Statement for the Record

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Texas Department of Public Safety

Defending Against Drones: Setting Safeguards for Counter Unmanned Aircraft Systems Authorities

Hearing Before the United States Senate Committee on the Judiciary

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Introduction

Chairman Grassley, Ranking Member Durbin, thank you for inviting me to testify before you today. My name is Troy Wilson and I am Staff Captain with the Texas Rangers at the Texas Department of Public Safety. I have been conducting or overseeing criminal investigations in Texas for twenty-five years. Part of my responsibilities include overseeing drone operations for Texas Department of Public Safety (DPS).

Transnational criminal organization Unmanned Aircraft System (UAS) misuse along the Texas-Mexico border presents a significant, evolving threat. These criminal organizations are increasingly leveraging UAS technology for intelligence gathering purposes, which enables them to monitor and exploit vulnerabilities in border security operations. This includes surveillance of Texas-based border security personnel (state and federal) to coordinate illicit contraband movement and human trafficking, further intensifying the challenges faced by all law enforcement agencies.

Over the past twelve months (April 2024 to April 2025), Texas DPS-owned sensors identified 1,216 UAS border incursions. We know this is a fraction of the actual number of incidents. Alarmingly, nearly half of these UAS incursions occurred at altitudes ranging between 600 to 1,800 feet Above Ground Level (AGL)—the typical altitude range for helicopter operations.

The increasing presence of UAS operating in the same airspace as manned aviation introduces the alarming possibility of collisions, endangering citizens of the State of Texas and law enforcement personnel and equipment.

Such incidents critically impair border security efforts and endanger lives, underscoring the urgent need for enhanced detection and mitigation systems.

My written statement also includes several specific examples of drone misuse.

Existing threat

The interference with legitimate border security UAS operations by these unauthorized drones undermines critical efforts to maintain control and effectively monitor the region.

Criminal elements have also succeeded in utilizing UAS to deliver narcotics and contraband into correctional facilities including jails and prisons—posing a severe threat to the safety and

security of the inmates and staff at these locations. Beyond direct threats to people inside correctional facilities, drones are used to deliver cell phones to inmates, which are often used to coordinate criminal activity in our communities.

Furthermore, unauthorized UAS flights over critical infrastructure, such as electrical power generating plants, dams, or water treatment facilities, highlight another layer of risk, as such flights could disrupt operations or compromise public safety.

Taken together, these threats underscore the urgent need for Congress to grant authority to state and local law enforcement agencies to operate robust detection and mitigation strategies to counter the threat of drones and ensure the safety and security of the border regions.

Ongoing efforts

The Texas DPS has taken a proactive stance against the escalating threat of UAS misuse along the Texas-Mexico border. With a recent grant of \$290,000 from the Office of the Governor (OOG) dedicated to detection efforts, DPS has enhanced its capabilities to address these challenges. However, as the threat continues to evolve, additional resources are crucial to ensure the effectiveness of these measures. DPS has requested an additional \$210,000 to build upon this foundation and fortify its UAS detection systems.

The existing twelve (12) sensors owned by the State of Texas are limited in scope and, only detect DJI drones (DJI drones currently make up approximately 80% of the market), which means other drones go undetected and creates critical vulnerabilities that, will be increasingly exploited by the transnational criminal organizations. Moreover, the twelve sensors monitored along the border cover only approximately 180 miles, representing just 14% of the 1,254-mile stretch of the Texas-Mexico border. This illustrates the urgent need to expand sensor coverage both in terms of geography and the variety of UAS that can be detected.

Addressing these threats requires a comprehensive, layered approach. Detection technologies must be integrated to identify potential UAS threats promptly and accurately, while any mitigation strategies must be implemented with precision to minimize collateral damage. Surgical mitigation techniques are essential to neutralize threats effectively without compromising public safety or causing unintended disruptions.

Lack of personnel and resources to analyze the increasing volume of threats presents another challenge. Effective counter-UAS operations also require well-trained teams, and the current lack of training and staffing hampers timely and effective responses to incidents.

Above all, we understand that any counter-UAS detection and mitigation policy or practice must abide by any applicable state and federal laws and align with the First and Fourth Amendments.

