

Emergency FIRE Dispatch

Ensuring the correct response with the proper resources. Every call, every time.





Lori Broadrick
TECC Director



NORTH COMM

- Fire Department 911 Dispatch Center
- Territory spans approximately 165 square miles
- Population of approximately 500,000 people
- Serves five (5) fire departments within northwest Harris County
 - Champions
 - Cypress Creek
 - Klein
 - Ponderosa
 - Spring

Our Mission

The Texas Emergency Communications Center (TECC) serves as the vital link of emergency services between the citizens and first responders within our communities. We strive to provide professional, courteous, reliable, and expeditious public safety communications services while keeping the safety of our first responders in mind at all times. We will provide this service in the most cost-efficient manner possible, recognizing that the citizens of our communities fully fund this operation. Through our actions, we help save lives, protect property, and assist the community in their time of need.

Public Safety Secondary Answering Point

- 911 calls in TECC's portion of unincorporated Harris County are routed first to the Harris County Sheriff's Office. All callers requesting the fire department are transferred to TECC as the secondary answering point.

Objectives

- Call Processing
- Emergency Fire Dispatch (EFD)
- Dispatch Operations

How Alarms are Received

- 9-1-1 transferred phone calls
- Phone calls on our direct emergency lines
- Over radio
- Conventional Telephones
- Wireless or Cellular telephones
- Internet phones (VoIP)
- Emergency call boxes
- Automatic Alarms
- Still alarms or walk ups
- Text to 911

Texts to 911

- Greater Harris County 9-1-1 was the first major metropolitan area to implement text-to-9-1-1 service. This valuable service is offered for when a voice call is not possible.



Calls for Service

- Call taking process – 911 transfer
 - Receive call
 - Use appropriate protocol
 - Recommend/SEND units



Fire Priority Dispatch System FPDS

- Chief Complaint / Incident Type Protocols
 - Ensures that the trained and certified EFD properly carries out the following:
 - Structured and rapid caller interrogation life safety evaluation
 - Accurate selection of the appropriate unit(s) response.
 - Relay of important scene information to field responders.
 - Provision of essential Dispatch Life Support (DLS)
 - Pre-Arrival Instructions.

ProQA Dispatch Software

LEVELS	#	DETERMINANT DESCRIPTORS	+	O	T	CODES
E	1	Person on fire (inside)				69-E-1
	2	Person on fire (outside)				69-E-2
D	1	HIGH LIFE HAZARD				69-D-1
	2	HIGH RISE				69-D-2
	3	COMMERCIAL/INDUSTRIAL building				69-D-3
	4	COMMERCIAL/INDUSTRIAL building with hazardous materials				69-D-4
	5	Residential (multiple)				69-D-5
	6	Residential (single)				69-D-6
	7	Chimney				69-D-7
	8	Large NON-DWELLING building/structure (barn, storage building)				69-D-8
	9	Small NON-DWELLING building/structure (shed, detached garage)				69-D-9
	10	Mobile home, house trailer, portable office				69-D-10
	11	Unknown situation (investigation)				69-D-11
C	1	Appliance (contained)				69-C-1
	2	Extinguished fire				69-C-2

+ Determinant Suffixes

The suffix codes help to delineate the type of problem for specific response and safety purposes:

O = Odor of smoke
T = Trapped person(s)

+ ECHO-only Suffixes
Person on Fire (inside)

The suffix codes identify the type of building/structure involved with a person on fire (inside):

B = COMMERCIAL/INDUSTRIAL building with hazardous materials
C = COMMERCIAL/INDUSTRIAL building
H = HIGH RISE
L = HIGH LIFE HAZARD
M = Residential (multiple)
S = Residential (single)
U = Unknown situation (investigation)
W = Small NON-DWELLING building/structure
X = Large NON-DWELLING building/structure
Y = Chimney
Z = Mobile home, house trailer, portable office

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Figure 1. Determinant Codes and suffixes for Protocol 69: Structure Fire (FPDS v5.0).

