



# CLOSE ENCOUNTERS OF THE **DRONE** KIND

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TEXAS CITY ATTORNEYS ASSOCIATION  
2017 SUMMER CONFERENCE  
SOUTH PADRE ISLAND | JUNE 14-16, 2017  
THE NICHOLS FIRM, PLLC

The background features a dark blue gradient with technical diagrams. On the left, a large circular scale with tick marks and numbers from 140 to 260 is visible. Several circular arrows and dashed lines are scattered across the slide, suggesting a technical or engineering theme.

# DISCLAIMERS

## OF THE **DRONE** KIND

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- IF YOU OWN A **DRONE**, DO NOT TRY TO DO ANYTHING YOU SEE IN THIS PRESENTATION.
- IF YOU DO NOT OWN A **DRONE**, DO NOT GO BUY ONE AND TRY TO DO ANYTHING YOU SEE IN THIS PRESENTATION.
- THIS 30-MINUTE PRESENTATION IS MEANT TO GIVE YOU A VERY GENERAL OVERVIEW OF THE **DRONE** INDUSTRY AND THE CHALLENGES IT PRESENTS.
- ENTIRE COURSES ARE NOW BEING DEVOTED TO **DRONE** ISSUES. THE BODY OF AVAILABLE MATERIAL IS HUGE!
- THE FIRM'S **DRONE** PAPER WILL BE AVAILABLE ON THE TCAA WEBSITE FOLLOWING THE CONFERENCE

# WHAT IS A **DRONE**? (“QUADS”)

- FAA: “unmanned aircraft system” (UAS)
  - The FAA defines a UAS as an unmanned aircraft and the equipment necessary for the safe and efficient operation of that aircraft.
  - An unmanned aircraft is a component of a UAS.
  - It is defined by statute as an aircraft that is operated without the possibility of direct human intervention from within or on the aircraft.



# HOW POPULAR ARE DRONES?

## UNIT STATISTICS

- **SMALL HOBBYIST DRONES:**
  - FAA 2016 Estimates: 1.1 Million
  - FAA 2021 Estimates: 3.1 Million
- **COMMERCIAL DRONES:**
  - FAA 2016 Estimates: 42,000 Units
  - FAA 2021 Estimates: 1.6 Million

## APPLICATION STATISTICS

- Aerial Photography 34%
- Construction, Industrial & Utility Inspection 26%
- Real Estate 26%
- Agriculture 21%

# POPULAR **DRONE** USES:

Hobbyists



Architects



Commercial



# DRONE REGULATIONS: THE FAA

## WHAT PLACE DO DRONES (UAS) HAVE IN THE NATIONAL AIRSPACE SYSTEM?

- With the introduction of drones to the marketplace, the FAA had to figure out how to incorporate them into our airspace.
- FAA Modernization & Reform Act of 2012
  - FAA to develop a comprehensive plan
  - Accelerate and integrate civil UAS into the national airspace system
- Effect:
  - Prohibited commercial UAS flights unless civilian operators obtained an exemption; or
  - Experimental airworthiness certificate; and
  - Certificate of waiver & authority limiting operation to specific vehicles / area

# DRONE REGULATIONS: THE FAA

JUNE 21, 2016: "Part 107 Rules" (Operational Approach)

## • COMMERCIAL OPERATORS

- Obtain a remote pilot certificate OR be under the direct supervision of a certificate holder
- Register the aircraft as a non-recreational drone with the FAA
- Not fly at night unless they hold a FAA waiver (governmental entities may get waivers)
- Follow all the operation rules and regulations for commercial drone use

## • RECREATIONAL OPERATORS

- Fly for hobby or recreational purposes only; fly under 400'
- Follow a community-based set of safety guidelines
- Fly the UAS within visual line-of-sight (VLOS)
- Give way to manned aircraft
- Provide prior notification to the airport and air traffic control tower (if present) when flying within 5 miles of an airport ([obeattie.github.io/gmaps-radius/](http://obeattie.github.io/gmaps-radius/))
- Fly UAS that weighs no more than 55 lbs. unless certified by a community-based organization

# DRONE REGULATIONS: TEXAS

## WHAT HAS TEXAS DONE TO REGULATE DRONE ACTIVITY?

- 83<sup>rd</sup> Legislative Session (2013) – Privacy Approach
  - Created Chapter 423 – Government Code
  - Illegal for a UAS operator to capture images on private property for surveillance
- EXCEPTIONS:
  - Public real property; persons on public property
  - Private landowner consent
  - Educational purposes
  - FAA-designated test sites / ranges
  - Military use
  - Satellite mapping
  - Utility uses
  - Valid search warrants
  - Law enforcement in immediate pursuit of someone believed to have committed a felony
  - Hazardous material spills
  - Fire suppression
  - Rescue of an individual
  - Real estate brokers (no individuals identified)
  - No more than 8' off the ground (public)
  - Pipeline inspections
  - Port security



