. Status
Operational Mode
Ambient Light Level
Fore Light Level
Aft Light Level
Currently Display
Override
Incident 1
Incident 2
Incident 3
Incident 4
Incident 5
Congestion
Manual
1. Select ATIS
2. Select Changeable Message Sign
3. Select Status & Control
4. Select Browse
5. Select appropriate sign
6. Select Message Control
Sign Control
Message Control
Detailed Status
Close


1. Select: LEVIS CALL ALERT TEMPLATE
2. Select: Display Message At Override Priority
Georgia Navigator
System Traffic Mngt. Audio/Video ATIS Alarms/Events GIS
Total: 3
Comments
Close Selection
Close Priority
Close All
Browse
Available Messages
555903: HOV RSTR 24 (STAD A/WINDYB)
555904: HOV TO 75 NB (14TH A)
555899: HOV TWO PERS (AMTRKB-GRADYA
624892: INT: DOME/TURNER FIELD
565145: LAW: HEADLIGHTS ON WHEN RAINI
627109: LEVIS CALL ALERT: TEMPLATE
582466: MARTA PARKING LOT FULL-OVERFI
571156: MARTA/SPALDING PIXEL
591703: PDS ALARM MESSAGE
573651: Parking Available
573652: Parking Lot Full
606476: RACE TRAFFIC
613466: SEC-FOR ALLGOOD, BEAVER RUIN
624348: SIGNTEST
616285: SMOG TODAY - BIG CMS 1 PHASE
616287: SMOG TODAY - HOV CMS 2 PHASE
624096: SMOG TODAY-BIG CMS (SAT OR S
624099: SMOG TODAY-hov cms (SAT OR SU
616286: SMOG TOMORROW - BIG CMS 1 PH
Display Message At Override Priority
Display Message At Manual Priority
Backout The Override Priority Message
Backout The Incident Priority Message
Backout The Congestion Priority Message
Backout The Manual Priority Message
Cancel
Selected Message
CHILD ABDUCTION ALERT
COLOR/MAKE VEHICLE
CALL 911
Start
WCLK-FM - Microsoft Inte...
Exceed
Microsoft PowerPoint - [N...
New Folder (2)
1:11 PM

Example of faxed Alert bulletin received from GEMA

Must be signed and dated



LEVI's CALL

ALERT BULLETIN

(Check One) ☐ Statewide Broadcast ☐ EAS Operational Area(s)

WE INTERRUPT THIS PROGRAM TO BRING YOU THIS IMPORTANT ANNOUNCEMENT: **THIS IS AN EMERGENCY MISSING CHILD ALERT.**

THE _____ AND THE GEORGIA BUREAU OF INVESTIGATION
(Local Law Enforcement Agency)

ARE LOOKING FOR _____, ON _____
(Child's Name and Description) (Date)

AT _____, _____ WAS LAST SEEN AT _____
(Time) (Child's Name) (Location/Address)

AND IS BELIEVED TO BE IN EXTREME DANGER. _____ WAS LAST SEEN
(Child's Name)

WEARING _____, _____
(Clothing Description) (Child's Name)

WAS ABDUCTED BY A _____, _____ AND _____
(Race/Sex of Suspect) (Child's Name)

_____ MAY BE TRAVELING IN A _____
(Suspect Description and/or name if known) (Vehicle Description)

_____. THE VEHICLE WAS LAST SEEN TRAVELING _____

_____. IF YOU HAVE ANY INFORMATION ON THE
(Direction of Travel)

WHEREABOUTS OF _____, PLEASE CONTACT _____
(Child's Name) (Local Law Enforcement Agency)

AT _____.
(Phone number) **END OF MESSAGE**

AGENT _____ OFFICE _____ DATE _____

SUPERVISOR _____ DATE _____
(Signature)