Conclusion

Despite significant efforts at the state level, the Texas DPS faces constraints imposed by the federal government that limit the full scope of action needed to address the growing UAS threat. Nevertheless, DPS has taken a proactive approach over the past eighteen months, ensuring that all UAS personnel and recruit classes receive comprehensive training in enforcing existing drone

laws. This commitment to education and readiness reflects DPS's dedication to adapting to the evolving challenges posed by unauthorized drone activity.

Additionally, Texas DPS has actively participated in national efforts, serving on the Federal Aviation Administration's UAS Detection and Mitigation Aviation Rulemaking Committee. Through this involvement, DPS contributed valuable insights and expertise toward developing regulatory frameworks and solutions for addressing the threats posed by criminal UAS.

These actions underscore Texas DPS's commitment to innovation, collaboration, and maintaining public safety in the face of an increasingly complex, dynamic and evolving threat environment.

State and local and tribal territory law enforcement agencies need the ability to detect and mitigate criminal UAS operation along the border and near/over correctional facilities and prisons. On behalf of the Texas Department of Public Safety, we urge Congress to take action to address this issue.

I look forward to being a resource to the committee as you consider this important topic.

Thank you,

Incidents:

DPS UAS mitigated by Mexican cartel, 4/22/2025 – Laredo AOR

On April 22, 2025, at approximately 7:19 a.m., Modernization & Advanced Technology Team (MATT) notified the Laredo United States Border Patrol – Laredo Foreign Operations Branch (LRT-FOB) of an Aerial Armor alert on a drone flying across from Father McNaboe Park in Zone 5 (27.5846306, -99.5315643).





At approximately 7:25 a.m., Secretaria de la Defensa Nacional (DEFENSA) was contacted via established communications regarding the drone activity to inquire if they could respond.

At approximately 7:58 a.m., DEFENSA acknowledged the inquiry.

At approximately 8:30 a.m., U.S. Customs and Border Protection (CBP) Air Marine Operations (AMO) advised OLS UAS Team-3 (Texas Ranger Ryan Christian and DPS SOG SSgt. Luke Tkach) of a UAS operating in Mexico across from Father McNaboe Park in Laredo, TX, LRT Zone 5. AMO believed the UAS was being operated by cartel members in Mexico near GPS 27.5832969, -99.5338187.

At approximately 8:36 a.m., Team-3 located the pilot and provided photographs to AMO, who provided them to the Government of Mexico (GOM) through the CBP Foreign Operations Branch (FOB).

At approximately 8:36 a.m., Team-3 photo of the UAS pilot (black shirt) and a second male.



At approximately 8:43 a.m., photo of UAS pilot.



At approximately 8:44 a.m., a photo of a UAS pilot, the second male and a female.



At approximately 9:07 a.m., DEFENSA was contacted via established communications again due to drone activity. DEFENSA acknowledged and advised they would be responding.

At approximately 9:07 a.m., DPS UAS was notified by CBP AMO that Government of Mexico (GOM) was responding to the area.

FOB understood that DEFENSA would be deploying with UAS mitigation equipment

At approximately 9:22 a.m., DEFENSA advised that they were near the World Trade Bridge (approx. 1,536M (0.95 miles) 331° north of target) and approaching the location.

LRT Sector Intelligence Unit (SIU) received information of "chatter" near the time of DEFENSAs arrival to down any law enforcement drones. The "chatter" is believed to be from law enforcement adversaries in the area.

At approximately 9:31 a.m., DEFENSA advised the operator appeared to have landed the drone.

At approximately 9:38 a.m., Team-3 continued to monitor the pilot and a second adult male as they left their original location and traveled into the brush near the river.

At approximately 9:38 a.m., a photo of UAS pilot and a second male traveling down river away from a structure enroute to the riverbank.



At approximately 9:41 a.m., USBP Laredo North Station (LRN) Supervisor Martinez was contacted telephonically to advise of DEFENSA searching the area across from Zone 5.

At approximately 9:42 a.m., DEFENSA advised they were at the location, which is near a residence (27.5833111, -99.5337652)



At approximately 9:43 a.m., LRT-FOB coordinated a mirror patrol with Marine Unit in Zone 5 across from Father McNaboe Park.