# DRONE REGULATIONS: TEXAS

## WHAT HAS TEXAS DONE TO REGULATE DRONE ACTIVITY?

- 84<sup>th</sup> Legislative Session (2015) – Amendments & Offenses
  - HB 1481: Added Sec. 423.0045 creating an offense for operation of UAS over critical infrastructure
    - 12 categories of “critical infrastructure” (e.g., dams, power plants, refineries)
    - Class B misdemeanor (Class A with a previous conviction)
  - HB 2167: Amended Sec. 423.002(a) to add acceptable circumstances for capturing images
    - Academic purposes; institutions of higher education
    - Professional land surveyors
    - Professional engineers
  - HB 3628: Amended Sec. 411.062 to require the Dept. of Public Safety director to adopt rules governing UAS operation in the Capitol Complex
    - Class C misdemeanor (Class B with a previous conviction)

# DRONE REGULATIONS: TEXAS

## WHAT HAS TEXAS DONE TO REGULATE DRONE ACTIVITY?

- 85<sup>th</sup> Legislative Session (2017) – More Amendments & Offenses
  - HB 1643: Amendments to the “critical infrastructure” list
    - Oil and gas drilling sites
    - Telecommunications infrastructure (e.g., cell towers, but what about small cell nodes?)
    - Concentrated animal feeding operations (CAFOs)
  - Sent to Gov. Abbott on May 30, 2017 (not yet signed)
  - Flying over “critical infrastructure” lower than 400’
    - Class B misdemeanor; and
    - 180 days in jail
- CRITICISM? “The law tramples on the public and the media’s First Amendment rights...”

# DRONE REGULATIONS: FAA + TEXAS

## WHAT DOES THE FAA HAVE TO SAY ABOUT LOCAL REGS?

- Preemption!
- Recommended potential restrictions:
  - Permitting process
  - Minimum operating ages (18+)
  - Maximum drone weights (up to 55 lbs)
  - Operation limitations (e.g., daylight only; no image capture)
- WHY SHOULD CITIES CARE?

# WHY SHOULD CITIES BE CONCERNED ABOUT **DRONES**?

- **Apr. 2014:** Drone crashes outside of South Carolina prison trying to deliver contraband
- **Jan. 2015:** Drone landed on the White House lawn
- **Jul. 2015:** 18 y/o investigated after posting video of a drone firing a gun
- **Oct. 2015:** Drone crashed into Los Angeles power lines cutting off power
- **Feb. 2016:** NJ man arrested after crashing drone into Empire State Bldg.



# DO YOU NEED **DRONE** REGULATIONS?

## • PROACTIVE APPROACH

- Do you need to get ahead of a growing problem? Increased complaints?
- Open air festivals, assemblies, conventions or other crowd attractions?
- Unique tourist attractions, parks, nature preserves, other areas of public interest where drones could be disruptive?
- "Critical Infrastructure" that could attract drone operators? (drainage channels)
- Active drone clubs or enthusiasts?
- Attract drones for potential economic development? (drone-ports)

## • REACTIVE APPROACH

- Rural location with little drone activity or complaints?
- Farming / agriculture community?
- Drone usage is incidental at best?
- Little to no commercial usage?
- Existing nuisance or trespass ordinances?

# POSSIBLE **DRONE** REGULATIONS?

- PROACTIVE APPROACH

- Keep it simple...illegal to violate any existing federal or state regulations.
- Operator / UAS registration
- Operator / UAS permitting
- Age requirements
- Proof of insurance requirements
- City indemnity requirements
- Time, place & manner restrictions
  - VLOS, intoxication, no weapons
- Dedicated operation zones

- REACTIVE APPROACH

- Keep it simple...illegal to violate any existing federal or state regulations.
- Rely on existing ordinances to deter disturbing drone activity.

# CITIES OF INTEREST?

- CITY OF KERRVILLE, TX

- Chapter 71 – Parks & Recreation
- Restricts the use of drones in municipal parks
  - City of Parker
  - City of Rosenberg
- No interference with person’s “orderly conduct of any person engaged in any supervised or unsupervised play or amusement program being conducted in a city park or recreation area.”

- CITY OF ORLANDO, FL

- Side-stepped the idea of regulating airspace
- Frame their drone regulations as land use issues
- Prohibitions on the areas where a person may launch and land drones
- With VLOS regulations, limiting launch and land locations indirectly controls where drones may be flown

- CITY OF DENVER, CO:

14.3 Flying Objects: The throwing, striking, propelling, launching or otherwise operating flying or propelled object of a potentially dangerous nature, such as a hang glider, sky diving, sky sail, model airplane or helicopter, model rocket, golf ball, rock, and similar flying or propelled item (“**Flying Object**”) is not allowed in a Park Facility. A Flying Object does not include a non-motorized model airplane under a half pound in weight, a Frisbee or a kite. Objects propelled by Weapons identified in 7.2 above are subject to the restrictions set forth in 7.2. Fireworks identified in 6.3 are prohibited in Park Facilities. Exceptions to this rule:

The background features a dark blue gradient with a starry space pattern. Overlaid on this are several technical diagrams, including circular gauges with numerical scales (e.g., 140, 150, 160, 170, 180, 190, 200, 210, 220, 230, 240, 250, 260) and various circular paths with arrows indicating direction. The main text is centered on the right side of the image.

# LET'S NOT *DRONE* ON

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