

**WELCOME**



**FREE  
DRONE LESSONS  
FOR DRONE  
TEACHERS**

Sponsored By:



**IBC CCMR For K-12**

**UAV/JROTC/Engineering/Robo/Ag/Sports/Aviation/Aerospace  
Real Estate/Construction/Energy/And more**



**Drone Pro Training**

**Government/Municipalities/Corporations/Individuals**

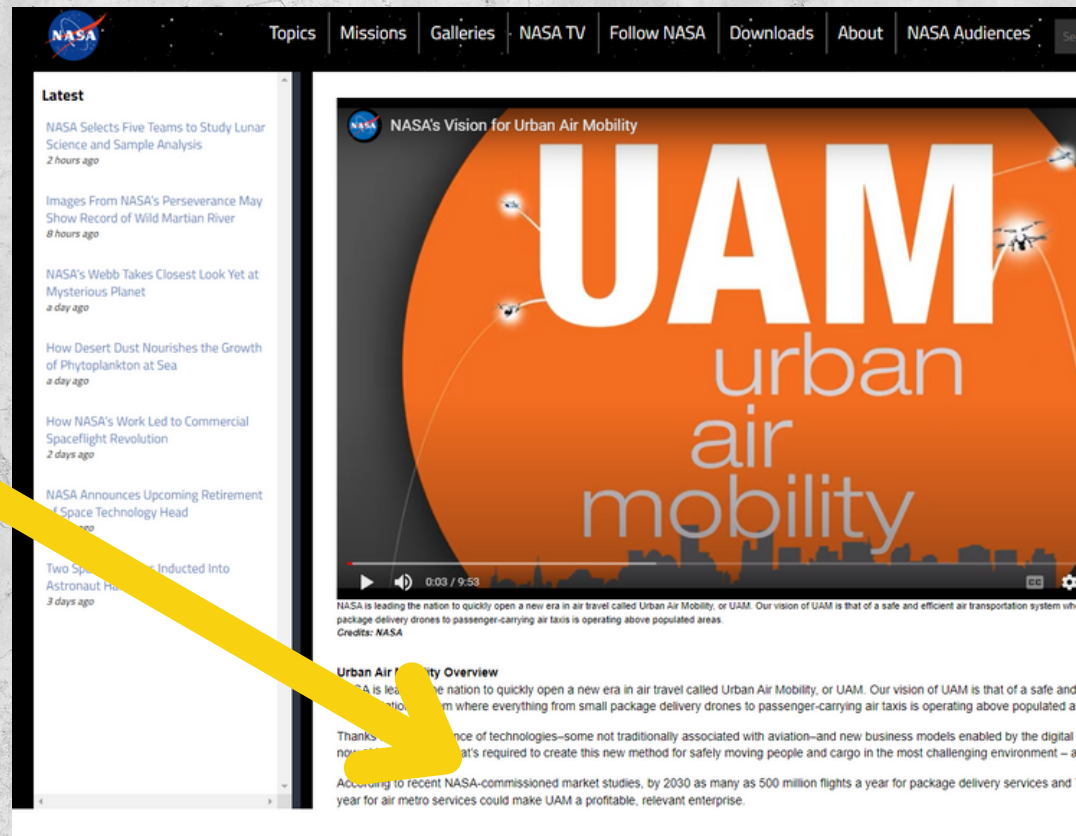
# INSTRUCTOR: JOE PANEITZ

- ICONIC DRONE EDUCATION TEACHER/DESIGNER
- FAA FAAST DRONE PRO
- TEACHER SINCE 2004
- 6 YRS HIGH SCHOOL DRONETEACHER
  - (99% FAA PART 107 IBC EXAM PASS
- REGION IV TEXAS TEACHER OF THE YEAR
- HUMBLE ISD TEACHER OF THE YEAR
- CHANNELVIEW ISD TEACHER OF THE YEAR
- ATPE HUMBLE TEACHER OF THE YEAR
- GULF COAST EDUCATORS TEACHER OF THE YEAR
- HONOR MEDAL CROSSED PALMS
- CIVILIAN CONGRESSIONAL MEDAL OF HONOR FINALIST



# WHY IS ALL THIS IMPORTANT TO SCHOOLS, INDIVIDUALS, BUSINESSES, GOVERNMENT, CORPORATIONS?

click



According to recent NASA-commissioned market studies, by 2030 as many as 500 million flights a year for package delivery services and 750 million flights a year for air metro services could make UAM a profitable, relevant enterprise.



