



TDEM
THE TEXAS A&M UNIVERSITY SYSTEM



Texas Division of Emergency Management State Operations Center

Texas RACES

CCG

AUXCOMM

Guadalupe River Response

Texans Serving Texans



Texas Division of Emergency Management Administers Texas RACES

- The mission of Texas RACES is to support communications for the ***Continuity of Government***
- The Amateur Radio Regulations, Part 97, Subpart E, §97.407, were created by the FCC to describe RACES operations in detail.
- **K5SOC** is the State Texas RACES Station Callsign in Austin.
- Kevin Lemon (KD5KL) is TDEM Administrator of Texas RACES, ESF-2 for Texas and Unit Chief - CCG
- Over 400 Texas RACES Volunteer Ham Radio Operators Stand Ready to Support Cities and Counties Across the State of Texas
- 8 Regions and 24 Districts

Radio Amateur Civil Emergency Service (**RACES**)

Texas Division of Emergency Management Response Preparation

- Hurricane
- Tornado
- Flood/Flash Flood
- Winter Storm
- Power Outage
- Water Shortage
- Wildfire
- Mass Fatality
- HazMat or Chemical
- Terrorist Act
- Hostage/Stand-off



ADDITIONAL POTENTIAL THREATS TO TEXANS TDEM WILL RESPOND TO

Earthquake

Oil Spill

Economic Loss

Communications

Urban Fire

Building Collapse

Utility Outages

Drought

Disease (Human/Animal)