GEMA USE ONLY

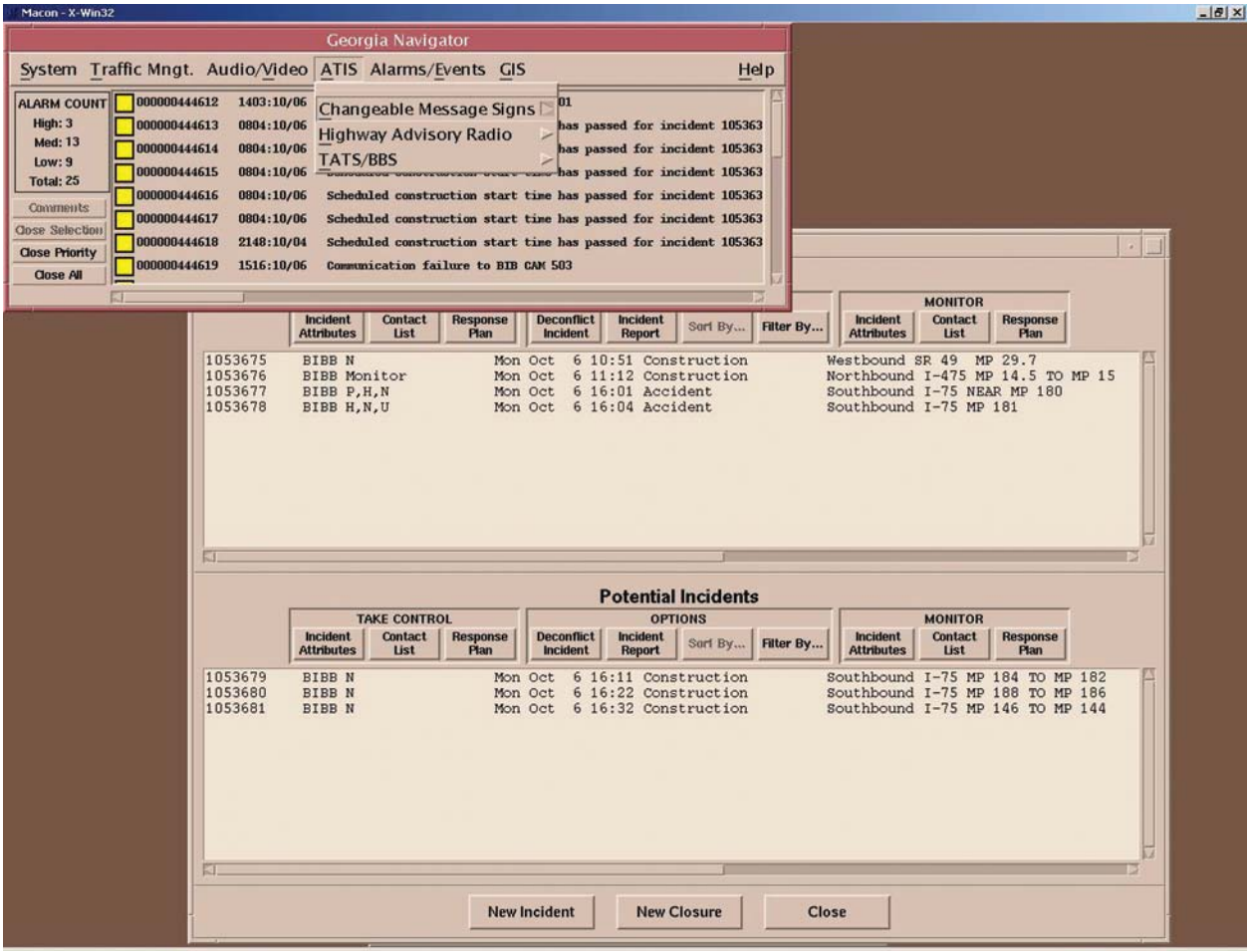
(Check One) ☐ Statewide Broadcast ☐ EAS Operational Area(s)

ALERT APPROVED BY _____ DATE _____
(Chief of Communications)

PROCEDURES TO VERIFY MACON CHANGEABLE MESSAGE SIGNS

On various occasions you will need to verify the CMS in Macon. The procedures to do so are as follows:

