

Radiological/Nuclear Threat Detection Unit



A dramatic night-time photograph of a city skyline under a dark, ominous sky. A colossal, glowing orange and yellow mushroom cloud rises from the center of the city, its base illuminated by intense fire. The cloud's cap is massive and billowing, with a bright red glow behind it. In the foreground, the dark silhouettes of city buildings are visible, some with lights on. The overall atmosphere is one of catastrophic danger.

The Threat is Real



Jared Atkins – April 28, 2019

- Fight with girlfriend, leaves apartment
- Stabs clerk at nearby convenience store, flees
- Steals three 880 Delta Projectors from his employer, Western Technologies
- Sets a car dealership on fire
- Texts coworkers that he has snapped
- Western Technologies employee reports theft to PD
- Atkins goes to Scottsdale mall planning on releasing Iridium-192
- PD notifies FBI; FBI begins notifications, goes to Atkins apartment to interview family
- Atkins returns and barricades self in apartment
- Law enforcement negotiate with Atkins, who surrenders



Basel Bassel Ebbadi

- Border Patrol agents stopped the Lebanese migrant at the border near El Paso, TX, on March 9, 2024, who claimed to be a member of Hezbollah and that he was going to New York and was going to make a bomb.

Zachary Rhyne

October 11, 2024, Gillespie County Deputies in Fredericksburg, TX received a tip about a man wanted out of Washington for stealing more than \$400,000 worth of coins and precious metals. Deputies stopped the U-Haul box truck that Rhyne was driving, arrested him for the warrant, and impounded the box truck. Days later, on October 16, 2024, they discovered several homemade explosive devices, numerous cans of ammunition, a handgun, and body armor inside the U-Haul.





Atomwaffen Division



- *Atomwaffen* means "atomic weapons" in German. An accelerationist group formed in Florida in 2013 by Brandon Russell, the group's U.S. headquarters is now in Texas according to the Southern Poverty Law Center. One of the groups main motives is the overthrow of the government by use of terrorism and guerrilla warfare.
- Members of the Atomwaffen Division have been held responsible for a number of murders, bombings, planned terrorist attacks, and other criminal actions.

China or North Korea to Suriname to United States

The current immigration agreements between China and Suriname (South America) and North Korea and Suriname do not require Chinese and North Korean nationalists to obtain a visa. Special nuclear material (enriched, weapons grade plutonium and uranium), could easily be transported into Suriname and then up through the southern border of the United States using minimal shielding.





The Unit

- 1 Lieutenant
- 1 Sergeant
- 6 Corporals

- Fully Staffed – 02/01/2024

Certifications

Trained by the Counterterrorism Operations Support (CTOS) Center as Primary (Type 2) and Secondary (Type 1) Screeners

Trained for Radiological/Nuclear Search Operations (RNSO)

Trained for preventing and responding to terrorist use of a radiological/nuclear Weapons of Mass Destruction (WMD)

Trained and certified by FEMA as Radiological Operations Support Specialists (ROSS)

CVSA Level VI certified to inspect transuranic waste and highway route-controlled quantities (HRCQ) of radioactive material

Certified as Radiation Safety Officers

Currently daytime RPIC certified pilots and all will be thermal certified this year.

Prevention and Response



Prevention Mission

Preventative Radiological Nuclear Detection (PRND)

The PRND mission is to detect and interdict radiological/nuclear materials outside of regulatory control before they can be misused. It enhances the ability of Texas to detect and prevent terrorist attacks and other high-consequence events utilizing nuclear or other radiological materials that pose a risk to homeland security.