Rail/Pipeline

Pandemic Flu

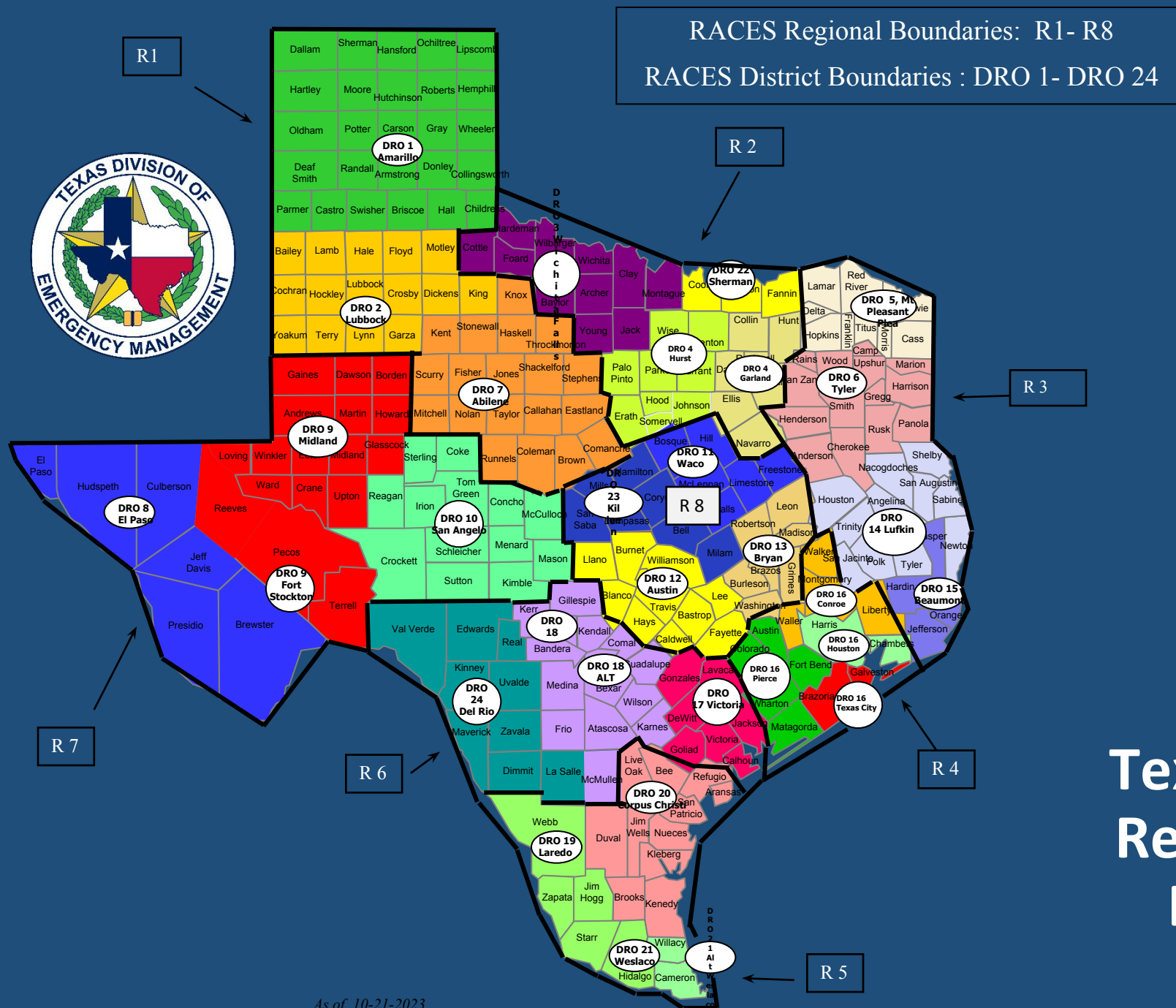
Border Security



SOC DAILY OPERATIONS ACTIVITIES

- ‘The WATCH’ Operates 24/7, 365 days a year
soc@tdem.texas.gov
- State warning point
- Coordinates assistance to local governments
- Maintains situational awareness
- Situation Reports
- Spot Reports
- STAR Processing





Texas RACES Regions and Districts

New Version of TDEM RACES Go-Kit



Antennas and Coax for Go-Kit





Older Version of RACES Go-Kits





The EMERGENCY MANAGEMENT COUNCIL AT THE SOC

Consists of:

- 32 State Agencies
- 2 Volunteer Organizations
- TDEM staff
- Private Sector Partners



SOC Council Room

Each Texas State Agency and
Federal Emergency Management
Partner Has a Position





State Operations Center (SOC) *Communications*



- **Redundant communications systems:**

- ☐ Traditional Land Lines and VoIP Lines from agency's network
- ☐ Cellular
- ☐ Mobile Satellite
- ☐ HF Radio – FEMA, SHARES
- ☐ Amateur Radio – STATE RACES (HF,VHF,UHF,SHF)
- ☐ HF, Pactor, Winlink, VHF/UHF, D-Star, Packet, 900Mhz)
- ☐ Stand alone IT network with voice, data, and video teleconferencing
- ☐ Texas Law Enforcement Telecommunication System (TLETS)
- ☐ Secure Voice

- **Texas Warning System (TEWAS)**

- **ERCOT Text Link - Satellite**

- **National Warning System (NAWAS)**

- **Emergency Alert System (EAS)**

- **WebEOC - Serves as our Common Operating Picture (COP)**

- **Social media monitoring and other information gathering tools**

Communications Coordination Group (CCG)

Created by State Statute

Coordinates Entities with Public and Private
Communications Systems

Under the Management of Emergency
Support Function Two (ESF-2)

Amateur Radio Operations (ARES, RACES,
Baptist Men, Salvation Army –SATERN,
Army Mars)

AUXCOMM

Members of the CCG

Wireless (Cellular) Carriers

All State and Local Government Agencies
Operating Radio Systems

Cable Service Providers

Texas Military

Broadcast Stations

Amateur Radio

MARS

AUXCOM M

Program Developed to Provide
Skilled Volunteers for Emergency
Management Organizations