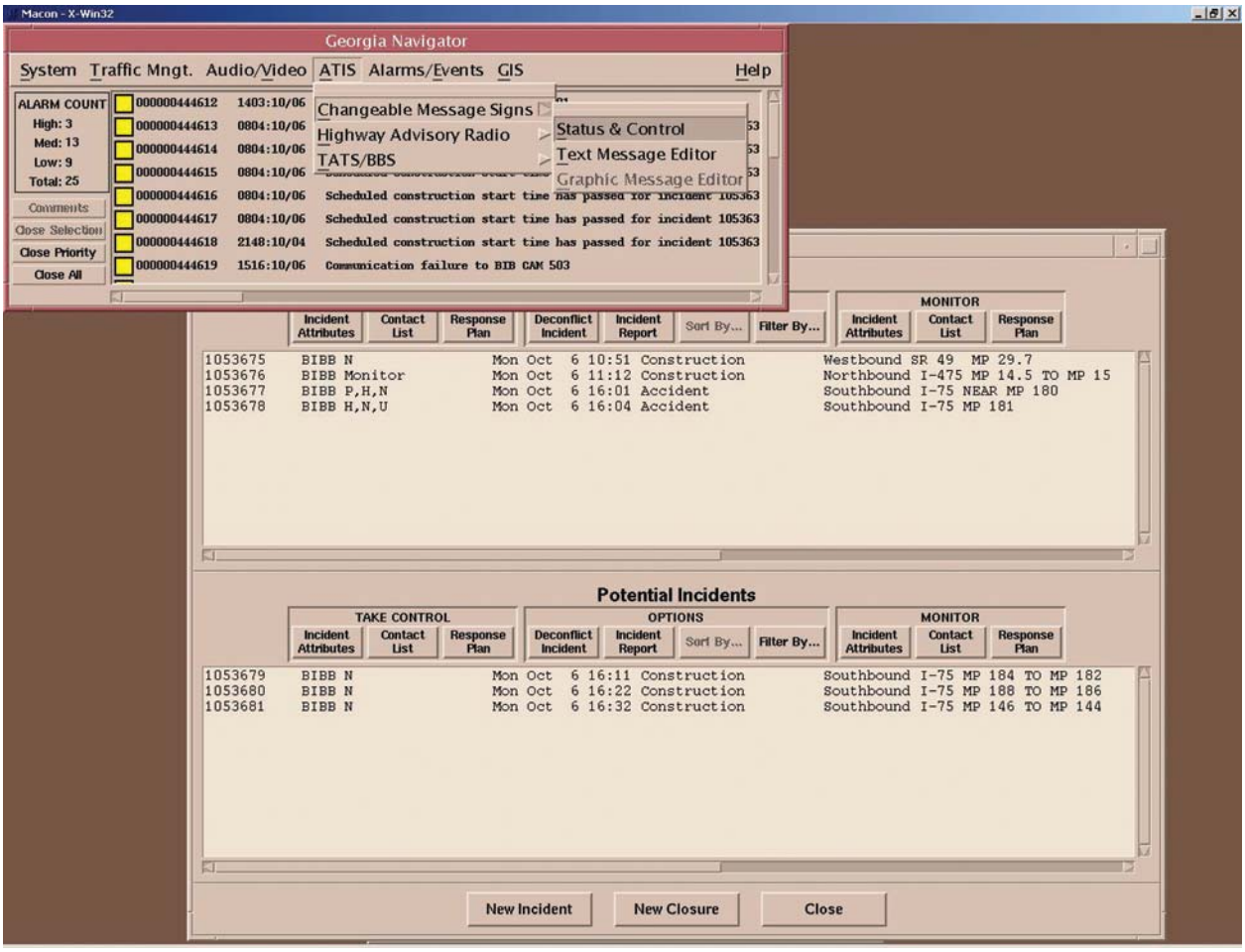
First, from your main screen, click on ATIS and then Changeable Message Signs.



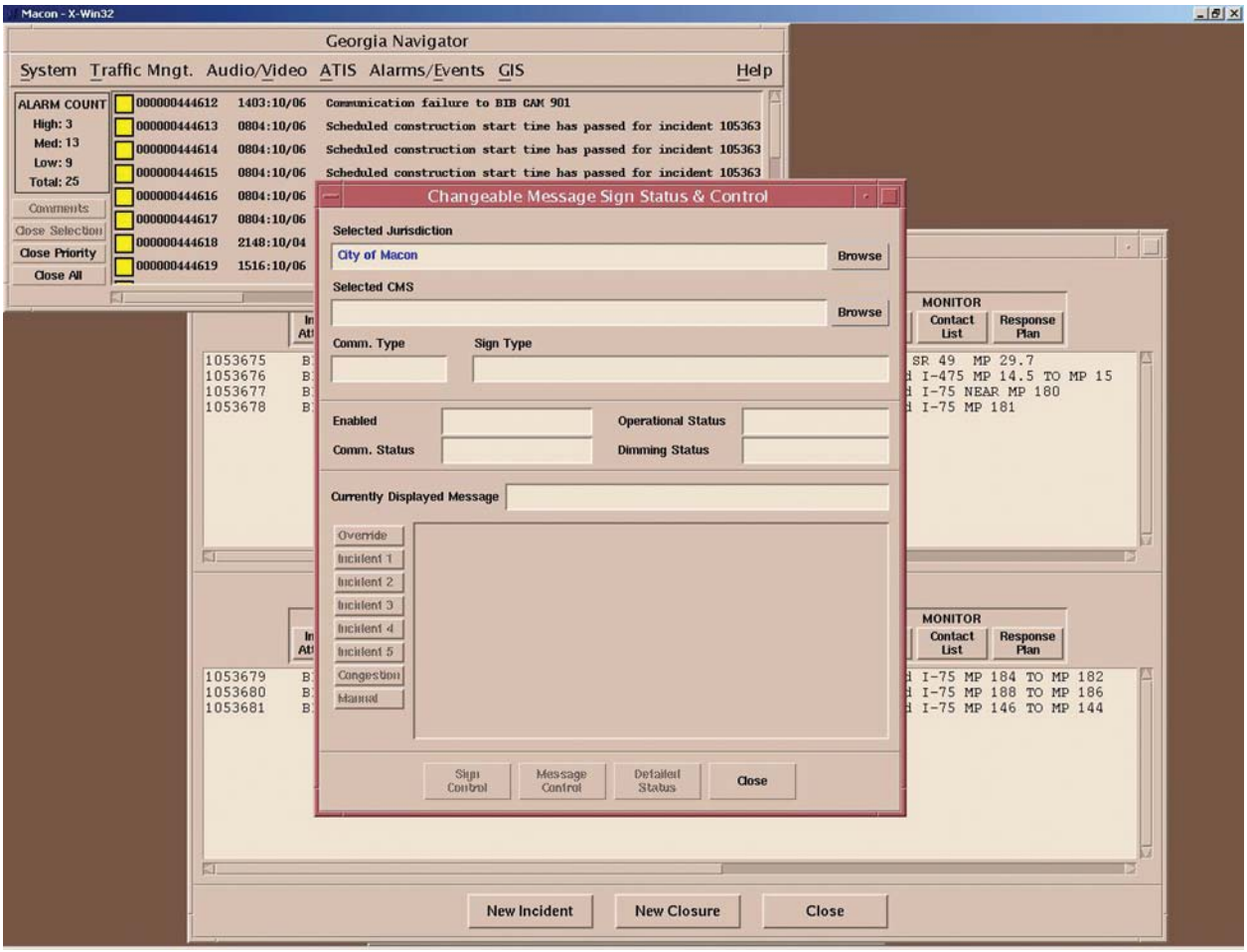
You may also use the web site as noted earlier.

