

Your 9-1-1 Service Network and Equipment Guide

Greater Harris County 9-1-1 Emergency Network

Greater Harris County 9-1-1 Emergency Network encompasses a total of thirty-seven (37) different agencies within its district. As a result, the GHC 911 is the largest and most advanced 9-1-1 Network within the State of Texas.

OBJECTIVES

- 1. The student will be able to demonstrate how to login to the 911 system and its features.***
- 2. Identify the restrictions of usage of the 911 consoles.***

LOGGING IN

Upon arriving at your workstation, you may need to manually bring up the login screen for the 911 call taking system.

Step 1:

To bring up the login screen:

Click the **“Start”** button, located on the bottom left-hand side of your Windows Taskbar.

Step 2:

Click on **“All Programs”** and locate the **“9-1-1 System Login”** program.

(NOTE: You should always have “Aware”, “Agent 511”, and your “Enhanced Data Window” running when logged into 9-1-1.)

Step 3:

Enter your **“Username”** and **“Password”**.

1. Your username will be **First Initial Last Name**. The username is not “Case Sensitive”.

-If there are two (2) users with the same name, the users **Middle Initial** will then be added.

For Example:

Name: Mindi Bartee = Username: Mbartee

2. **Passwords** are “Case Sensitive”.

(Note: *You cannot be logged into more than one station at a time, with the same login.*)

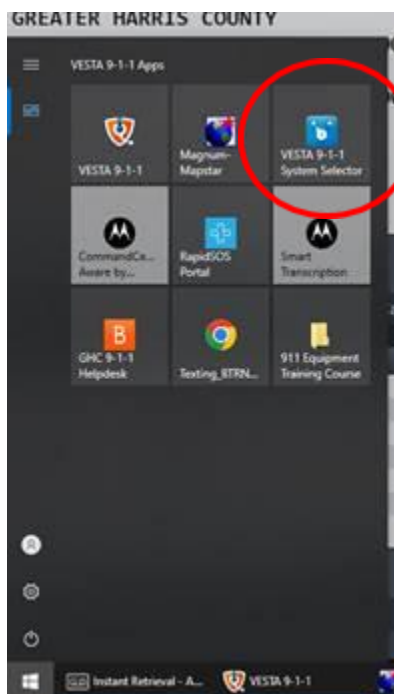


System Selector

All agencies on the same Pro System can utilize system selector at another GHC 9-1-1 PSAP/SSAP on that same Pro System.

System Selector allows an agency on the same pro system to take their agencies 9-1-1 calls from another PSAP/SSAP.

System Selector can be found from the start menu.



The console will display a black screen asking you to select which Pro System you need to sign into.



After pressing the correct number, the sign in screen will appear and you can use your regular credentials to login.

Pro 1:

Baytown
Bellaire
Cy Fair
Deer Park
East Harris Co Comm
ESD 100
For Bend Co
Humble
Jacinto City
Jersey Village
League City
Pearland
Southside
Spring Valley
TECC
Tomball
Village Fire

Pro 2:

ESD 11
Friendswood
Galena Park
HCCOMC
Hedwig
Katy
La Porte
Memorial Village
Missouri City
Pasadena PD
Richmond
Rosenberg
Seabrook
South Houston
Stafford
Sugarland
Webster
West University

AWARE:

The **AWARE** icon is located on the far left of the tool bar, with an icon titled, **“CC Aware”**.

- **AWARE** is your mapping tool. It is cloud based and tied to your VESTA account.
- You have to login to your map and your VESTA or calls will not plot on the map.

We will discuss **AWARE** in depth later in this course.

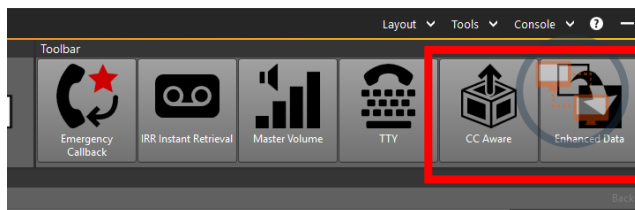
ENHANCED DATA BUTTON:

The *Enhanced Data Button* is located next to the **“CC Aware”** icon on the tool bar.

- Click the icon and use your **RapidSOS** credentials to login to the portal. These credentials are assigned to you by your manager.
- Once signed in, the window will remain *blank* until your first 9-1-1 call.

We will again address **RapidSOS** later in this course.

(NOTE: DO NOT Log off windows on the 911 computers, and/or plug any USB's into our computers. Greater Harris County 9-1-1, will always maintain all 9-1-1 Equipment.)



THE TITLE BAR

OBJECTIVES

- 1. The student will be able to identify and explain the uses for items located on the "Title Bar".***

Title Bar

Layouts Drop Down:

The system only allows the user to change the color of their screens. The screens are fixed they cannot be moved around. You cannot change the size or font. Each agency has different layouts or colors prebuilt.

These console colors are user specific not console specific. So if you log out and sign into a another console your layout selected will be the same on the new console.

MCU Layout- There is a MCU layout that is for the laptops. It is considerably smaller than the other layouts.

Console:

Clicking "Log Off" is the only way to log out of your VESTA console. You should log out of 9-1-1- after each shift. It is important to remember to NEVER log out of windows on the GHC 9-1-1 computers.

Question Mark:

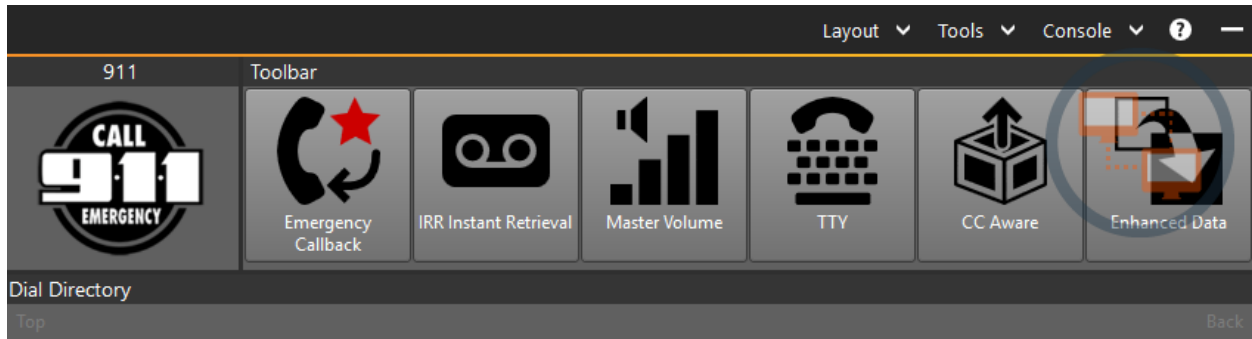
Console User Guide – A searchable help guide will appear on your screen.



THE TOOL BAR

Objectives

- 1. The student will be able to identify and or explain the use for the items located on the Tool Bar.***



The toolbar provides quick and easy access to some of the most common tools you will use. The advantage of these tools is that you can access them without having to click on another tab or change windows. They are always available.

Emergency Callback:

This will perform a quick-dial callback to the most recent inbound call received at your console without having to click on Recent Calls.

IRR Instant Retrieval:

This will bring up the Instant Retrieval window and allow you to play back the audio of a previous call received at your console.

Clicking the IRR Instant Retrieval, button will bring up the Instant Retrieval Window.