FOB understood from established communications that DEFENSA had not had the opportunity to deploy its UAS mitigation equipment.

At approximately 9:43 a.m., while flying near GPS 27.5828898, -99.5298058 (approximately 1487 ft from the UAS pilots) at 294 ft AGL, Team-3 lost control of its UAS (TRD12H1 - DJI Mavic 3). As the UAS traveled North and dropped altitude, it would not respond to remote controller inputs. DPS SOG and TPWD SOG later recovered the UAS next to a playground in Father McNaboe Park, approximately 1,060 ft North of the location where it lost connection. The severity of damage to the UAS was catastrophic.

At approximately 11:32 a.m., DEFENSA advised that after a thorough search of the area, the search for the drone operator or drone yielded negative results. DEFENSA units cleared the area.

Flight Id	Drone Id	Drone Type	Detection Count	Sensor Name	Max Altitude	Total Duration	Detection Time Start
113486939	F67Q3245V004L06C	Mavic 3 Pro	1	Laredo_4	1637.14	0.00	4/22/2025 4:38:50 PM
113486807	F67Q3245V004L06C	Mavic 3 Pro	27	DHS S&T 2	1640.75	20.80	4/22/2025 4:20:34 PM
113486224	F67Q3245V004L06C	Mavic 3 Pro	37	DHS S&T 2	1640.75	23.39	4/22/2025 3:38:55 PM
113485384	F67Q3245V004L06C	Mavic 3 Pro	172	DHS S&T 2	1640.75	94.03	4/22/2025 1:09:21 PM
113481441	F67Q3245V004L06C	Mavic 3 Pro	19	DHS S&T 2	1499.34	11.56	4/22/2025 9:24:30 AM
113480883	F67Q3245V004L06C	Mavic 3 Pro	67	DHS S&T 2	1467.52	19.90	4/22/2025 8:21:25 AM
113480622	F67Q3245V004L06C	Mavic 3 Pro	5	Laredo_4	1405.84	8.82	4/22/2025 7:42:22 AM
113480623	F67Q3245V004L06C	Mavic 3 Pro	88	DHS S&T 2	1416.34	20.71	4/22/2025 7:33:05 AM

Suspect Drone Flight Data

Possible related UAS Incident

The day before the DPS UAS mitigation, on April 21, 2025, at approximately 8:30 a.m. Laredo Border Patrol (LRT) S-UAS had a drone malfunction near the same location (Father McNaboe Park in Zone 5 (27.5846306, -99.5315643)). The incident resulted in the LRT drone falling into the Rio Grande River.

Due to the proximity in time and location, it is suspected the LRT UAS was also illegally mitigated by Radio Frequency (RF) jamming.

LRT SIU has information indicating that since September of 2024 there have been six events related to UAS RF disruption in the Laredo Sector. Additionally, since February of 2025 there have been nine events of GPS disruption on manned aircraft in the Laredo Sector.

On April 22, 2025 in the PM hours, US Air and Marine (AMO) reported GPS disruption in its aircraft operating in LRT Zone 5 near the same area (Father McNaboe Park)

Border Patrol Drone Detection 5/6/2025

At approximately 8:55 p.m., on 05/06/2025, Sierra Blanca Border Patrol Agents in the Big Bend Sector were conducting line watch duties near an area known as "Neely's" (BBT Zone 1) and witnessed two drones hovering above them. The agents stated they observed the drones spray a mist or fog which gave the drones a strange fuzzy appearance (See photo below). The two drones hovered above the agents for a few minutes, turned off their lights and flew north away from the agents and the US/ Mexico Boundary line. BBT air domain awareness (Dedrone) did not pick the drones up at the time of the detection by the agents. AMOC was called and they stated that they were also unable to detect anything in the area as well. An MC-L was sent north of the area in an attempt to spot the drones but were unable to detect them. The agents stated that the drones were high enough they did not feel threatened by whatever was being sprayed. The videos are hard to see but clearly show the fuzzy appearance of the drones, but the attached picture shows a clear view of the drone (see below).