This is an independent system from the Atlanta TMC.

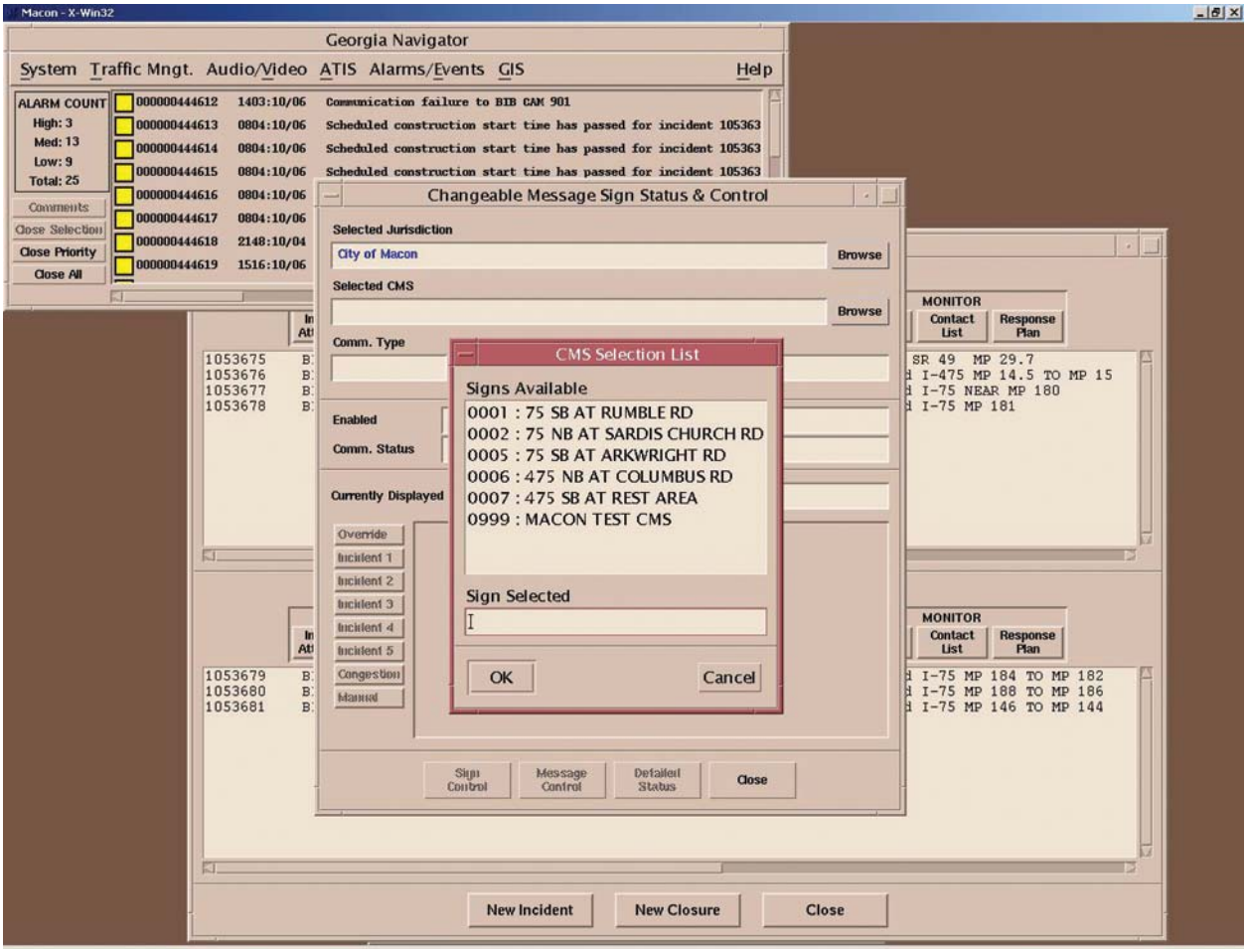
Next click on Status & Control.