- Integrates Fire Protocols in CAD
- Navigates the dispatcher through Case Entry and Key Questions
- Appropriate Dispatch Determinant Selection
- Guides through Post-Dispatch and Pre-Arrival Instructions

Unit Tracking

Apparatus			
apparatus	Agency	CcStation	Cc Types-App
AL1101	ALDINEVF	AL1	CH
AL1102	ALDINEVF	AL1	CH
AL1103	ALDINEVF	AL1	CH
ALB21	ALDINEVF	AL2	B
ALD11	ALDINEVF	AL1	CH
ALD21	ALDINEVF	AL2	CH
ALD31	ALDINEVF	AL3	CH
ALE11	ALDINEVF	AL1	E
ALE21	ALDINEVF	AL2	E
ALE31	ALDINEVF	AL3	E
ALFD	ALDINEVF	AL1	FD
ALR11	ALDINEVF	AL1	R
ALSQ11	ALDINEVF	AL1	SQ
ALSQ31	ALDINEVF	AL3	SQ
ALT11	ALDINEVF	AL1	T
ALVFD	ALVINFD	ALV1	FD
ATB39	ATASCOC	AT3	B
ATBAT19	ATASCOCI	AT2	CH
ATD19	ATASCOC	AT2	CH
ATD29	ATASCOCI	AT2	CH