The area where the detection occurred is a desolate area with little to no roadways and very few residents (in the US and in Mexico). The area is also a few miles east of an area where several vehicle incursions have occurred in the Fort Hancock Border Patrol Station AOR (El Paso Sector). This is the second night in a row that drones were detected near the river, a drone incursion occurred the previous night several miles east of this area which was witnessed by DOD personnel utilizing the camera system on their Stryker vehicle.

Detection occurred approximately 1697.80 feet from the US/Mexico boundary.





Area of detection from nearest populated area (Sierra Blanca)

Close-up of drone as it is spraying.



Arizona HIDTA "KNNR" report, dated May 5, 2025 (Mexico)

First DOCUMENTED potential use of a FPV (First Person View) use in Mexico. The drone is a DJI Avata 2, which is a FPV drone. If this is truly video from Mexico, this would be the first time of a FPV drone being used by cartels in conflict. (pg 14)



CJNG sicarios operating a Chinese manufactured VBE 1PD drone detector. This system can be used to detect & direction find drones & operators. Special Forces member of CJNG filming himself while operating a signal jammer that can have different uses, including interrupting the signals of radios, cell phones, and sometimes even drones. (pg 14)





 Video showing a Carteles Unidos drone with an explosive device being used to battle CJNG in Michoacán. (pg 66)



Two types of drone munitions seized by authorities. These munitions are crude in design. They appear to have PVC bodies w/ an end cap that has four stabilizer fins of corrugated plastic glued together on the bottom, ~26 cm in length. (pg 67)



Filmed by La Familia Michoacana (LFM) sicarios. The drone is a DJI Matrice 350 RTK & Zenmuse H20 or H30 camera w/ munition attached to the body. Munition is large, made of unknown materials w/ a body & attached stabilizer fin section. DJI Matrice 350 RTK has a height of 43 centimeters. This would mean that the drone drop munition is at least 43 centimeters in length. This is on the larger side of drone drop munitions that are typically seen in cartel videos on social media. (pg 70)



August 22, 2022 (www.dronedj.com)

Texas prison drone drug-smuggling ring busted, netting 42 suspects

Texas prison drone drug-smuggling ring busted, netting 42 suspects

Once tipped to the activity, the TDCJ joined with an array of law enforcement agencies to investigate the ring's use of drones to deliver drugs and other contraband into prisons.

This news out of Texas came in the wake of arrests in Georgia of two men now facing charges of having smuggled drugs, including 280 grams of meth, into state prisons by drone. Use of drones

to smuggle drugs and other contraband into prisons has become a major plague for authorities around the US and abroad.

The same problem is on the rise in Texas, where the Department of Justice's Office of Inspector General released an audit indicating a 50% surge in drone activity near or above Bureau of Prisons (BOP) in 2020 alone. The findings noted it number of sightings it worked from is almost certainly lower than the actual number of flights that take place around the banned airspaces of penitentiaries.

"We found that the BOP faces significant and growing challenges to protect its facilities from drone threats," the audit read. "Drones have been used to deliver contraband to inmates, but could also be used to surveil institutions, facilitate escape attempts, or transport explosives."

October 6, 2022 (cbsnews)

Texas man pleads guilty to flying drone into Fort Worth prison yard - CBS Texas

Man flew drone loaded with drugs, electronics and other contraband into a Fort Worth prison yard has pleaded guilty.

Included in the contraband was methamphetamine, THC, tobacco, cell phones and mp3 players. According to court documents, the drone crashed inside a secure, fenced-in yard near the prison's HVAC shop, where it was recovered by staff.

When he was arrested in August, Henderson was charged with one count of attempting to provide contraband in prison, one count of serving as an airman without an airman's certificate, and one count of possession with intent to distribute a controlled substance.

Plea papers show Henderson admitted to flying a drone loaded with contraband into the airspace of Federal Medical Center Fort Worth. Court documents say that affixed to the drone was a package containing 46 grams of crystal methamphetamine, 87 grams of pressed THC, two prepaid smartphones, and nine mp3 players.

"The criminal element will always take advantage of new opportunities for illegal activity as technology progresses," said FBI Dallas Special Agent in Charge Matthew J. DeSarno. "In this instance, excellent collaborative investigation among federal and local agencies led to federal charges and prevented contraband from entering the federal prison system."