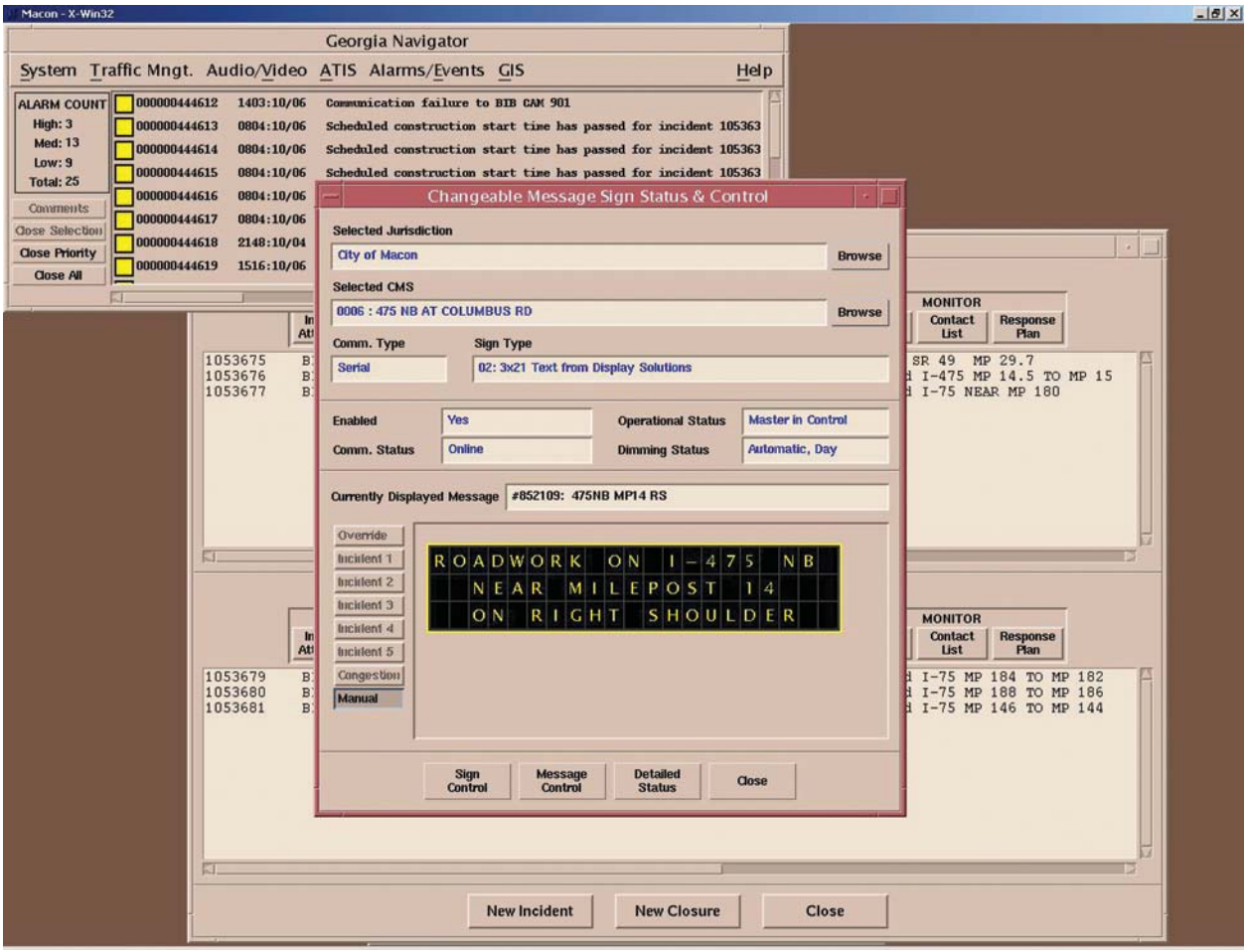
Now you click on "Browse", then "City of Macon".



The CMS that are available will now be displayed.



Select the sign that you want and the assigned message will display.



SMART ZONE

The Smart Zone is a portable traffic management system. It's designed to gather traffic data, monitor and manage traffic flow, and update drivers with real time information, all of which makes managing a site safer and easier.

Smart Zone incorporates video, sensors, wireless communications, and dynamic message signs integrated throughout the work zone. Smart Zone gives TMC operators the ability to monitor changing traffic patterns and weather-related road conditions and immediately inform motorists via dynamic message signs.