Department No. Series

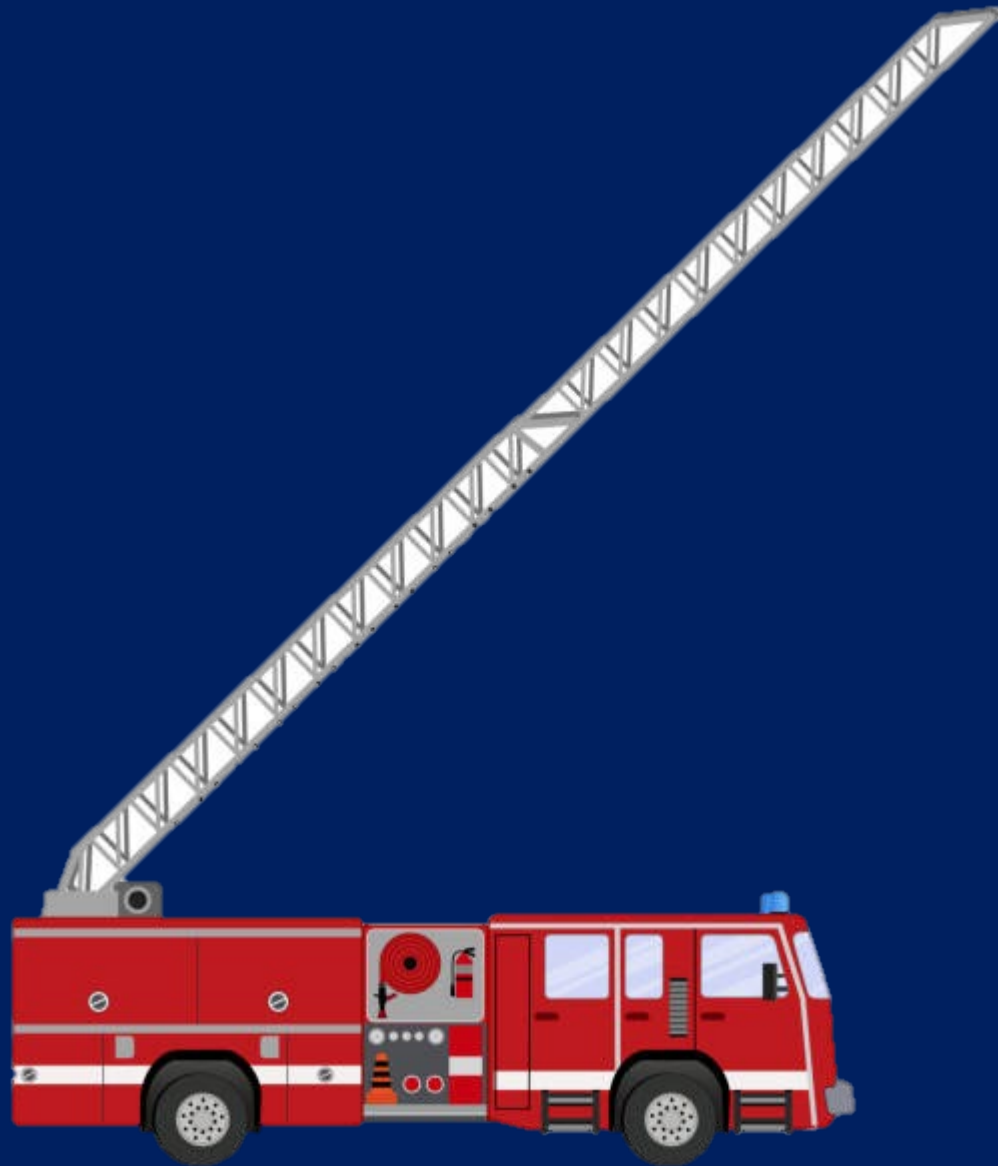


- Champions ESD – 10
- Cypress Creek FD – 20
- Klein FD – 30
- Ponderosa FD – 60
- Spring FD – 70