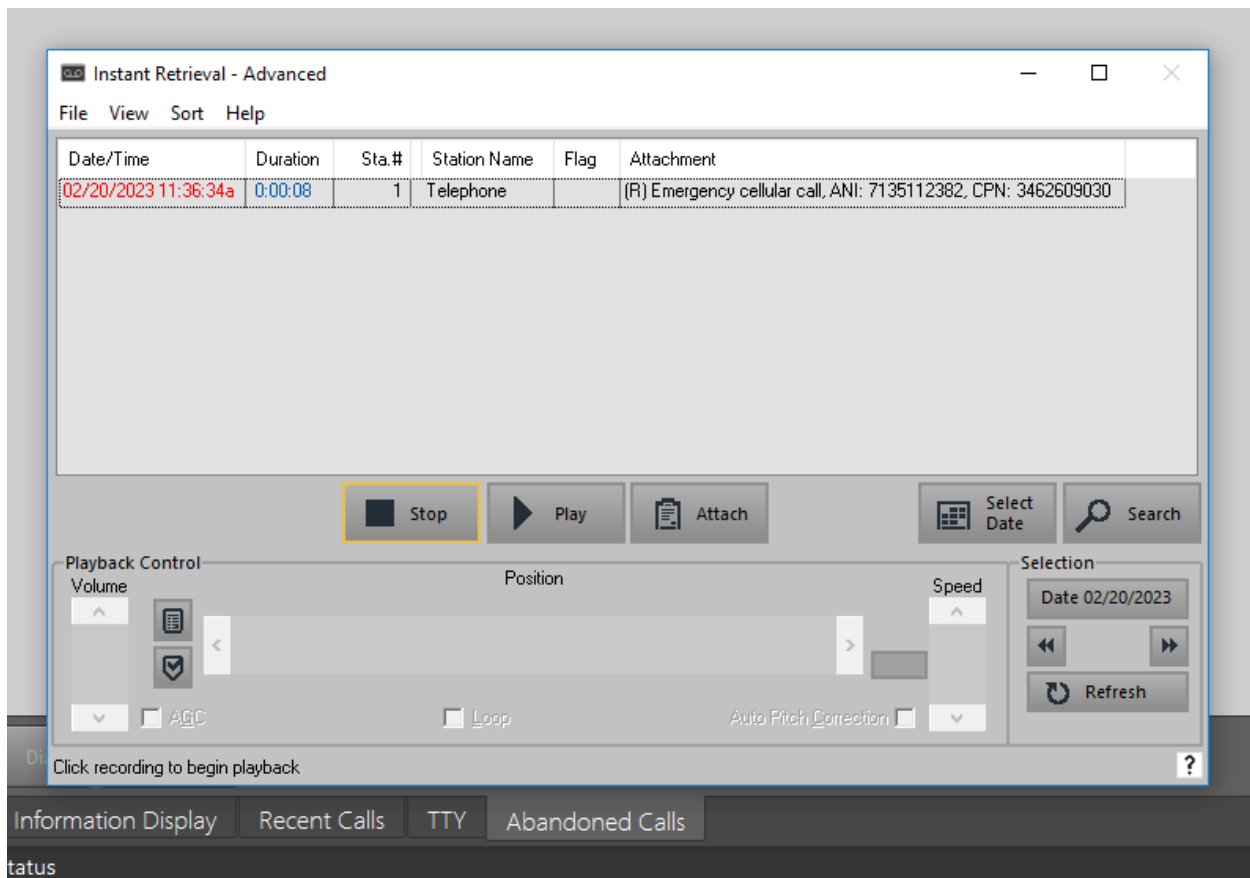
The View menu serves primarily to toggle between the Basic Controls and the Advanced Controls.

The Sort menu allows you to sort the recordings on your workstation according to your preference. You may sort by Date/Time, Duration, Sta.#, Station Name, Flag needed. You may also reverse the sort order.

An IRR does not stop playing when a phone call is answered. You must click the stop icon. The IRR is also agency specific. An agency can specify how long they would like call takers to be able to listen back. For example, some agencies allow 8 hours some allow 30 minutes.

If a user right clicks on a recording and locks it to the console, then the user can only go back to the agency allotted time minus that call. It's important to be mindful and not lock a lot of recordings on your console. You can right click and unlock recordings as well.

Listening to an IRR is a two-step process. It requires you to click on Master Volume First to select the avenue you would like to listen to the recording on.



Master Volume:

The third button is the Master Volume button. Clicking this button will bring up the Master Volume window, which controls the audio for your 9-1-1 call taking equipment.

This window allows you to adjust the volume of your call, the volume of your microphone, as well as the IRR Playback audio settings.

If you do not see “All Headsets Mic” option on the right side of the Master Volume screen, you will need to resize the window or use the scroll bar.

Mute Box:

A common mistake is a call taker clicks this box by accident and it mutes your mic. The call taker will click out of the box to answer a call quickly and the caller cannot hear them.

Tabs:

There are three tabs the call taker can toggle between. The fourth tab "Aux Audio" is not used.

When you bring up the Master Volume window, the Jack boxes tab will be selected by default.

To adjust the volume at which you hear the call on your phone receiver, move the slider for Headset #1 Receiver (This is the headset or handset you use). Headset #2 and Headset #3 are not used.

The All Headsets Mic slider allows you to control the volume of your phone microphone, that is, the volume at which you are speaking to your caller.

There are also three buttons along the bottom of the window: SAM Defaults, Restore, and Save.

SAM Defaults restores the Master Volume to the default system settings-all sliders to the middle across the board.

Restore returns the volumes to the last saved setting.

Save will save any changes that you have made to your volume settings. These changes are stored in your profile.

The IRR Playback tab will allow you to select whether you would like to hear IRR Recordings played back over the Speakers or the phone handset/headset. Be sure to follow your policy and procedures.

Some agencies only allow the use of the headset or handset for play back due to bleed over on recordings.

To hear a call played back on your IRR, ensure you first click the Enable box under either Speakers or Headset, and adjust your volume accordingly.

NOTE: If you are not using your IRR you need to keep Enable unchecked, as it may cause feedback in your recording.

If you exit out of Master Volume. It automatically will save your settings.

If you are using your playback, it will not automatically stop when you answer a 911 call. You will need to press stop on your IRR.

Everything done in the Master Volume button will save to the console, until it is changed by the call taker.



TTY Button

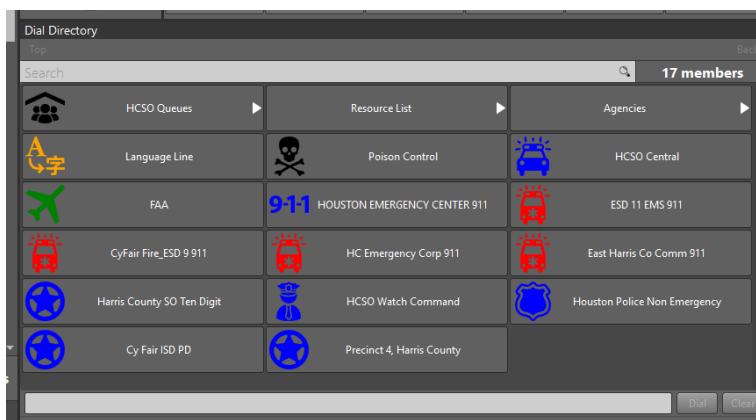
This button will bring up your TTY window in the Call Information Display area.

We will go over usage of the TTY later in this course.

QUICK BUTTONS

Objectives

1. The student will be able to identify the use of quick buttons.
2. Navigate the main quick buttons that are similar at all sites (Resources, Agencies).
3. The student will be able to identify what the system will perform when a caller is on the line and which one of these buttons are used.



Quick Buttons:

Quick Buttons are icons that can be specific to each agency. They are used to create a quick connection or list of items a call taker may need.

When utilizing the quick buttons, the call taker should only click one time.

Any quick button with a triangle located on the button means there are more options located under that button. These quick buttons are customizable by agency request.

Icons you will see on the quick buttons:



This icon is used for 9-1-1 Police agencies.



This icon is used for 9-1-1 EMS agencies.



This icon is used for language line.



This icon is used for 9-1-1 Fire agencies.



This icon is used for 9-1-1 EMS and Fire agencies.



This icon is used for Poison Control.

Agency Button:

This has all agencies listed in our dial directory separated alphabetically.

If searching for an agency name, it is recommended to use the contact search button for quicker response.

If the 9-1-1 caller is on the line and the call taker clicks an agency listed under the agency quick button the system will perform a no hold conference with that caller on the line.

Resource List Quick Button:

Clicking on the Resource List button will bring up a list of various resources that may be useful to you. Take the time to familiarize yourself with these different resources so you can locate them quickly when you need them.

If the 9-1-1 caller is on the line and the call taker clicks a resource listed under the resource list quick button the system will perform a no hold conference with that caller on the line.

Quick Button Search Bar:

You can use the Search bar at the top of the Dial Directory window to quickly find a resource you need. This search bar will only search the quick buttons.

Direct Connect Button:

The use of these contacts in this group will allow our centers to dial directly into another GHC 9-1-1 center on the Vesta Console. (Harris County Sheriff's Office, Houston Emergency Center, and Fort Bend County Sheriff's Office will not be added at this time)

MANUAL DIAL BOX

Objectives

1. *The student will be able to demonstrate how to use the manual dial box and identify the purpose.*

Manual Dial Box:

Below your quick buttons you will find the Manual Dial Box. This is where the call taker can manually dial or manually transfer.