Off-loaded as a skid or mounted on a trailer, Smart Zone can be easily deployed in as little as two hours. Once it's in place, traffic managers can use the Smart Zone to monitor and regulate work zone traffic remotely, greatly reducing the need for on-site supervision.

Smart Zone takes on the responsibility of providing driver communication updates and lets workers proceed with their jobs at hand. Motorists can look to Smart Zone messages for up-to-the-minute changes in driving conditions delivered on-site. The result is a faster, smoother flow of traffic and reduced frustration among drivers.

GDOT uses Smart Zone primarily for Hurricane Evacuation but it can be used for any special occasion requiring additional signs.

Employing Smart Zone in a construction area or special event location provides the flexibility, ease of operation and efficient traffic regulation required by traffic management professionals today.

Because these signs are portable and self contained they are used for various purposes, but their primary use is to aid in hurricane evacuation. There are several concrete pads set up on the primary evacuation routes that are used to set the Smart Zone up prior to an evacuation.

Major Sub-Systems

As previously stated this is a self-contained unit, to include:

- Variable Message Sign (VMS)
- Power Components
- Digital Video (CCTV)
- Control Components
- Sensor
- Communication

Variable Message Sign (VMS)

These signs have a basic 4 x 3 horizontal high density full matrix sign that can be controlled at the TMC. The control station is normally set up at the table on the far left (facing forward) and back row in the TMC. A Console Operator will be responsible for manning this station during any deployment of the Smart Zone.

Power Components

The major power components that regulate power are located in the front-most panel and include:

- Solar voltage regulator
- On/Off switch
- Tower actuators
- Battery charger

Power for the Smart Zone system is provided by 32 6-Vdc deep-cycle batteries connected in series-parallel. Additional power is supplied by eight 75-watt solar panels which can be directed toward the sun.

Digital Video (CCTV)

Closed Circuit Television, in color, that is capable of pan (moving right or left), zoom (close-up or wide-angle), and tilt (up and down movement).

Control Components

The following control components are located on the right-hand side of the trailer.

- QNX controller
- Camera controller
- Network hub
- Radar Printed Circuit Board (PCB)