Fire Stations

- Department Series
- Station Number



Truck Types

- L = Ladder
- TW = Tower
- E = Engine
- B = Booster
- R = Rescue
- T = Tanker

Unit Designations

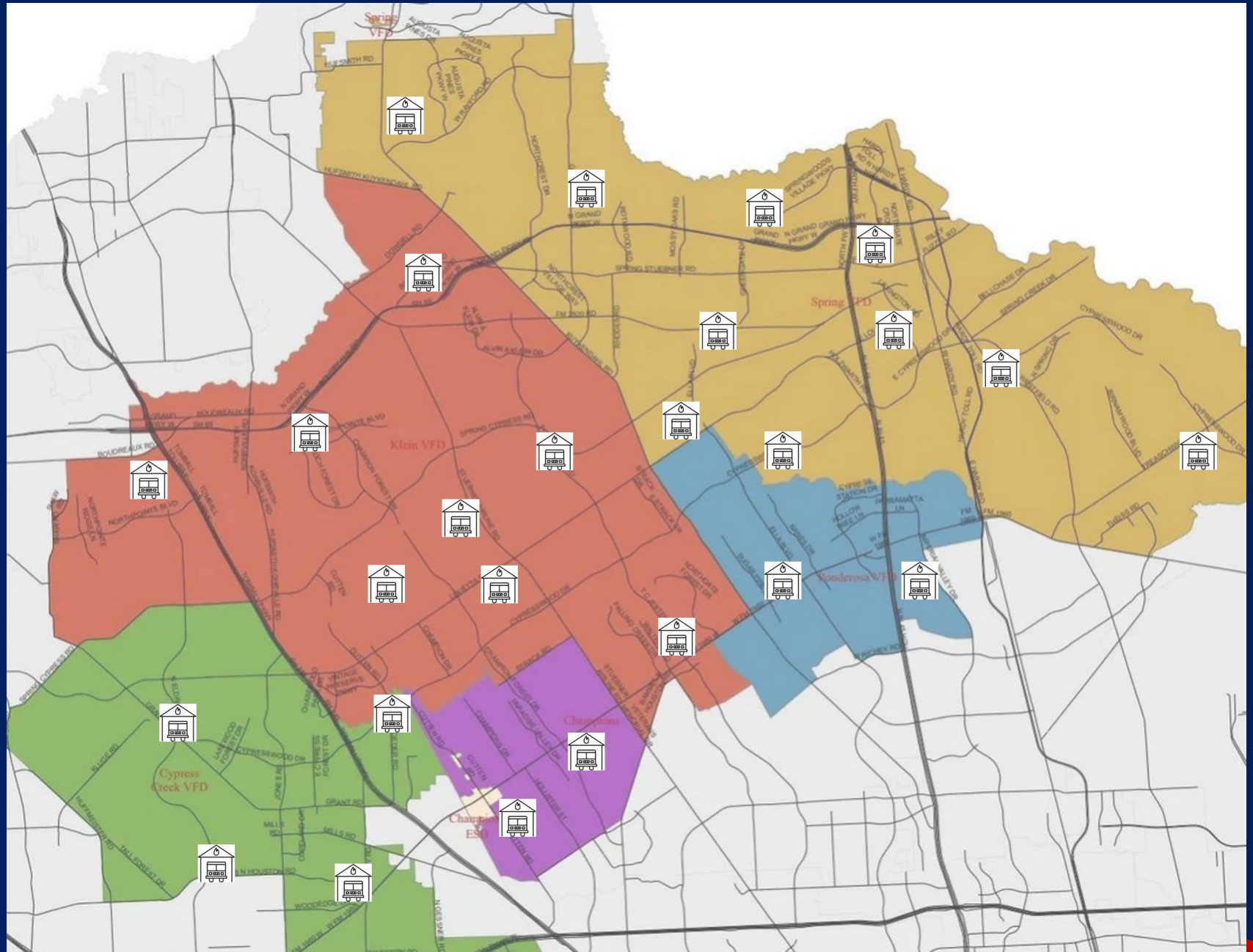
- R33

- Rescue Truck
- Klein Fire Department
- Station 3

- E62

- Engine
- Ponderosa Fire Department
- Station 2

Stations



TECC Radio System

- All repeaters are on UHF (453Mhz) repeaters; no trunking
 - Radio rack contains 800Mhz radios for patching
- Primary dispatch channel is analog
- FD Operations and EMS channels are NXDN
- Fire ground & tactical channels currently analog/hybrid but will be moving to NXDN

TECC Radio System (cont.)

- Primary Dispatch channel (COM2)
 - UHF simulcast at 3 locations (FM249 & Louetta, Greenspoint, I-45 & SH99)
- EMS Operations (COM1)
 - All EMS calls with ESD 11
- FD Operations channel (COM3)
 - Minor incidents (fire alarms, grass fires, still alarms – 2 pumpers or less)
- Eleven (11) fire ground/tactical channels (COM6 – COM18)
 - Major incidents (rescue calls, structure fires, multi-alarm calls, etc.)

TECC Radio System (cont.)

- Mutual Aid Calls
 - Patch to ESD 11 radio system via the Internet (not RF); they use LTE system
 - For NXDN agencies, we switch to either others channel (i.e., Aldine, LYFD, NWFD)
 - For non-NXDN agencies, patching is done using different methods
 - CyFair FD and HFD allow direct patching to their P25 radio systems
 - Harris County's TexWarn state-wide system (Tomball FD, Woodlands FD , Montgomery Co FDs)
- Common channel for county dispatch centers
 - HCSO, North Comm, West Comm, East Comm, Harris Co Emergency Corps
- Radio dedicated to Fire Desk (HCFMO) during disasters

Computer Aided Dispatch (CAD) System

- Interface to 911 - call data automatically entered into CAD
- Unit tracking
 - Agencies dispatched all have vehicle tracking (AVL)
 - This allows the CAD to select nearest available unit based on call type
- CAD-to-CAD linking
 - North Comm and ESD 11 have interconnected their CAD systems
 - Reduces call processing & unit dispatch for joint responses

Dispatch Position

- Each station has six (6) screens
- Two (2) computers
- Three (3) 24x7 positions
- Three (3) open positions for disasters & high call volume