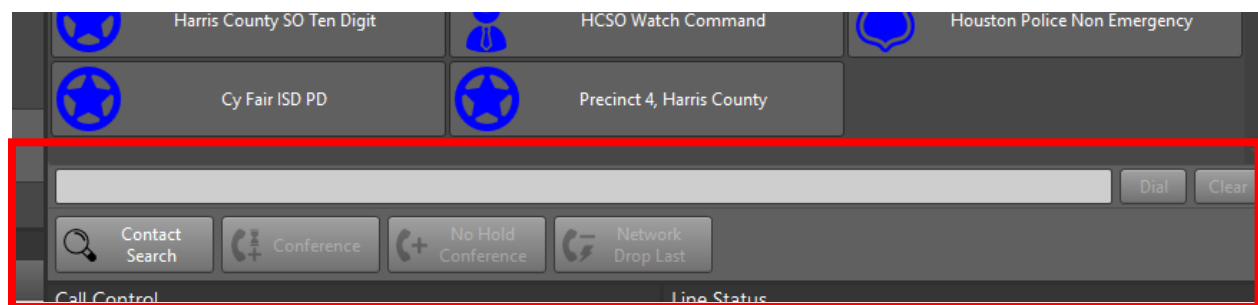
The call taker will type the numbers in and then hit dial. It is possible that the line you are calling is long distance. The call taker will need to use a 1 before the phone number.

There is a clear button next to your dial button. This will clear the number you put in the manual dial box.

*You can transfer 911 calls out to manual number if the contact is NOT listed in our dial directory. Do not transfer 9-1-1 calls using phone numbers because you can remember them quickly. You should be using our dial directory or quick buttons, if possible, for all transfers. *

To perform a manual transfer:

1. Click No Hold Conference
2. Put the number in the manual dial box. Hit enter or the dial button.



QUICK DIAL BUTTONS

Objectives

- 1. The student will be able to identify the functions of the following buttons listed under their Quick Dial Buttons.***

-Contact Search

-No Hold Conference

-Network Drop Last

Contact Search:

This button is located below the Manual Dial box.

Contact search has all contacts listed in the 9-1-1 Dial Directory. This can be done by phone number or name of the agency. When you start typing into the search bucket it will start to eliminate contacts.

If you have a caller on the line and you double, click a contact in the contact search or highlight then click dial. The system preforms a no hold conference with the caller to the agency you clicked on.

Agency Types/ Name Scheme:

If the agency contact has 9-1-1 it means the contact is a 9-1-1 line.

If the agency contact has Non-Emer attached to it then it is the agencies non-emergency or administrative lines.

- If the call taker has a caller on the line and clicks on a contact from the contact search window and clicks dial (or double clicks on the contact) the system will perform a “no hold conference” with the caller to the agency you clicked on.
- If the call taker is not performing a transfer and clicks on a 9-1-1 contact that is within our district, they will receive a busy signal. This is because the 9-1-1 system is built to transfer 9-1-1 calls. It is not a direct connection between sites. The call taker, however, can use the non-emergency contact for the same location to connect without a call to transfer.
- The contacts in the dial directory are listed to match the map locations. When performing transfers, the call taker should click on the agency name listed in the mapping solution for jurisdiction.

No Hold Conference

This button is located below the Manual Dial box.

The No Hold Conference button is used to perform an internal transfer, or to transfer a call to a number that must be done manually.

You may transfer internally by clicking on a user in the Agents window and clicking Dial, or just double-click on the desired user.

Network Drop Last

This button is located below the Manual Dial box.

This allows you to drop the last agency button or manual dial number you attempted to transfer to and allows you to select a new agency. (An Agency within GHC 9-1-1 servicing area)

For example: A call taker went to transfer a caller to Houston Fire they realized they clicked the wrong agency. They would click the Network Drop Last and it releases Houston Fire, keeps your caller, and allows you to select the correct agency.

Conference

Conference is to be used when the call taker needs to place the caller on hold before connecting them to the agency they are being transferred to.

The conference button must be clicked one time to place the caller on hold. The call taker will choose the contact they are transferring to. After the information is given to that agency the call taker can click the conference button again to take the caller off hold and connect them to the call.

Drop Last

This button is to be used for contacts that are not in our network.

For example, if the call taker has added in language line to a call. The call taker will always use drop last to let go of language line.

Announcement

This button is a separate contact that can be recorded by your agency. It is used as a contact for those who are calling 9-1-1 and shouldn't be. When the call taker clicks this contact, they can release the line. The caller will hear the recording twice then the line will automatically disconnect after the message is played.

LINE TYPES

Objectives

- 1. The student will be able to identify the two-line types, their purpose, and expectations.*

Line Types

Each agency is given two-line types for their 9-1-1 console. EIM or 9-1-1 Trunks and 10 Digit EMER lines. The number each agency receives of these lines is based on call volume.

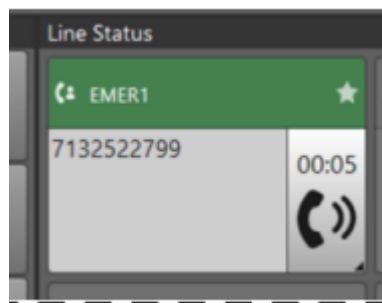
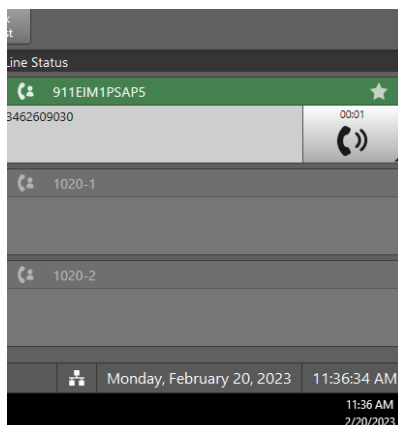
The agency will have a line status section located on the button right of their VESTA that will display these lines.

When a call comes in on the EIM line which is a 9-1-1 trunk the call taker should be receiving ANI and ALI of the caller.

On the incoming ringing line (bottom left of VESTA) the caller number will display with EIM on the top bar of the ringing line.

10 Digit EMER trunks are used as overflow of the 9-1-1 trunks. For example, if there is a major accident and all of your agencies 9-1-1 trunks are full those callers who dialed 9-1-1 will now ring in on a 10 Digit EMER line. These lines are also used by the wireless carriers when they attempt to deliver a wireless call to a 9-1-1 trunk and cannot get through. They will then route the call to a 10 Digit Emer Line.

The 10 Digit EMER lines are regular public telephone lines. They are not regulated like 9-1-1 line are so if you receive a call on that line, you may not receive ANI/ALI. You might not even receive call line ID. This is normal.



The ringing line will look like the EIM line but will display EMER. The caller still dialed 9-1-1, you are just not guaranteed ANI/ALI.

9-1-1- CALLS

Objectives

1. *The student will be able to identify how to answer, hangup, and place a 9-1-1 caller on hold.*
2. *The student will be able to list how to identify an incoming 9-1-1.*
3. *The student will be able to identify line colors and their meaning.*

All 9-1-1 calls need to be answered within 15 seconds. This is two ring cycles. The service level for our district is 95% of 9-1-1 calls answered within 15 seconds. This is also a national standard. Your PSAP Managers have tools available for them to monitor and run stats for your agency.

Incoming 9-1-1 Call

- The call taker will hear an audible tone in their ear.
- You will also have a red “Incoming Call” bar come across the top of the CID Window.

The system will auto answer for the call taker.

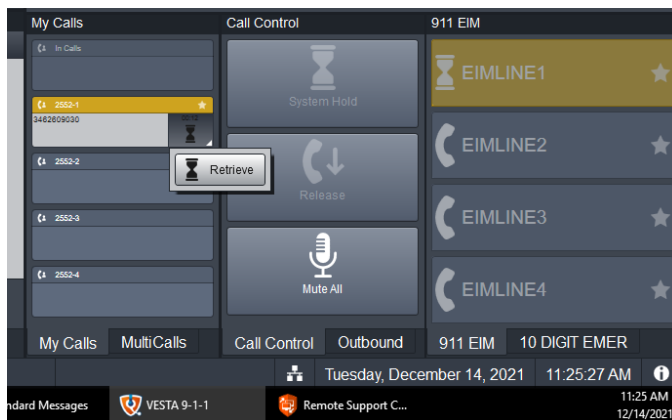
When the line is answered the line will be **green**. This means the line is connected.