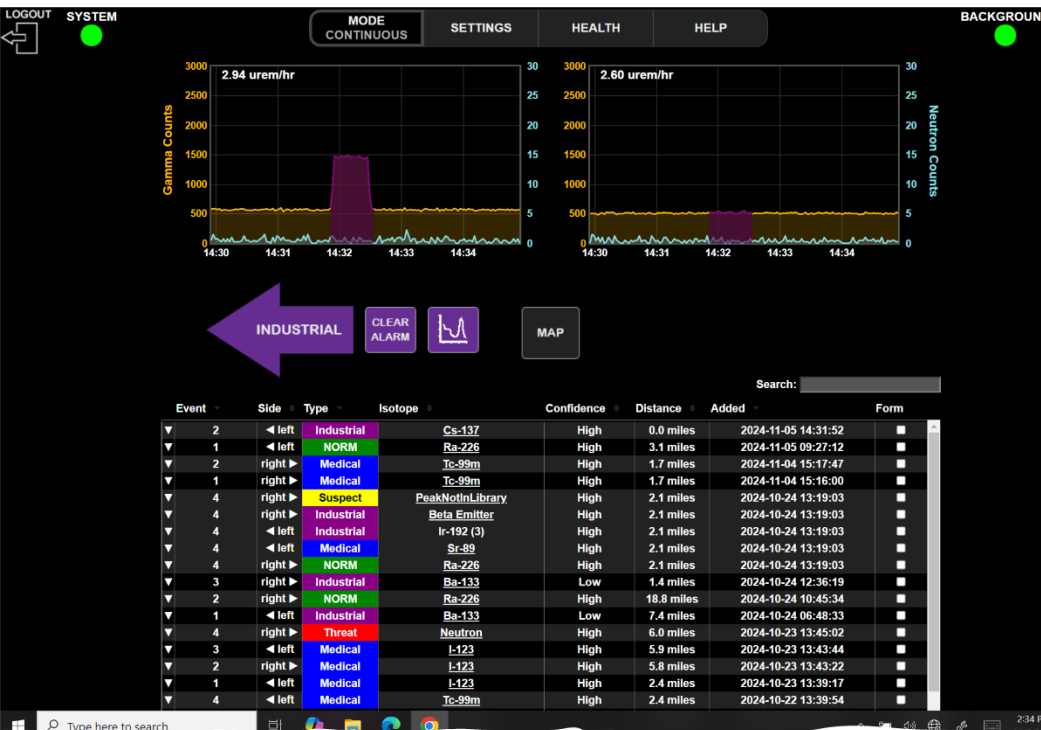


Response Mission

Ability to safely respond to radiological/nuclear Weapons of Mass Destruction (WMD) incidents.

Detection Tools





Mobile Unit

- Mobile radiation detection system which provides high-sensitivity gamma and neutron detection with left versus right directionality at highway speeds. Provides rapid isotope identification and alarm categorization. Used daily and for special events.

Half Mobile Unit

- Half system features high-sensitivity gamma and neutron detection, with left vs. right directionality. The system is ruggedized and weather-proofed. It also includes a simple user interface, with mapping and reachback features, and provides reliable isotope identification and alarm categorization. Easily utilized on a Utility Task Vehicle.



Backpack

- Portable, directional system for detection, identification, and localization of radioactive sources. Rapid isotope identification and alarm categorization. Primarily used for special events.



UAV (Drone) Spectrometer

- Compact and lightweight. Can communicate wirelessly to provide radiological spectra measurements. Used primarily for special events and response missions.



Radioisotope Identification Device (RIID)

- RIIDs are used by Secondary Screeners when further investigation is required to adjudicate an alarm. RIIDs identify radioactive materials by measuring the spectra (energy of emitted gamma rays) and comparing against the known spectra signatures of various radioactive materials. Secondary Screeners can send measured spectra to Los Alamos National Laboratory for greater analysis and more definitive identification.



Survey Meter

- Portable, hand-held radiation detector that can be used during interdiction or response to radiological incidents. Also utilized for Level VI inspections of transuranic waste and highway route-controlled quantities (HRCQ) of radioactive material.



Personal Radiation Detector (PRD)

- PRDs are used everyday by members and provide real-time monitoring of radiation levels in the surrounding environment. PRDs can alert users to potentially hazardous levels of radiation, allowing them to take appropriate precautions to minimize exposure.