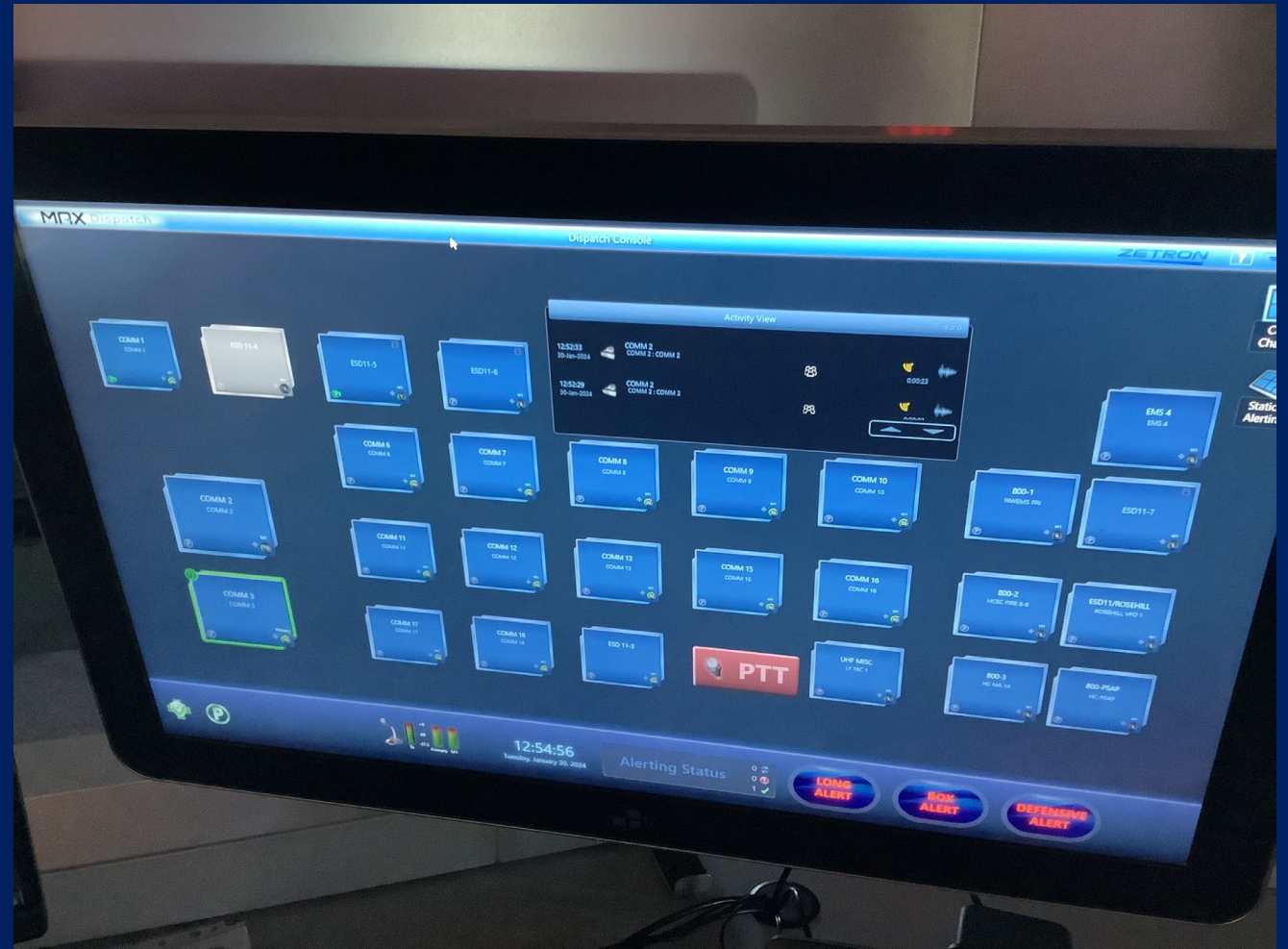
Dispatch Position

- 911 Screen
 - Rapid SOS
 - Text to 911
 - Voice Calls
 - Transfers
 - TTY
 - Photos to 911 (link required)
 - Language Assist
 - Video to 911 (coming soon)