To place a 9-1-1 call on hold the user can click the system hold icon (Located on call control tab), click on the phone icon located on the active line.

When a caller is placed on hold the line will turn yellow.

Another user on the VESTA system can click on the hourglass icon on the line and answer if needed.

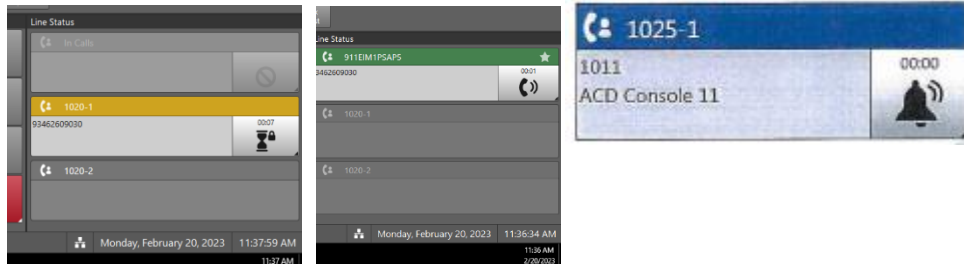
To take the line off hold the call taker will need to click the hourglass icon on the **yellow** line and click retrieve.



If you receive a call from another agent in your center the line will be **blue**.

You can release or disconnect a call several ways. The call taker can press F9, click on the phone icon located on the line and click release, or click the release button (Located on call control tab).

If the call taker is performing a transfer it is recommended to use the F9 or Release Button. This will ensure all lines are disconnected in the correct order and you do not disconnect your caller.



You can release or disconnect a call several ways. The call taker can press F10, click on the phone icon located on the line and click release, or click the release button (Located on call control tab).

If the call taker is performing a transfer it is recommended to use the F10 or Release Button. This will ensure all lines are disconnected in the correct order and you do not disconnect your caller.

Outbound Call Tab

If the call taker is making an outbound call, they will need to utilize the hold button on the Outbound call tab or click on the line to place the caller on hold.

Multi Calls Tab

Should a TCO press the ready button, the button will turn red! The TCO will still be able to answer calls but the F9 quick key will not work. Therefore, TCO's will have to click on the line to answer. If the Ready button is pressed it can quickly be changed back by simply clicking back on the ready button.

Direct Connect Tab

There is also a "Group" added under your "Resource List" quick button.

The use of this contact will allow our centers to dial directly into another GHC 9-1-1 center on the Vesta Console. (Harris County Sheriff's Office, Houston Emergency Center, and Fort Bend County Sheriff's Office will not be listed)

What the call taker can expect:

A new tab will be added under the line type area. They will see EIM, EMER, **AND** the new Direct Connect tab.

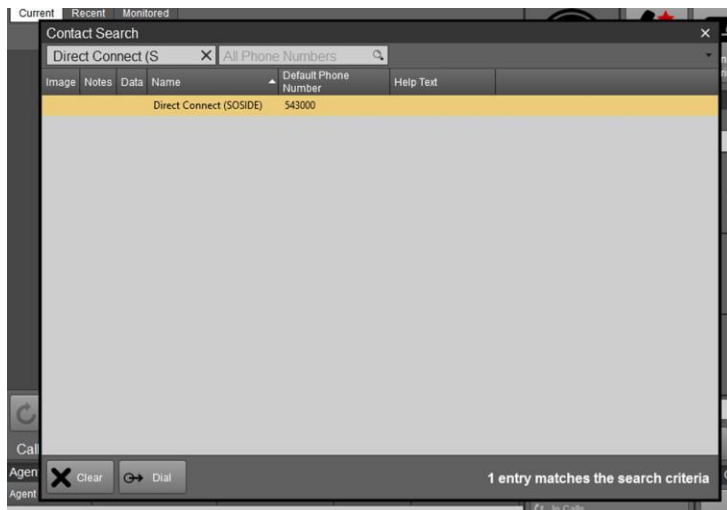
When another GHC agency is calling your center using this contact the line will ring into your center on the Direct Connect Tab. The line color will be purple. (See attached picture)

The ringer will be different than the 9-1-1 ring tone. (I will be able to share this audio with you soon)

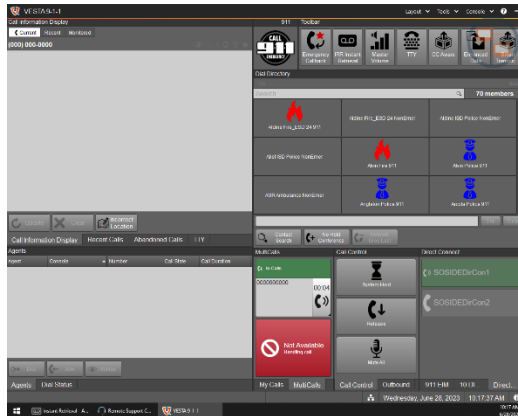
The call taker will still be able to answer the line like they have been on the Vesta Console. (F9, clicking on the line, clicking on the bell, using the key pads.)

The call taker who answers the line will **NOT** receive ANI or ALI. The call line ID will display all zeros.

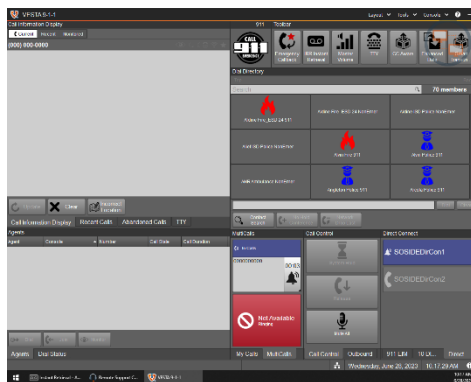
Call takes will not be able to use this new contact to transfer a 9-1-1 caller. If the call taker attempts to use this contact with a 9-1-1 caller on the line the system will NOT perform the transfer.



This is an example of what the contact search name will look like:



This is a screenshot of what the line and CID will look like when a call from this line is **answered**:



This is a picture of the line ringing into a console. The line is purple:

AGENTS WINDOW

Objectives

1. The student will be able to identify the use of the agents window.

Agents Window

This will list all agents that are signed on at your PSAP/SSAP. It displays their name, terminal, and status.

You can see if the person is Idle (not on a call) or Connected (on a call). You may see if someone has a call on hold, and if they are listening to another Telecommunicator's call.

There are three buttons on the bottom of the agent's window. Dial, Join, and Monitor.

Dial- To call another Telecommunicator, highlight their name and click dial, double click, or manually dial their console number.

Join- To join another Telecommunicator's call, highlight their name and click join. This is normally requested for trainers.

Monitor- Is a supervisor function. This allows supervisors to monitor other calls in real time without joining the Telecommunicator's call. To monitor another Telecommunicator's calls, select the agent you want to monitor and then click the monitor button. A message will display at the bottom of the screen stating that you are monitoring the agent and the Monitor button will be highlighted.

There are two ways to use the monitor function.

Listening will allow the supervisor to listen to the call without either part hearing.

Talking will allow the supervisor to talk to all participants on the call.

The ALI screen of the monitored call will display on the supervisor's CID window and will show the information pertaining to the call. The screen will also display the Monitored eye indicator in the top right portion of the screen.

The supervisor will monitor every call taken by that Telecommunicator until the monitor function is turned off (By clicking on the Monitor Button again) or a different Telecommunicator is selected.

*Join, and monitor can be assigned to specific users at the managers request.

The screenshot displays the VESTA 9-1-1 software interface. The top section shows call information for a monitored call (832) 868-4683, including the caller's address (23806 COLONIAL PARKWAY - SE SE, KATY, TX) and call details (A1-000, ESN=826, 001). The interface includes a toolbar with various functions like Emergency Callback, IRR Instant Retrieval, Master Volume, TTY, Enhanced Data, CC Aware, and Smart Transcription. A Dial Directory on the right lists 17 members, including HCSO Queues, Language Line, FAA, CyFair Fire, Houston Emergency Center, and others. The bottom section features an Agents table with columns for Agent, Console, Role, ACD, Number, Call State, and Call Duration. The table lists several agents, with Isabel Rosado highlighted as being monitored. The interface also includes buttons for Dial, Monitor, Queue Display, Agents, and Dial Status. The bottom status bar shows the date and time as Friday, May 26, 2023, 10:14:54 AM.