There is also surveillance video from a nearby high school that showed Henderson driving up in a red Chevy Tahoe, removing a drone and a package from the vehicle, launching it towards the prison and driving off.

Prison staff reportedly found the drone controller, immediately paring it with the device.

The drone showed flight logs, of which investigators identified four flights entering FMC Fort Worth's airspace. Investigators also saw two flights that entered the airspace over Federal Correctional Institution Seagoville and another correctional center southeast of Dallas. Cell phone records of Henderson's also show that the phone was near FMC Fort Worth around the time of the drone crash and near FCI Seagoville near the time of the drone's flight into the prison's airspace.

According to the FAA's database, Henderson did not have an airman's certification and the drone he used was registered to another owner who cancelled their registration in August 2018.

September 26, 2023 (abc13 news)

https://abc13.com/drone-drug-drops-grant-parish-louisiana-fugitives-surrender-harris-county-federal-prison-smuggling/13832220/

HARRIS COUNTY, Texas (KTRK) -- A man and a woman, who are accused in a scheme to get drugs into federal prisons across the U.S., turned themselves in to the Harris County Jail on Tuesday afternoon.

The sheriff's office in Grant Parish said it uncovered the scheme during a traffic stop near the federal prison in Pollock, Louisiana, almost three weeks ago.

According to Sheriff Steven McCain, deputies found \$1.18 million worth of K2-soaked paper, \$10,000 worth of Suboxone, \$4,000 worth of THC wax, and \$1,500 worth of marijuana. They also found two drones and numerous drone batteries, eight cell phones, a vacuum sealer, and a scale.

"You can see these orange drones in front of me," Sheriff McCain said during a news conference. "Law enforcement recovered these drones, it was being used to drop the stuff across the fence inside of the fence of the federal prison. The cans weren't open like this when they were discovered. These were filled with drugs. These drone has an actuator on there that the operator pushes a button on the remote control and releases the package."

McCain also shared a text message with a list of what was supposed to be dropped at a certain prison facility.

"They had a very, very specific list of what was supposed to be dropped at every location," the sheriff said.

October 7, 2024 (abc 12 news)

Drone used to bring contraband into federal prison confiscated | 12newsnow.com

Jefferson County deputies confiscate drone used to bring contraband into United States Penitentiary

Some of the contraband that deputies confiscated along with the drone includes cell phones, drug paraphernalia, watches, Narcan, spray paint and various electronics.

BEAUMONT, Texas — Jefferson County deputies have confiscated a drone that the sheriff's office says was used to bring contraband into the United States Penitentiary, in Beaumont.

Some of the contraband that deputies confiscated along with the drone includes cell phones, drug paraphernalia, tobacco, GPS trackers, credit cards, a shank, watches, Narcan, spray paint and various electronics.

Two people were arrested in a car outside the jail and the car was towed. Jefferson County Sheriff Zena Stephens says incidents like these happen more often than you think.

"We have ranchers who call us many times in the county, because they see the drones flying over, and they see the drop offs," said Stephens.

Patrol Deputy Adam Lovett with Jefferson County Sheriff's Office told 12News that he pulled a man and woman over for speeding on Hillebrant Road and began questioning why they were speeding. Both gave conflicting responses, prompting a search of vehicle, which the driver refused.

"He said they were down here for work, then I went and spoke with the female in the passenger seat. She told me they were down here visiting some friends, so right there you have conflicting stories," said Lovett.

They called out a K9 unit, who was alerted to something during the search. That's when they found contraband and arrested the couple for drug possession.

Some of the items were wrapped in a way that hid what the item was along with fishing line believed to be used for the drop of contraband into the federal prison. The vehicle was located near the back of the prison.

"I was shocked there was that much. I figured I was just going to find a little bit of meth or something, never thought I'd come across a little enterprise they have going on," Lovett told 12News.

Stephens believes they planned to fly the contraband into the prison for inmates. She says it's a problem they've seen before.

"They'll bundle it in plastic, paper, backpacks, cases and when the drone drops the packaging in the prison area it doesn't get any attention. This not our first and it is certainly not our last," said Stephens.

As smugglers continue to revolutionize their tactics Sheriff Stephens wants people to report any drones they see flying close to the prison.