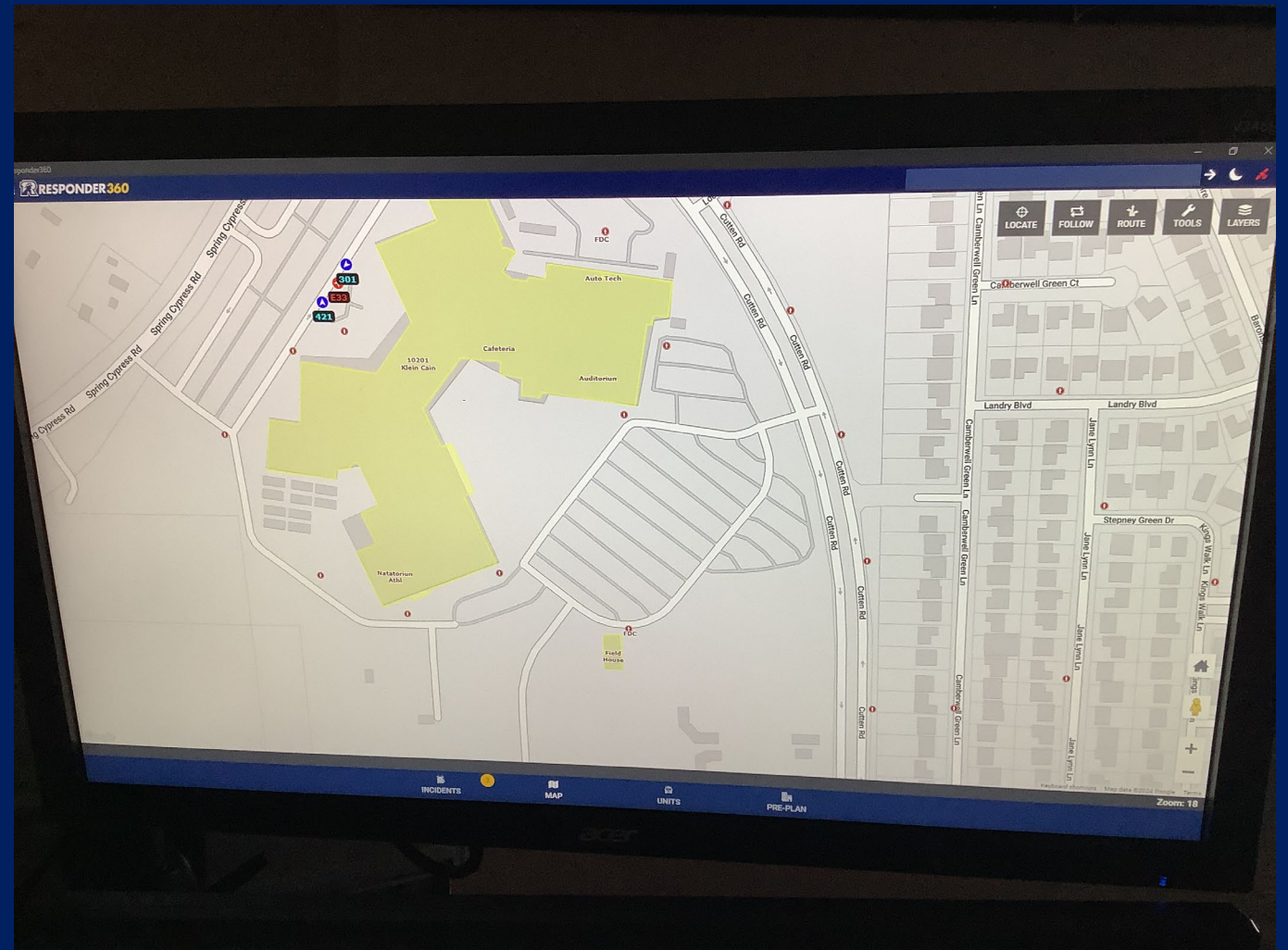
Dispatch Position

- Zetron / Radio Screen
 - Configured to display all necessary radio channels
 - Patching is done right on the screen
 - Station alerting
 - Channel Status
 - Alert Tones



Dispatch Position

- Responder 360
 - Incident response software
 - Improves situational awareness with multiple departments throughout Harris and Montgomery Counties.
 - Pre-plans (occupancy type, hazmat information, FDC, hydrants)
 - AVL Tracking
 - Status switching