Agent	Console	Role	ACD	Number	Call State	Call Duration
Charyslynn White	HCNTRL010	HCSO_911	Ready		Idle	
Cynthia Mayer	HCNTRL044	HCSO_6000	Not Rea	2813763472	Connected	04:40
Danyelle Leverette	HCNTRL017	HCSO_911	Not Rea		Idle	
David Miller	HCNTRL018	HCSO_6000_Supv	Not Rea		Idle	
Deirdre Ray	HCNTRL045	HCSO_911	Not Rea		Idle	
Devita Nelson	HCNTRL006	HCSO_6000	Ready	4782322345	Connected	07:49
Gabriella Garcia Ramos	HCNTRL023	HCSO_911_Spanish	Ready		Idle	
Isabel Rosado	HCNTRL002	HCSO_911	Not Rea		Idle	
Kyle McLean	HCNTRL040	HCSO_911	Ready		Idle	

Above is a clip of the 9-1-1 screen where a supervisor is using the Monitor Feature. The CID window is being displayed in the monitor tab. The operator also has the option to choose listening or talking.

Call Information Display (CID)

Objectives

- 1. The student will be able to identify the correct usage of tabs and buttons located in the Call Information Display (CID) Window.***

While the title is the Call Information Display window some call it CID Window, or ANI/ALI Window. This is where the ANI/ALI information for 9-1-1 calls is displayed. This screen works directly with your map.

(Show Breaking Down ANI and ALI handout. Handout 1)

Tabs

You will notice three tabs along the top of your CID window: Current, Recent, and Monitored.

The Current tab will highlight and bring to the front when the call taker answers a 9-1-1 call. The ANI/ALI information of the call will display.

The Recent tab will display if the call taker has clicked on a call from their “Recent Call Tab” and clicked the “View in CID” button.

The Monitored tab will display if the call taker has that permission and is monitoring a call.



Buttons

There are three buttons located on the bottom of the CID window. Update, Clear, and Incorrect Location

Update Button

This is used for wireless callers. The ANI/ALI of wireless calls updates every 15 seconds for 2 minutes. However if the call is longer than two minutes and the call taker needs updated location information displayed they will need to manually click on the update button. You often hear others refer to this as “rebid”.

Clear Button

This button will clear your CID window and bring it to a blank grey screen.

Incorrect Location

This is sometimes referred to as DRS, discrepancy report, or ILIR.

This button is used when something occurs with your CID window or on your 9-1-1 map that needs to be reported.

Example: A 9-1-1 call does not plot.

A location is listed incorrectly in your CID window for a landline.

This button is not used for Rapid SOS errors or your agency CAD errors.

The button opens an additional window with a form that needs to be completed. You must have the associated ANI/ALI information pulled up in the CID window or it will not allow the call taker to click the button.

ANI/ALI Information

Date/Time Calling Number

Agent

Agent Extension

All the information above will auto fill for you.

The call taker will need to choose what is incorrect about this location.

The remarks section of the ILIR is critical **and should always be filled out**. This is where the call taker will explain exactly what is incorrect with the call they received.

Example: AN/ALI displayed the calling number as 281949 5663. The call taker verified with the caller, several times, they were actually calling 911 from 281 948 2234 (Show Handout 2)

Recent Calls Tab

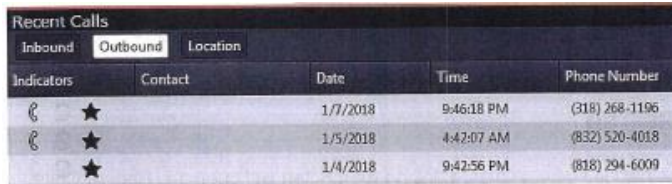
The tab after the CID is Recent Calls. Clicking on this tab will open the Recent Calls window, which contains information about the last 100 calls received at that console.

You can also perform a call-back from this window on any of the previous calls listed. Select the call and click the dial button. Or double click the call.

There are buttons across the top and bottom of the window to help sort calls for your console. Inbound, Outbound, Location, All, Admin, and Emergency, Dial, View in CID, and Emergency Callback.

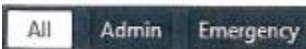
Inbound displays up to the 100 most recent inbound calls received on the console. The date, time, callers' phone number (CPN), and circuit (line type) are displayed.

Outbound displays up to the 100 most recent outbound calls made on the console. Also shown are the date, time and phone number associated with the call.



Recent Calls				
Inbound		Outbound		Location
Indicators	Contact	Date	Time	Phone Number
☎ ★		1/7/2018	9:46:18 PM	(318) 268-1196
☎ ★		1/5/2018	4:42:07 AM	(832) 520-4018
☎ ★		1/4/2018	9:42:56 PM	(818) 294-6009

All, Admin, and Emergency are filters that appear only when Inbound button is selected and will show:

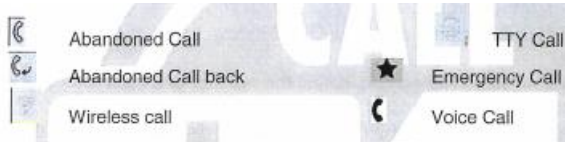


All: All inbound calls received on all circuits at your console.

Admin: All inbound 10-digit calls received at your console.

Emergency: Inbound calls received on 9-1-1.

Indicators found in your recent call display information about a call at first glance. More than one symbol may be displayed for each call.



View in CID Button

This is used to view a previous ALI screen, select the number, and click the View in CID button.

This will take you back to the CID Window and display the ALI for the highlighted call.

Emergency Call Back Button

To perform a quick dial callback to the most recent inbound call to your console, click Emergency Callback. It doesn't matter what call you have highlighted in the Recent Call Window. If you click the Emergency Call Back button it calls back the last number that came into your console.

Abandon Calls Tab

Objectives

- 1. The student will be able to identify what occurs with an abandoned call.***

An abandoned call occurs when a person dials 9-1-1 and then disconnects the line before a call taker could service the call.

Agencies within our servicing area have auto abandoned called back. When this happens the system calls the number that came into the system and plays a recorded greeting. It will list options for the caller to choose. One option will allow the caller to press a number and the call will be sent back to the 9-1-1 center to be serviced. Another option will allow the caller to press a number which means the caller does not have an emergency. If this option is pressed the call will never be seen a 9-1-1 operator. If the system calls a number back and no one answers it will attempt to retry the call several times, the number specified by each agency. If the call is not answered, it will be sent to the abandoned call window for a call taker to click on the call to call the number back.

Each call taker should follow all policy and procedures on abandoned call backs.

When there is an abandoned call in the queue it will emit a beeping tone until someone performs the call back from the Abandoned Call Window.

You can perform a call back by double clicking on the line, manually dialing the number, or highlighting the call and pushing the dial button.

If the line is long distance you will have to manually dial the number back using 1.

TTY

Objectives

- 1. The student will be able to demonstrate how to navigate and transfer a TTY call.***

There are two ways to access the TTY located on the 9-1-1 console. The button and the tab. By law you are to activate your TTY on all open and silent 9-1-1 calls. These devices are used for the hearing impaired, and the actual devices have evolved tremendously. Now people can turn their cellular device into a TTY capable device. TTY Stands for teletypewriter.

Whether you choose to use the TTY button on the toolbar or click the TTY tab, both options will open the TTY window.

Using a TTY, text is transmitted in real time over telephone lines using audible tones known as the Baudot code.

Your TTY window functions like a chat window. The large open area on the lefthand side of the screen is where the conversation is displayed.

On the right-hand side of the screen, the General and American Sign buttons display pre-programmed messages.

To send one of the pre-programmed messages, highlight the message and hit the send button, or double-click the message.

To compose your own message, type in the box below the Characters Pending and hit enter.

Your message displays in real-time (as you are typing it). Messages are limited to 160 characters.

Buttons

There are several buttons at the bottom of your screen: Detect TTY, Voice, Mode, and Session Control

Detect TTY Button

Is the only way to activate the TTY and play out the greeting. Just opening the TTY window does not automatically activate the TTY.

Voice Button

Will change a TTY active call to a voice call. To return to TTY mode, you will have to click Session Control >Request Session Control.