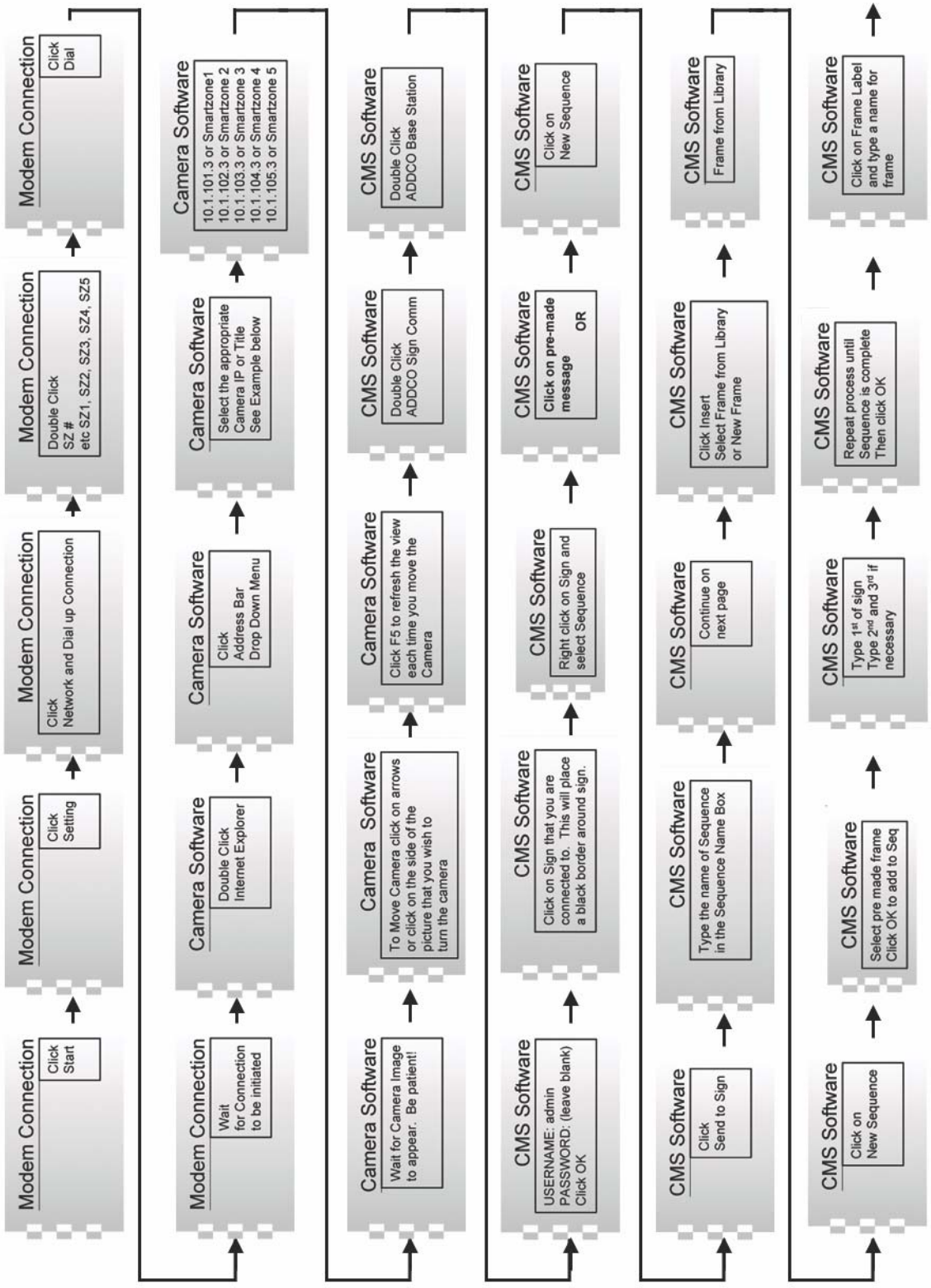
Sensor

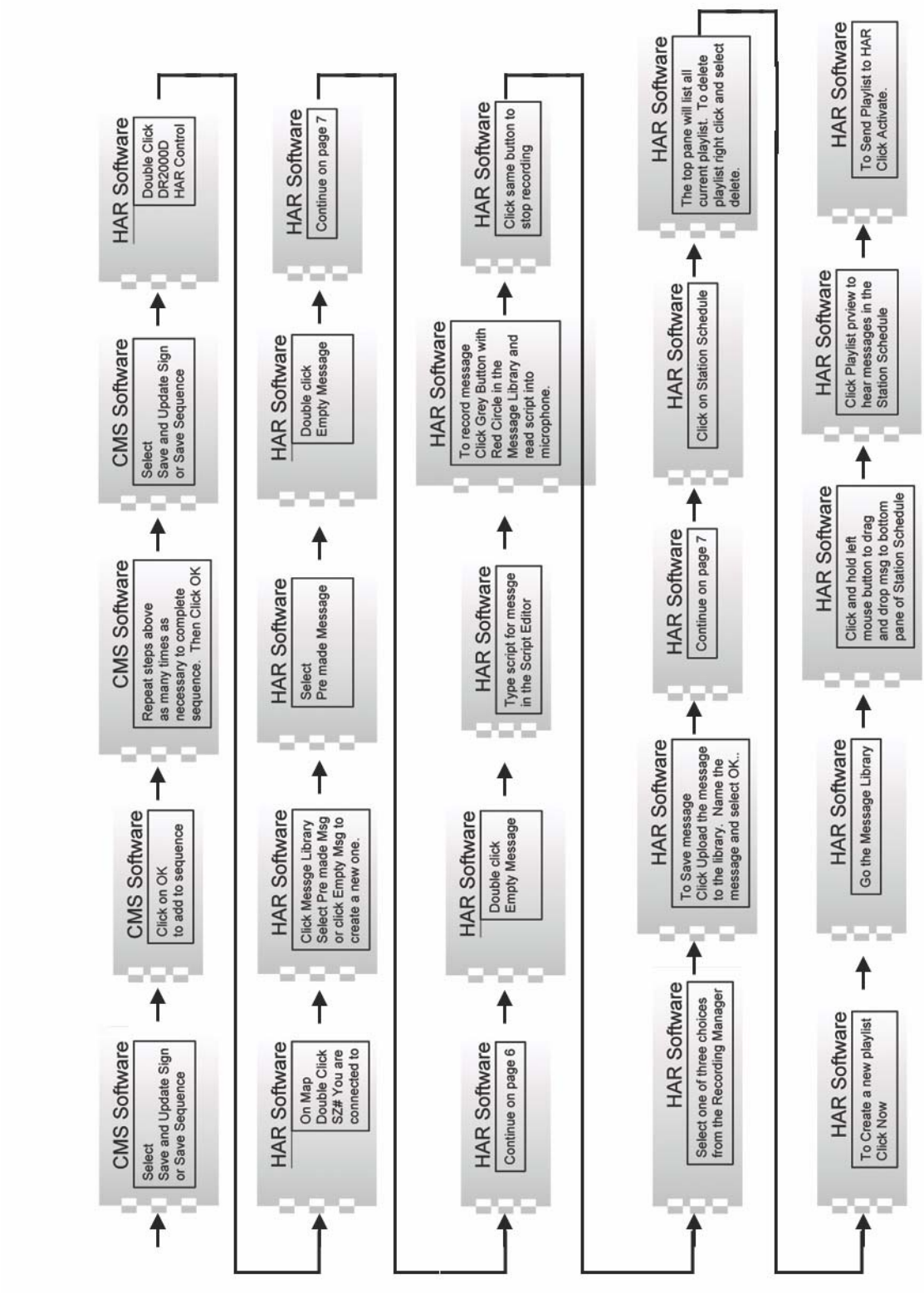
The sensor is located on a tower that can be raised using a series of winches and pulleys. Once the tower has been raised to the desired height it is securely locked into place.