The CCG Recommends Local
Jurisdictions Make Use of
AUXCOMM Volunteers

Texas RACES Volunteers are
Background Checked

Amateur Operators with Skills

State Operations Center (SOC) 2025 Radio Systems

1KW FNARS Collins G2 HF Radio

2 Broadband Dipoles

1 HF Log Periodic

P-25 Portables and Mobiles

2 Icom IC 746 Pros

Icom IC 880H D-Star – FM U/V

Yaesu FT 8800 U/V

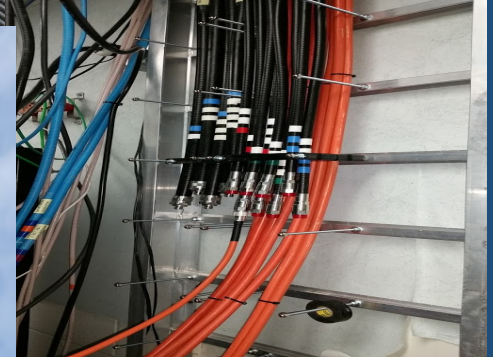
Kenwood TK 941 900 MHz

(Texas and Nationwide 900 MHz Network)

Hardline to All Antennas

12 M-SAT Systems Patchable

Rapid Radio



TX DPS Austin

State Operations Center

Legend

- Capitol Police District
- Corner Shoppe
- Feature 1
- Feature 2
- Koenig
- Revolver Amplification

N. Lamar

Butternut
Vert

60 Mtr
Dipole

50' Tower
VHF-UHF-9
00Mhz

B&W
Dipoles

LPA HF Beam

2 Delta
Loops

Campus Aerial View

Google Earth

©2018 Google

200 ft





Antennas on Roof of DPS HQ Building in Austin



Transmission Lines Serves HF and M-SAT Systems

A low-angle photograph looking up at a worker on a tall, complex metal tower. The worker is wearing a dark jacket, light blue pants, and a safety harness with a large white bag. They are positioned on a horizontal beam of the tower, with their legs spread wide for balance. The tower is made of numerous vertical and horizontal metal poles and cross-braces. The background is a bright blue sky with scattered white clouds. The overall perspective emphasizes the height and scale of the structure.

Top of 50 Foot Tower at TDEM State Operations Center

Amateur Radio Response to July 4th Guadalupe Flood

- Amateurs from Kerr, Kendle, Bexar, Gillespie and Travis Counties
- Volunteers assisted in Search and Recovery
- Took the Load Off Of Land Line Telephone Service for Kendle County
- Unified Command for Four Incident Commands Located at Youth Center in Kerrville Next to the Hill Country Amateur Radio Clubhouse



Local Kerr, Gillespie, Travis, Bexar and Kendall County Hams volunteer for the jobs that are needed to support the response to the Hill Country flood.

SAR Teams now supported by State and Local Communications Providers



Amateur Radio Support

**Kerr and Kendall
County**

Guadalupe River



Camps Along the Guadalupe River

GILLESPIE CO.

KERR COUNTY

KENDALL CO.

Hunt

Ingram

Kerrville

**Camp
La Junta**

Camp Mystic

Guadalupe River

Comfort

>>>>> River Flow >>>>>

Courtesy NBC News



	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Date	2-Jul	3-Jul	4-Jul	5-Jul	6-Jul	7-Jul	8-Jul	9-Jul	10-Jul	11-Jul	12-Jul	13-Jul
Total Number Personnel				2	15	18	16	20	18	28		
County Supported												
Kendall					11	11	13	11	14	25		
Kerr					2							
County of Origin												
Bexar						5		6	3	8		
Kendall					11	7	3	6	4	6		
Kerr					2							
Lee						1	1	1	3	3		
Travis				1	1	3	2	4	4	7		
Williamson								1	3	3		
Wilson						2						
Bandera								1	1	1		
Brazoria								1				
Other TX Counties						4	10	5	10	19		