Mode Button

To accommodate different needs of callers, there are different TTY modes supported through your software. The Mode button allows you to toggle which mode is enabled. To change the mode, click the Mode button to bring up a drop-down menu and select the proper mode.

Hearing Carry Over (HCO) is the default mode. It is used when the caller can hear but cannot speak.

The Voice Carry Over (VCO) is to be used when a caller can speak but cannot hear.

The ASCII Answer and ASCII Originate buttons are not supported at this time.

Accepting a TTY Transfer

If you are accepting a transfer, you will have to click on session control and request control of the session. If the transferring agency immediately disconnects the line then the system will give you control automatically.

Transferring a TTY

If you are transferring a TTY call it's important to remember to do your "Warm Transfer". You will need to click on session control then click on relinquish control. If you disconnect the line the system will automatically give the other agency control. You will need to pass along the information you have already taken from the caller. The text does not transfer.

Agent 511

Objectives

- 1. The student will be able to identify an incoming text chat.***
- 2. The student will be able to identify features available in the text chat.***

Session Manager

This is the same view for your entire PSAP. All call takers in your PSAP can see a text msg come into your center via the session manager.

Session Manager has 4 views. All, Queue, Active, and Archived. The call taker can toggle between by clicking on the button.

- All: Is viewing all text chats answered or unanswered for your PSAP
- Queue: Is viewing the text chats that have yet to be opened by a call taker.
- Active: Is viewing the text chats that have been opened by a call taker.
- Archived: Is viewing all previously open text chats that have been closed out or released.

The session manager allows the call taker to also filter their views by phone number and start time/date and end time/date.

The view also has columns where limited information can be viewed about the chat.

- Participants- Agents on the text chat.
- Phone- Phone number of the text chat.
- Session Start Time- The time the session began.
- Latest Message- Time of the latest incoming message
- Messages- The number of messages
- Open- This will display an envelope icon where the call taker will click to open a text chat.

Initiating a Text Chat

On the top right of the session manager there is a box where the call taker can enter a phone number and click the start session button to initiate their own text chat with a caller from 9-1-1.

- If the call taker initiates a text chat the call taker will not receive XY coordinates.
- If the system is unable to start a text chat with the number being used, you will get a bounce back msg. Stating the system was unable to establish a chat.

Receiving a text-

The call taker will receive a phone call via their 10 Digit Emer lines. When the caller answers the call there will be a voice recording notifying them that they have an urgent Agent 511 text chat waiting, open their Agent 511 window. The call taker that received the voice notification call should be the one who opens the text chat from session manager.

- All incoming text chats that have not been opened by a call taker will highlight **orange**.
- When opened they will become a **blue/grey** highlight.
- Text chats that have been in the queue for 5 mins or more will be highlighted **yellow**.

9-1-1 text chats do not automatically populate on your map like regular 9-1-1 calls will.

When a text chat is opened by clicking on the envelope icon in the open column a text chat box will appear. Once opened the text chat will display XY coordinates of your texter. These coordinates must manually be plugged into the map. They will plot within 50 meters of your texter.

The top bar of your text will display the phone number of the texter and the carrier of the device.

Unlike other wireless calls the call taker will have to manually click the Rebid button if they would like updated coordinates to plug into their map.

The texter will display in the chat box with the person icon.
The caller taker will display in the screen the headset icon.

Features available in a text to 9-1-1 are transfer, request MMS, insert into conversation, and language assist.

Transfer

The call taker can only transfer a text chat to an agency listed in the text chat dial directory.

1. The call taker will click transfer.
2. Type in the agency needed.
 - If the agency is not listed the call taker will need to process the chat and relay the information verbally to the other agency.
3. Click on the contact and click on the transfer chat button.
4. The chat is then transferred to that agency you selected. You are still on the text chat and can read and communicate with the texter and the other agency until you hit your release button. This is more of a conference than a transfer.
 - When you transfer a text chat the entire text chat is transferred.

It is very important that the call taker also transfers the voice notification call to the agency as well.

Request MMS

Citizens can send pictures or videos into the 9-1-1 call center but only once requested.

The pictures and videos cannot be sent directly to the #911.

The call taker must click the Request MMS button.

Once clicked the texter can send as many pictures and videos as they would like until the call taker uses their release button.

While the call taker stays in the same text chat window the texter is toggling between two text feeds.

1. One from a 713 number where they will send pictures and videos.
2. One directly to 9-1-1 where they can communicate via text only.

Videos must be saved to the device and under 60 seconds in length.

Release Button

This is the correct way to end a text chat. When you use this button it auto sends a message to texter letting them know their text chat has ended. If they need something else to please call 9-1-1.

If the call taker uses the X on the window the message will stay active for 6 additional minutes before it is closed out.

Insert into Conversation

This drop down is prefilled with 10 statements that the call taker can chose to use if it applies.

The text box allows for up to 160 characters.

Language Assist

When clicked to turn on the text chat will refresh and use the 106 language in google translate to translate the text in your window.

- The translation into English will appear under the language sent.
- The call taker can click on the? to see what language the system is using.
- When the call taker types their response in English the system will auto translate and send the texter the translated msg and the English msg.

This can also be used when initiating a text chat.

After turning language assist on the call taker will click the drop down for the cell phone icon and type in the language the texter needs to read. The headset icon is the language the call taker is typing in.

Archived Chats

To view chats that have already ended the call taker will need to click on the archived button.

The call taker can then click on the open envelop icon next to the chat they wish to view. This will open up the text chat window for view purposes. If the call taker wishes to reactivate the conversation, they can click the reactivate conversation button and a message will be send to the phone number stating "Message from 9-1-1. Please reply if you need assistance.". This will allow the call taker and texter to communicate again.

Transfers

Objectives

- 1. The student will help identify common best practices for the district.***

GHC 9-1-1 Servicing area has agreed as a common practice that when transferring a 9-1-1 call to another agency, Warm Transfers will be given.

To do this the transferring agency will give all information to the receiving agency, make sure the caller is talking to the receiving agency, and they are no longer needed before disconnecting the line.

Map Usage

It is a prescribed best practice to use 9-1-1 map as a location verifying tool before performing a 9-1-1 transfer to a different agency.

Several agencies have different CAD systems which may not be as up to date as we would like. Using the 9-1-1 map to verify location jurisdiction before performing a transfer will help eliminate delays in service during critical moments.

RapidSOS

- Rapid SOS is an additional resource available at the time of a 9-1-1 call.
- The logins for each agency are created and maintained by the PSAP manager.
- The call taker should login to the Rapid SOS portal right after logging into their 9-1-1 console.
- The information displayed in the portal is only good for 10 minutes after a 9-1-1 call disconnects.
- The information does not spill over into call slips.
- The location they provide is from the device itself.

This resource provides critical data such as medical information, Z axis, emergency contact information, location information and so much more.

Rapid SOS Training is done online through their portal.

At minimum we suggest a call taker take the following training from the portal:

1. What's New (RapidSOS grows very quickly so it's important to stay up to date on the new systems/devices they interface with.
2. Rapid SOS Basics
3. Quick Tips
4. User Training

The training **cannot** be done on a 9-1-1 console.

IP Phone

Objectives:

- 1. The student will be able to list differences in the Vesta Console and IP Phone solution.***

IP Phone Differences

1. The sign on for the IP phones is not unique. Meaning it is not tied to a VESTA account. For reporting purposes, the call taker should put an identifier in their call slips. Due to the phone sign on not being a unique identifier it will help agencies identify who took the 9-1-1 call. You will not be able to pull data from analytics by user for these phones.
2. These phones are only recorded if the agency uses IP level recording.
3. When logged into the IP Phone the user will receive ANI and ALI. To rebid the user will need to click on the ALI Update option. This phone does not auto rebid on wireless calls like the VESTA console.
4. The phone will only “Ring” if logged in. At this time GHC will log the phones in and leave them logged in once installed. There will however be a section in the manual on how to log the phones in just in case they get logged out.
5. When a 9-1-1 call is answered on the IP Phone it can no longer be picked up by someone on a VESTA console.
6. The call will not currently plot on Aware. However, it will populate on RAPIDSOS portal if the information is available.
7. The agency will provide GHC 9-1-1 with up to 14 contacts they wish to add to the phones dial directory for transfers. Just like all other 9-1-1 calls you should be utilizing the dial directory (For this IP Phone it will be the 14 agencies given to GHC to preprogram) for transfers. Call takers should only be performing MANUAL TRANSFERS when the contact is not listed in the dial directory.