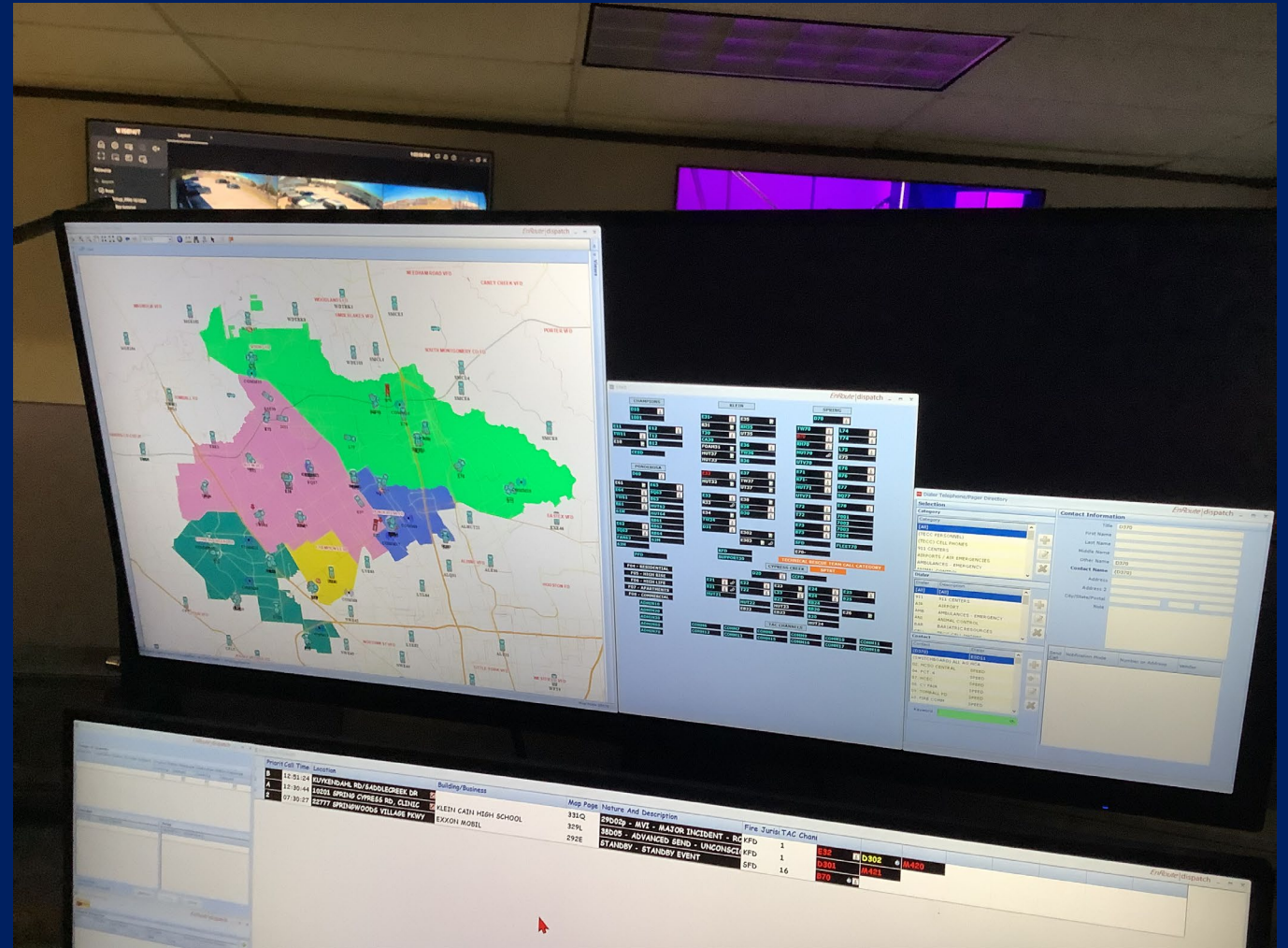
Dispatch Position

- Houston TranStar
 - Dispatchers have access to move the traffic cameras to confirm call locations, direction of travel, or to obtain incident information