Communication

The communications system can be either a hard wired, wireless or linked network that can be used to establish multiple Smart Zone systems.

SmartZone Software Startup




CMS Software
Select
Save and Update Sign
or Save Sequence
CMS Software
Click on OK
to add to sequence
CMS Software
Repeat steps above
as many times as
necessary to complete
sequence. Then Click OK
CMS Software
Select
Save and Update Sign
or Save Sequence
HAR Software
Double Click
DR2000D
HAR Control
HAR Software
On Map
Double Click
SZ# You are
connected to
HAR Software
Click Messge Library
Select Pre made Msg
or click Empty Msg to
create a new one.
HAR Software
Select
Pre made Message
HAR Software
Double click
Empty Message
HAR Software
Continue on page 7
HAR Software
Continue on page 6
HAR Software
Double click
Empty Message
HAR Software
Type script for messge
in the Script Editor
HAR Software
To record message
Click Grey Button with
Red Circle in the
Message Library and
read script into
microphone.
HAR Software
Click same button to
stop recording
HAR Software
Select one of three choices
from the Recording Manager
HAR Software
To Save message
Click Upload the message
to the library. Name the
message and select OK..
HAR Software
Continue on page 7
HAR Software
Click on Station Schedule
HAR Software
The top pane will list all
current playlist. To delete
playlist right click and select
delete.
HAR Software
To Create a new playlist
Click Now
HAR Software
Go the Message Library
HAR Software
Click and hold left
mouse button to drag
and drop msg to bottom
pane of Station Schedule
HAR Software
Click Playlist prview to
hear messages in the
Station Schedule
HAR Software
To Send Playlist to HAR
Click Activate.

LEDSTAR SOFTWARE INSTRUCTIONS

(Dalton/Hurricane EVAC CMS) This is a seperate system from NaviGAtor & runs from its own hardware & software system.

1. To call up sign (turn AUTOMODE off)...*located at bottom of center screen*

2. Select and highlight sign you want to change. (Dalton CMS 1 or 2)
   (Hurricane CMS 901-909)

3. Select "CONNECT" ...*located at bottom left screen*

4. The sign selected will dial up. Look for Synchronize System box to appear and WAIT ...*wait for hour glass to go away*

5. Select "MESSAGES" ...*located at bottom screen*

6. Select "DALTON FOLDER" ... *located in the Library List (upper right screen)*

7. Select and highlight the Message you wish to display ...(I.E. RDWK 75 NB mile 335)...*located in the message list for the folder selected earlier*

8. A preview of the message will show up on a small sign in the message list ...*located at the lower right screen*

9. Uncheck the INFINITE box and set timer according to when the closer is scheduled to come out (i.e., if it is currently 7:30 pm and the closer is scheduled to come out at 6:00 am, then set the hours for 10 and the minutes for 30

10. Select "DISPLAY" and send message to sign...*located at bottom right screen*

11. Select "MESSAGES" ...*located at bottom center screen*

12. Look at the sign display to ensure message is on the sign ...*located at the upper left screen*

13. Select "DISCONNECT" ...*located at bottom left screen*

14. Re-select "AUTO MODE"; this allows scheduled scenarios to enable/ensure signs have a check mark in the auto mode box next to the sign ...*located at bottom center screen*

* *Make sure LEDSTAR Software stays "ON" - if turned off for any reason, you will need to turn it back and re-select Automode!!!*

CHAPTER TEST

1. What are the changeable message signs used for?

   a. Advertise
   b. Keep the citizens informed as to the Braves standing
   c. Conditions that affect travel
   d. Communicate the current weather conditions

2. How many different CMS sizes are there?

   a. 3
   b. 4
   c. 5
   d. 6

3. How long must a new sign run prior to it being accepted?

   a. 15 days
   b. 30 days
   c. 45 days
   d. 60 days

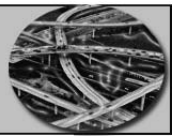
4. What does the second line of text on a Basic Stall Message indicate?

   a. Type
   b. # of lanes affected
   c. Location
   d. Direction

5. Which is an example of a good message title?

   a. Const, 75sb, mp218
   b. Acc:: 675::2LEFT::FRI:MAR2
   c. asford:stall:2ndleftlane:white camery:thurs
   d. acc:75nb:ashdone:2r1

Notes



Notes

Notes