Objectives:

- 1. The student will be able to list how to login to the IP Phone and make themselves ready for a 9-1-1 call.***

Logging In

(At this time GHC will log on the IP Phones when installed at your agency. If they are not logged in the phone will not ring.)

Procedures for logging into the IP Phone:

To login the call taker must press the button next to login option on the screen of the IP Phone. The username and password for each phone is the number displayed in the blue bar on the home screen of each phone.

NOTE: Usernames are not associated with an individual's Vesta account. The username and password will be the same. The call taker will need to use the ABC button to change it to the number function. The user will also have to use the arrows to input the password.

The screen will change to the login screen. After the username and password is put into the screen.

Press the button below submit option on the screen.

You will get a "Logging in as ###.." message. Then a "Login Successful." Message.

Once logged in the phone should be automatically put into "Ready".

If the phone does not automatically go into "Ready" the call taker needs to press the button located next to the "Go Ready" option on the screen.

Objective:

- 1. The student will be able to list how to answer an incoming 9-1-1 call as well as rebid for a wireless call.***

Incoming Call

When a call rings into the center it will display the line type and call line ID. The call taker can pick up the handset to answer or press the button next to the line ringing to answer.

When the call taker answers a call the ANI/ALI will display on the phone screen.

A rebid for wireless calls on the IP phone must be done manually. While on the active call the call taker will need to click the button located under “done” on the screen. This will bring the call taker back to the home screen. The call taker will need to then press “ALI Update”. The IP phone will then display the updated information on the display screen.

If the agency allows ANI/ALI CAD spill 9-1-1 calls answered from these phones will spill over into the CAD call slip like normal.

NOTE: The call will not currently plot on Aware or Magnum. However, it will populate on RAPIDSOS portal.

Remember: someone on a VESTA console cannot pick up a line that has been answered by an IP Phone.

For reporting purposes, the call taker should put an identifier in their call slips. Due to the phone sign on not being a unique identifier it will help agencies identify who took the 9-1-1 call.

Objective:

- 1. The student will be able to identify how to perform a transfer of a 9-1-1 call on the IP Phone.***

Transfers

Each agency should be performing “Warm Transfers” as they do on all 9-1-1 calls.

There are two ways to perform a transfer from the IP Phone.

1. To transfer to an agency that is built into the IP Phone directory click on the button located next to the agency name on the right-hand side of the phone. When the call taker has done their warm transfer and they need to disconnect they can hang the receiver up or click the red disconnect button located on the bottom right of the IP phone.
2. To perform a manual, transfer the call taker will press the button located below “Xfer” or “Conf” then dial the number the call is needing to be transferred to. No “9” is needed.
 - a. **NOTE: Call takers should NOT be performing MANUAL TRANSFERS unless the contact is not preprogrammed. Performing a manual transfer will take the call from a 9-1-1 truck to a 10 Digit EMER line, which takes it out of the protected 9-1-1 network.**

XFER /CONF Buttons

XFER- used when not using a pre-programmed contact. This will only have to be pressed 1x. The caller will not be placed on hold.

Conf- used when not using a pre-programmed contact. This will need to be pressed 2x. It will put the caller on hold and will have to be pressed a second time to take the caller off hold.

CONTINGENCY OPTIONS

Objective:

- 1. The student will be able to identify what contingency options GHC has for agencies within their district and their function.***

Alternate Route- GHC 9-1-1 provides each agency in our district an alternate route. The purpose of this is to make sure all 9-1-1 calls for service are answered. The system will auto reroute a call to agencies alternate route for two reasons.

1. All consoles for that agency are logged out.
2. All lines for that agency are occupied.

Mitel Phones- These phones are used as a backup for the Vesta System. They should only be logged on when directed to do so by GHC.

System Selector- This feature can be found on all Vesta Consoles. It allows agencies to relocate to another GHC 9-1-1 center and login to their agencies 9-1-1 system.

MCU Laptops (Layout)- This is a mobile 9-1-1 call taking station. Each center has at least one stationed at their site. The purpose of this laptop is to allow a center to set up anywhere and take 9-1-1 calls. There are in-depth instructions on setting up the laptop located in the black carrying case. Due to the size of a laptop screen the call taker will need to be in the MCU layout option before logging into the laptop with their Vesta credentials. All features available to the user on a Vesta Console are available on the MCU laptop.

**** If using the hotspot it's important to make sure it is powered down when not in use. ****

[illegible]

Aware

Objective:

The student will be able to demonstrate how to login to Aware as well as identify key elements for accounts.

ACCOUNT CREATION

An individual's COMMAND CENTRAL user account is created simultaneously with the creation of the users VESTA account.

This process begins when an agency's head sends an email notifying the Greater Harris County-NOC of a new user needing access with that agency.

This email contains the user's basic information such as the call takers "NAME" and "OFFICIAL AGENCY EMAIL".

Once the users account is created, the user will automatically receive an email from the COMMAND CENTRAL TEAM.

This email will be sent from the following address:

noreply@commandcentral.com

SETTING THE USERS PASSWORD

Located within this initial email, the user will need to click on the "Set your password here" link.

After "clicking" this link, the user will be directed to a new page, allowing the user to set their password.

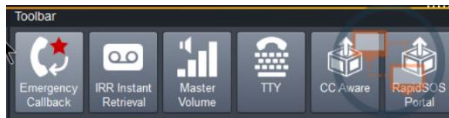
Upon submission of the users new password information, a confirmation email will be automatically sent to the users registered email address. *(Pictured Below)*

NOTE: *If the user does not receive the conformation email, users should check their SPAM folders, or will otherwise need to contact their individual agencies IT department, as it is possible that the email is being blocked.*

ACCESSING AWARE LOGIN PAGE

Users can log into the AWARE application via the AWARE icon, located within the VESTA consoles' toolbar.

Upon clicking AWARE icon, users are automatically directed to the "Command Central Aware" sign in page.



The user can also find the application under the start menu.

USER CREDENTIALS

The Greater Harris County-NOC is responsible for assigning each individual operator a user's name. This is accomplished by utilizing the individual operator's agency email address as the "USER NAME" for that individual.

Each individual's login credentials will be tied to that individual user VESTA account.

For that reason, it is important for each operator to login to their map using their own assigned login credentials,

DO NOT use another operator's login.

By logging in under another operator's credentials the 9-1-1 calls will not plot on the map, as the MAP account and Vesta account are tied to each individual operator's login.

LOST OR FORGOTTEN PASSWORDS

If a user has forgotten their password they will need to click on the "FORGOT PASSWORD" option, which can be located on the sign-in page ***LOCATION OF FORGOT PASSWORD LINK***.

When a user "clicks" the "FORGOT PASSWORD" icon/link, an email will be sent to the users registered email address from COMMAND CENTRAL support.

Contained within this email is a link, allowing the user to "RESET", the lost or forgotten password.

This email link is only valid for Ten (10) minutes.

NOTE: *If the user does not receive an email containing the "PASSWORD RESET" link, users should check their SPAM folders, or will otherwise need to contact their individual agencies IT department, as it is possible that the email is being blocked.*

INITIAL PROGRAM START UP

Upon logging into AWARE, users will be initially greeted by the programs opening display page.

Located within this initial screen, the user will notice a dialogue box, inquiring if the user wishes to view any new release notes for the COMMAND CENTRAL program.

At this point, it is the user's discretion as to whether they wish to, "VIEW" or "DISMISS", any available notes from the prompt.

NOTE: *Aware will auto log the user out every 12 hours.*

Objective

The student will be able to identify 9-1-1 calls jurisdiction and utilize google map link.

INCOMING 9-1-1 CALLS

All calls that come into the center can be viewed on both the **MAP** and the **EVENT** tab.

They will remain on the map and in the Event tab for 1 hour.

When an operator answers an incoming 9-1-1 call, that operator's map will automatically center on that specific calls' location.



If the call is *"Active"*, a *"Blue Circle"* will appear around the *"Triangle"*.

If the *"Circle"* is not visible the call is *"No longer Active"*.