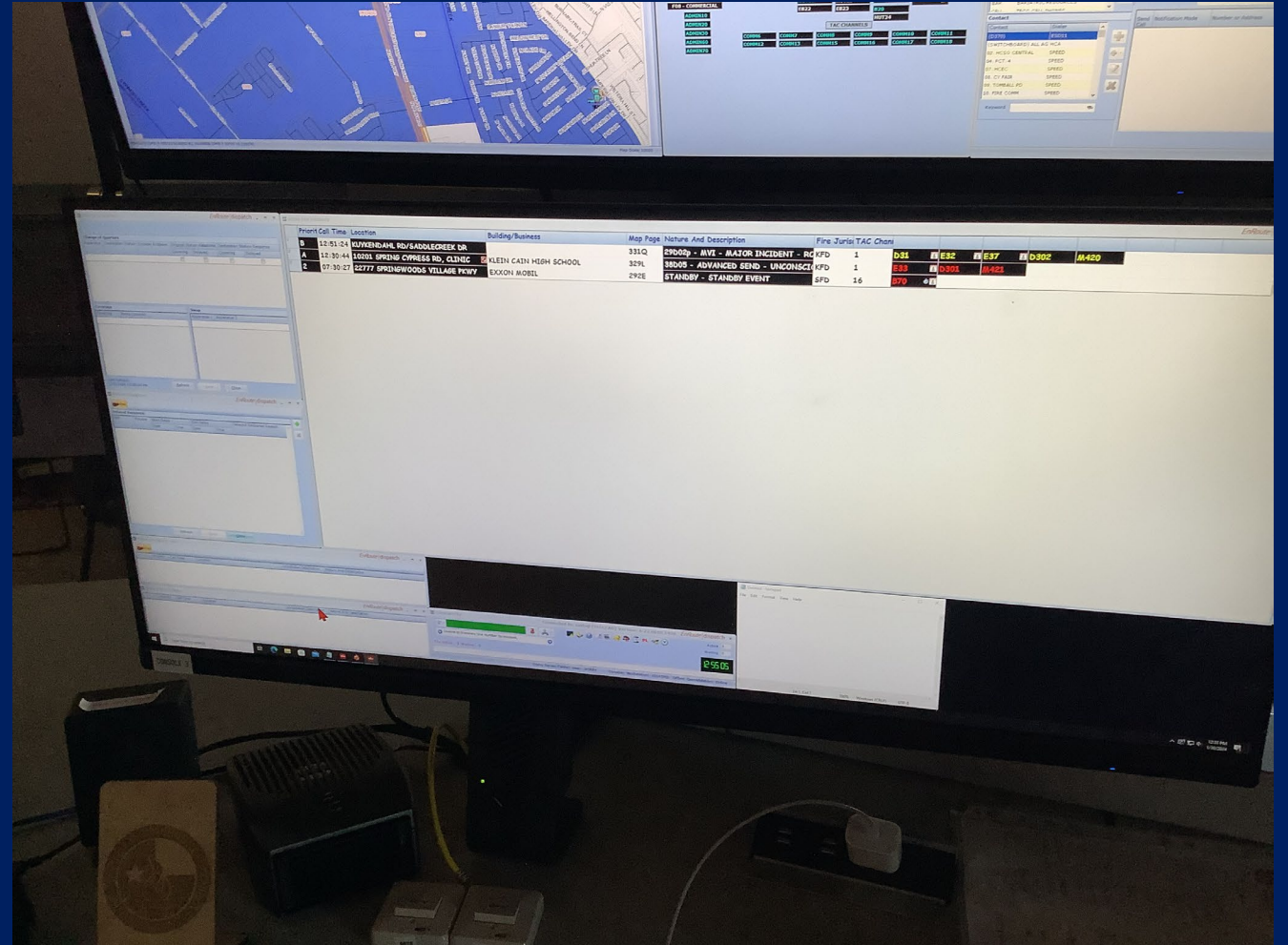
Dispatch Position

- CAD Screen (top)
 - Routing Map
 - Apparatus Screen
 - Dialer File



Dispatch Position

- CAD Screen (bottom)
 - Active calls
 - Command Bar
 - Coverages
 - Change of Quarters
 - Delayed Response Units





Questions?