Capabilities

- **Everyday patrol for the Prevention Mission**
- **Response to Rad/Nuc emergencies which can involve a variety of accidental and intentional incidents, from small to very large**
Transportation incidents; Lost, found, or orphan material; Dirty bomb; REDs and RDDs; Misuse of or incidents involving industrial radiographic or medical sources
- **Large special events**
PRND and RNSO
- **Dignitary protection**

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- Since the unit was created it has had 250+ detections of radioactive material. None nefarious, but many in violation of regulatory control (Department of Transportation Hazardous Materials Regulations and Department of State Health Services laws and rules).





Response to Rad/Nuc Emergencies

- July 19, 2024 – Responded to “radioactive” truck fire and was able to determine the scene was safe for responders. <https://www.dps.texas.gov/news/dps-responds-fire-involving-radioactive-materials>

Response to Possible Bomb



- November 18, 2024, Rad/Nuc unit member hears radio traffic of a bomb in front of the Briaroaks Fire Department
- Member arrives on scene before bomb squad
- Utilizes the mobile unit and drives through parking lot scanning for radioactive material
- Determines no radioactive material present and notifies bomb squad as they arrive
- Bomb squad x-rays package and determines it is only pipe and timers

Large Special Events Worked

- San Antonio Stock Show and Rodeo[^] (2024, 2025, 2026)
- Fiesta San Antonio[^]
- Texas A&M v Notre Dame*
- Texas A&M v UT*
- 2025 NCAA College Football Playoff (at Texas A&M)*

- [^] = Requested by 6th WMD CST
- * = Requested by FBI



Large Special Event Work

- 2024 General Election – In preparation of post election unrest, the unit scanned the Texas Capitol area with the mobile unit and backpack to get the normal radiation levels and create a heatmap.



Dignitary Protection

- October 1 – 3, 2024, Former President Trump (FPOTUS) visited Texas. The unit, at the request of the Secret Service's HAMMER Team, sent members to Houston and Midland. The Houston team scanned FPOTUS's hotel, the event facility, the motorcade route to and from the airport, and vehicles arriving at the event hotel. The Midland team scanned the event facility, the motorcade route to and from the airport, and all vehicles coming into the event.



Dignitary Protection

- November 19, 2024, President Elect Trump (PEOTUS) visited SpaceX Starbase. The unit sent members to the Brownsville-South Padre Island International Airport and SpaceX Starbase to perform facility sweeps, motorcade sweeps, and route scans.



Dignitary Protection

- January 6 – 7, 2025, the unit provided detection sweeps at an event in Franklin, TX for incoming Border Czar Tom Homan.
- July 14, 2025 Pre-event scan for Tom Homan at Prairieland Detention Center in Alvarado, TX
- Sept 11, 2025 Supreme Court Justice Brett Kavanaugh visit in Waco, TX