Amateur Radio Operators



Kendall County SAR Operations

















What it Looks Like









**Travis County
Amateur Operator – Cyber Truck
Powering SAR Radios**

W5MTR Backpack







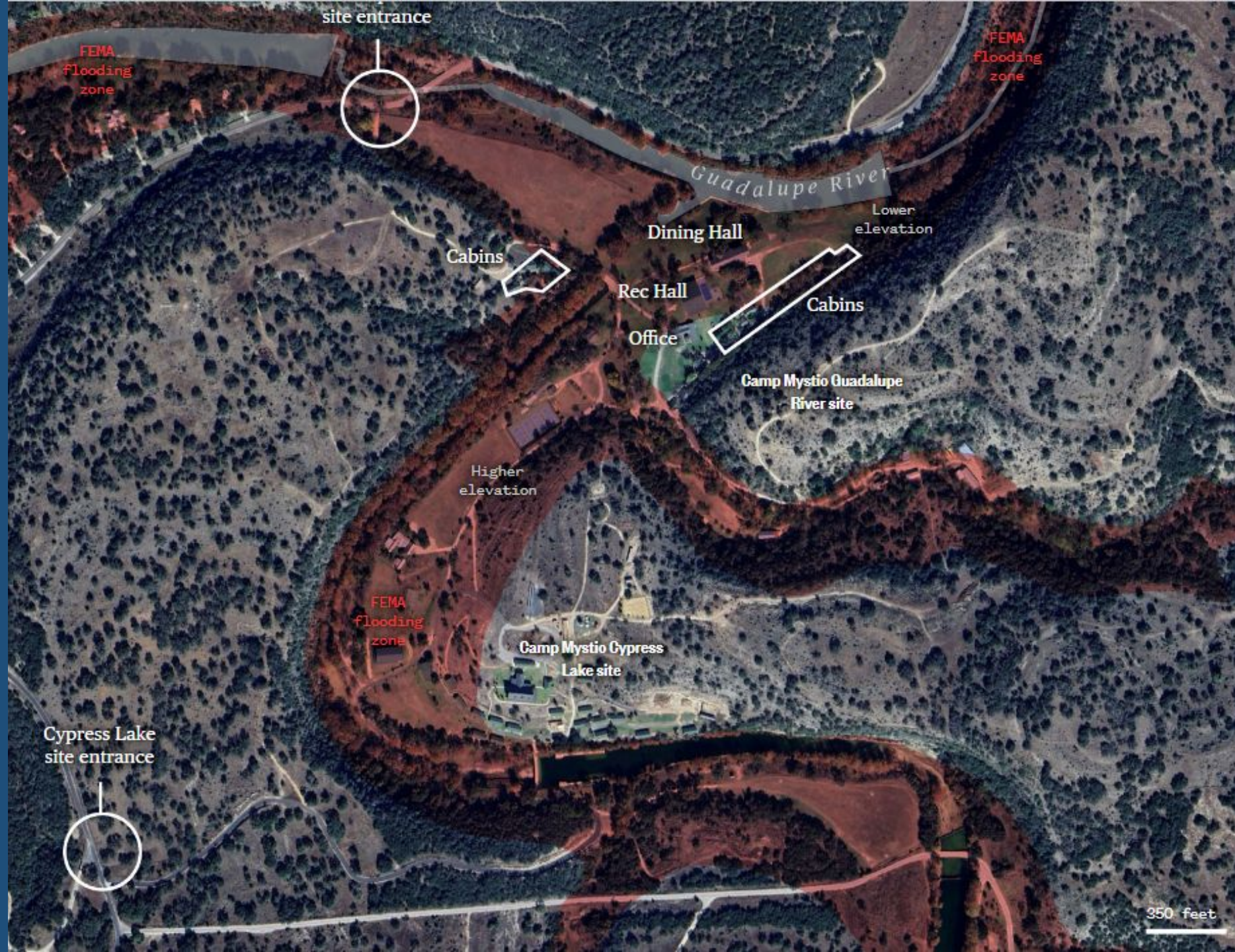






SAR TEAM PREPARE TO DEPLOY









Compact
Deployable Cell on
Wheels

Texas RACES May Be Asked
to Assist



TDEM Headquarters Building Under Construction in Austin



New TDEM HQ and SOC Building



Thank you!

Questions?