The *"Green Triangle"* indicates the ANI/ALI location of the caller. The *"Green Triangle"* will display an icon indicating the class of service, which is as follows:

1. Phone- Landline
2. Tower- Phase 1
3. Cell Phone- Phase 2
4. World-VOIP (Voice over internet)
5. Car- Telematics Call
6. Text Bubble- SMS Text (These will not currently appear on our map, but a RapidSOS triangle will if available)
7. Circled Question Mark- UNK



When the "Red Triangle" is visible the location provided by Rapid SOS is indicated.

Rapid SOS triangle- this may not be available on every call. This is information given to GHC by Rapid SOS, we do not control the information. This location is coming from the device. This popup will also provide the probable location.

While viewing the map, the user has the ability to *"click"* on either the *"Green Triangle"* or *"Red Triangle"*, and the map will display the location for that point.

In order for the user to determine the jurisdiction of a 9-1-1 call, the user will need to *"click"* within the area next to the 9-1-1 call indicator.

Conversely, *"clicking"* directly on the *"Triangle"* icon will display *"call information"* not *"jurisdictional information"*.

Actions: The user can use the roller ball on the computers *"Mouse"* to **ZOOM IN** or **ZOOM OUT**. Additionally, users can also use the plus (+) and minus (-) icons, located on the bottom left of the map. The further the call taker **ZOOMS OUT** of the map, the 9-1-1 calls within the users district become visible, indicated by *"Blue Dots"*.

The call taker can also *"hover"* over a 9-1-1 call triangle (red or green) and the map will display the location address.

Google Street View:



When "clicking" on a "Triangle", either "Green" or "Red", if a Google Street View of the location is available the call taker can "click" on the "Google Street View" Icon, which is found next to the "Location" portion of the popup.

Google street view may not always be available. If the user clicks the link and a black screen pops up there is not a street view available.
Jurisdictional Pop-Up Box

DETERMINING JURISDICTION

For a user to determine the jurisdiction of a 9-1-1 call using the Aware map, the user must "*click*" in their map *next to* the 9-1-1 call indicator.

Upon performing this action, a "*jurisdictional pop-up*" box will appear visible to the user.

This "*pop-up*" will display who responds for Police, Fire, and EMS, in addition to the responsible PSAP.

Note: when the call taker clicks the entire area with that response will highlight

If the users view is zoomed into their map close enough to see individual street segments a "*pop-up*" box will display the street information first.

The user will then need to use the provided "*Arrow Keys*" located within the "*pop-up*" box to page over to the jurisdictional information. In the event the area is close to another jurisdiction click on the street segment for jurisdiction information is the best practice.

SETTING UP TABS

The user will only need to set tabs on initial login.

Default settings: When a user logs the only tabs visible will be the map tab and an event tab. The call taker can "**double click**" and "**hold**" to grab either the **Tab**s or **Map**. This will allow the user to move the **Tab** or **Map** around to allow for different layouts.

Objective

The student will be able able to identify the information showing in the event tab.

COLUMNS

The user will need to set up their columns, tabs, and filters. The settings will move with the callers login.

In the **Event Tab** the user will need to set up the information columns displayed in this tab.

To do this you will need to "**click**" on the "**Settings Wheel**" then "**click**" "**Select Columns**". Only the following should be checked.

- **Address**
- **Call back number (calling party number)**
- **COS (class of service)**
- **ESN (emergency service number)**
- **Occurred (date and time of call)**
- **Owner (user who answered the call)**
- **Updated (time the call rebid/updated)**

The user can "**click**" back on the "**Settings Wheel**" for the settings options to collapse again.

Users should always have their **Event Tab** up and operational.

ADDING TABS

To set up a tab that will display a user's individual calls the user will need to add a second tab.

This can be done by clicking the **plus (+)** sign on the top right of the **Map Tab** or the top right of the **Event Tab**.

"Click" the **plus (+)** sign then "click" **Event Monitor**. This will create a second tab titled, "**Event Monitor 1**". The user can "double click" on that title and change it to whatever they would like. (*examples: username, six digit, last name etc.*)

The user will then need to filter this new tab for their username, or the username they are wanting to monitor on this tab.

To do this the user will need to "click" the "**filter icon**" on the new tab, then scroll down to "**owner**" and "click". The user will then need to put their map username into the keyword search icon and hit enter.

Username will be what is listed before the @ **of** your email address. (*for example my email is mbartee@911.org, so I would put mbartee in the keyword section*)

The user can then "click" back on the "**filter icon**" to collapse the filter options.

After the user creates their filter then they will need to make sure the columns reflect the same columns seen on the **Event Tab**. (*see the Event Tab section*)

NOTE: For PSAP situational awareness we encourage each call taker to create their own tab.

THE EVENT TAB

The **EVENT TAB** will display all calls that have come into the agencies call center for the past hour.

The specific users individual calls will be highlighted green.

Users can "click" on any call listed in the **Event Tab**.

If a user "clicks" twice (2x) on an individual call, the users map will automatically center on that calls location.

If the user "clicks" one time (1x) on an event, the call information will populate on the "pop-up". Additionally, a button will also become available to the user, when "clicked" will center the map on the call's location.

The icon for the class or service of the 9-1-1 call or the Rapid SOS icon can be seen in the **Event Tab** as well.

The Event Tab & Call Takers tab should be up and operational at all times. The call taker can click on a tab and hold to drag and drop the windows in the format they would like.

LAYERS

There are optional layers available to the user.

1. ***Weather layer:*** This layer displays current weather information as it relates to the user's map. This information is provided by the National Weather Service.
2. ***Bayou Gauge:*** This layer provides information as it relates to the bayous visible on the user's map. This information is provided by the United States Geological Survey, and the National Weather Service,
3. ***Traffic:*** This layer provides current traffic within the user's visible map area. The traffic information is provided by the Texas Dept. of Public Safety.
4. ***Schools, Precents, EMS Stations, Fire Stations, Police Stations, and Hospitals*** have recently been added. When clicking on the icon displayed additional information may be displayed. The information provided is done from an outside source, it does not belong to GHC.

Users can change the opacity of these layers, and/or turn them on and off on demand.

There will be additional optional layers for the call takers in the future.

Objective

The student will be able to determine response by performing searches for locations, cross streets, exits, common places, and XY coordinates.

UTILIZING THE SEARCH FUNCTION

Users can use the "***Magnifying Glass***" icon as a search feature to find specific locations.

It is important to use the "***city/state***" when searching to help you narrow down options.

This feature is a web-based map, as a result you will get several location options including location results from out of state.

The user can also search addresses. When searching addresses, it is important to include the city, state, and/or zip code. (*Format: Street Number, Street Name, City, State, Zip Code*)

1. Example: 9223 Brinkmeyer Rd., Needville, TX 77461.
 - Cross streets are entered with either.

1. ***and***
 2. ***&***
 3. ***at***
 4. ***@***
 5. ***;***
- XY coordinates are separated by a comma or a semi colon. You must put the (-) attached to the Y coordinate.
 1. ***29.0567, -95.4567 or 29.0567; -95.4567***
 - Common places can be searched as well.
 1. ***They can be searched by the locations name. Include city, zip code or both.***
 - Roadway ***"Exit"*** names and numbers can be searched different ways.
 1. ***Exit #, City/or Zip***
 2. ***Exit 105, Sugarland, city or zip***
 3. ***Exit # & street name***
 4. ***Exit 105 & Southwest Fwy, Sugarland, TX***

NOTE: You may or may not need to use comma or semi colon to separate data on every search. This will depend on the criteria entered.

LEGENDS

When a user selects the ***"Legend"*** icon, an informational box is displayed providing the user with a description, explanation, or a table of symbols that define features on the map.

If the user has the opacity of the layers turned to zero you may not see data in the legend.

MEASUREMENT

The ***"Measurement"*** icon will allow the user to manually ***"point-and-click"*** or ***"draw"*** any shape on the map for which they want to measure the distance of.

To remove the "drawing" the user need only to click back on the ***Measurement*** icon

COORDINATES

A user can ***"click"*** the ***Coordinates*** Icon when viewing anywhere in the map and receive the ***X and Y coordinates*** for that particular location.

UTILIZING THE "SETTINGS WHEEL" ICON

By selecting the "**Settings Wheel**" icon, users can then access the "**Base map**" tab to change the map visual.

Base Map: After selecting the "Base map" tab users will then see two (2) map options to choose from.

Option 1: Streets

Option 2: Imagery

It is the user's preference as to which view, they prefer.