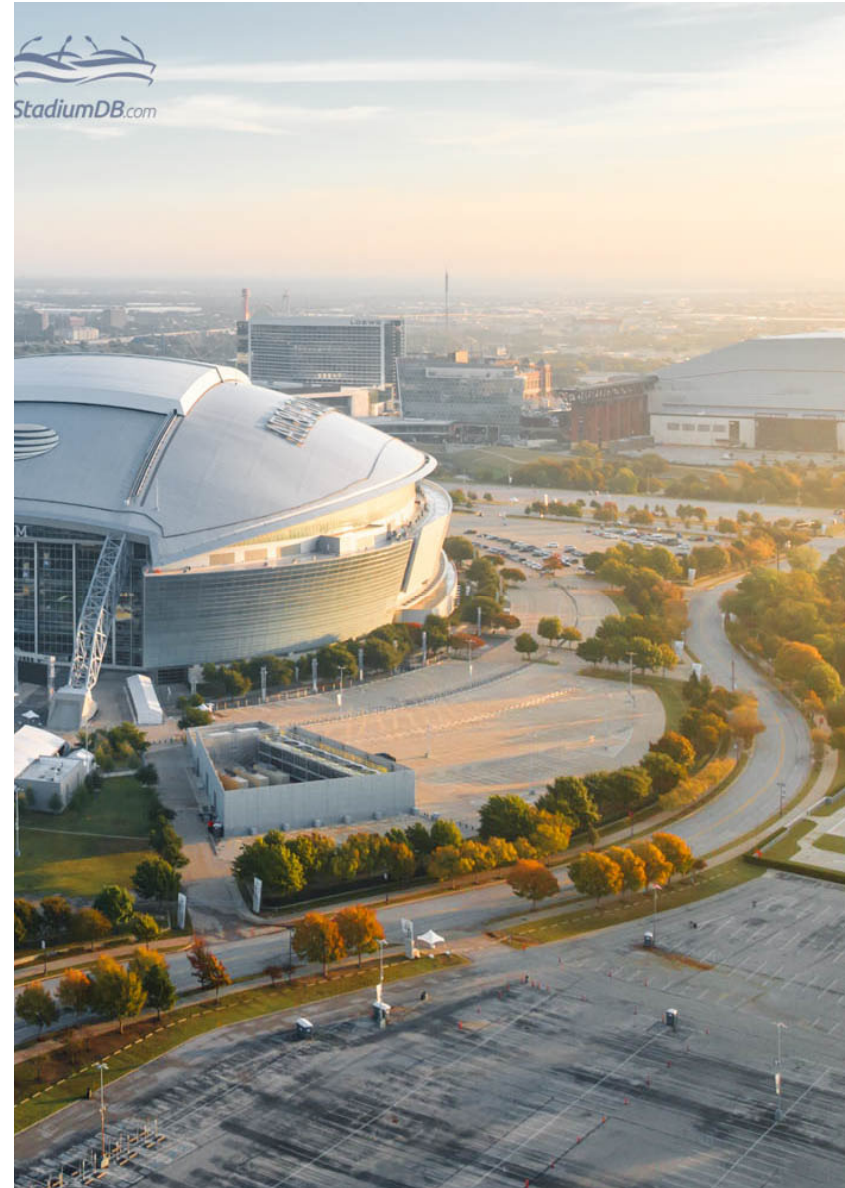
Dignitary Protection

- February 2, 2025, the unit provided facility sweeps and scanned entering guests for Governor Abbott's State of the State address at Arnold Oil Company. We utilized knowledge of radioactive materials and other hazardous materials to adjudicate multiple issues of concern.



Large Events 2026

- World Cup – Arlington (9 matches)
Houston (7 matches)
 - Alternate sites pending issues with Mexico
(Austin / Dallas / San Antonio)
 - World Cup Base Camps
(Austin / Dallas / Frisco / Irving / Fort Worth / San Antonio)
 - World Cup Fan Fests
(Fair Park – Dallas / East Downtown – Houston)
- Indy Car (Arlington)
- Fleet Week (Houston)





Future Large Events

2027

Texas Gubernatorial Inauguration (Austin)

2028

Republican National Convention (Houston)

2030

NCAA Final Four (San Antonio)

NCAA College Football Playoff Championship
(TBD – Either 2028, 2029, or 2030)

Expanding the Prevention Mission

To bolster the defense of the State of Texas, the unit has trained more than 1,600 members of the department on the use of a PRD. Each student was issued a PRD and trained to perform basic Preventive Radiological/Nuclear Detection (PRND) operations as Primary Screeners.

Our training has reached more than DPS. Now the Texas Office of Court Administration's Court Security Division is interested in implementing a PRD requirement for courthouse/courtroom security personnel.





'Radioactive spill' shuts down I-35 north of DFW in both directions: Latest updates

wfaa.com

PRD Training Success

- September 27, 2024, a fatality crash involving 3 TT/STs and a passenger car occurred on IH-35 in Cooke County. The CVE Trooper called to the scene for the post-crash inspection had just attended our PRD class. The car was transporting radiopharmaceuticals. One DFW news outlet had reported that a “radioactive waste spill” had shut down IH-35. The Trooper used his PRD and determined there was not a spill and that radiation levels were safe.
- *“The Texas Department of Transportation initially said the crash involved a “radioactive spill,” but the Texas Department of Public Safety said in an update that there was a Hazmat cleanup for a diesel and oil spill.” wfaa.com*

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Questions?

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