# TODAY'S LINEUP

- **Jobs Report**
- **HS Industry Based Certification (What is 107?)**
- **Recreational vs Commercial**
- **Critical Laws**
- **Drones for Sporting Events (UIL)**
- **Upcoming FAA Law (Remote ID)**
- **Regional Program of Study**
- **Registering Your Drone**
- **Drone Education for Elementary and Middle**



# JOB'S REPORT

\$1.25 TRILLION - 2030

59% CAGR

Home > Aerospace And Defense > Commercial Drone Market Growth, Analysis, Report to 2022-2030



## Commercial Drone Market

Commercial Drone Market: Information by Product (Rotary Blade, Fixed-Wing, Hybrid), Application (Filming and Photography), End-User (Agriculture), and Region — Forecast till 2030

REPORT OVERVIEW

Table of Content

Segmentation

Download Free Sample!

### Market Overview

The global commercial drone market size was valued at USD 20.8 billion in 2021. It is expected to reach USD 1,205 billion by 2030, growing at a CAGR of 57% during the forecast period (2022–2030).

A commercial drone is defined as a quadcopter, octocopter, or hexacopter used for commercial purposes rather than personal and recreational use. Commercial drones operate in the same way that personal drones do. They are outfitted with flight control computers and sensors to hover and perform programmed movements. Commercial drones can do more than hover or fly back and forth. They are equipped with high-definition thermal cameras that allow the pilots to see what the drone sees in real-time. Furthermore, some drones can stay in the air for hours and fly hundreds of feet.

Drones are deployed for various tasks, including filming and emergency response. Due to their capacity to survey the property, offer ongoing and accurate project alerts, increase safety, and prevent hazardous accidents on construction sites, these devices are also in high demand in the real estate and construction sectors. Drone business use cases have expanded significantly over the past few years. Designing, evaluating, and upgrading solutions for diverse markets is an ongoing task for market participants like drone producers and software providers.

Jobs Come  
to Your  
Phone

Drone Up

Drone  
Base

\$150/hr  
Avg.

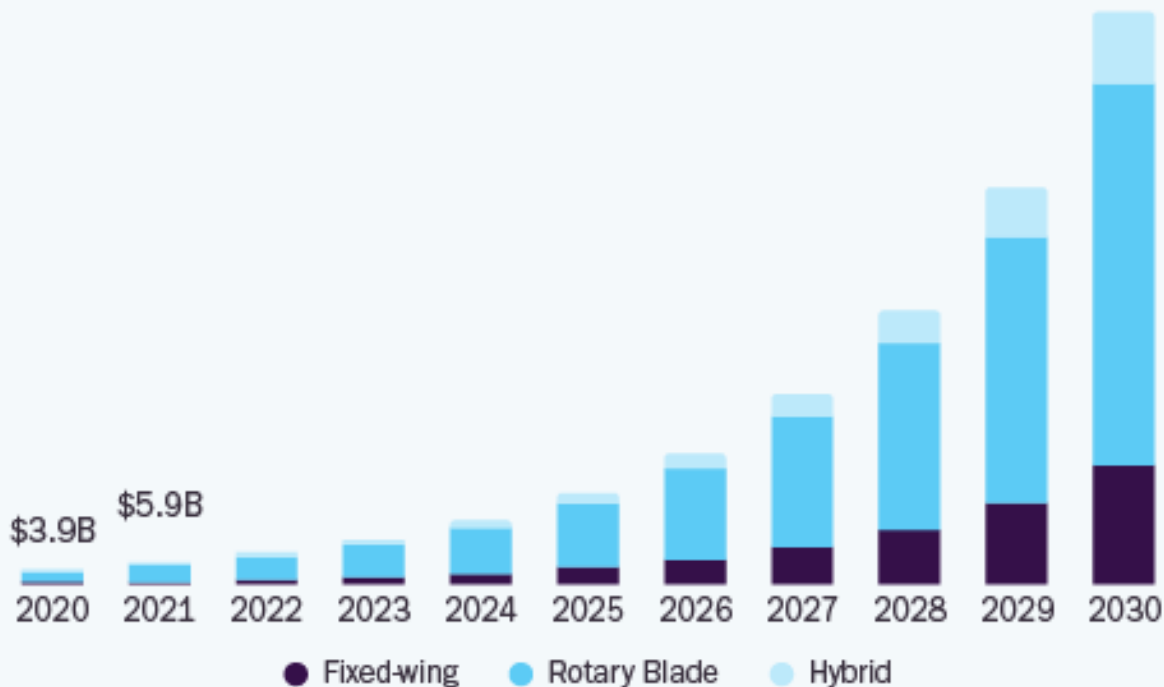


# JOB'S REPORT

(MORE CONSERVATIVE BUT....BOOM!)

## U.S. Commercial Drone Market

size, by product, 2020 - 2030 (USD Billion)



GRAND VIEW RESEARCH

**36.9%**

U.S. Market CAGR,  
2023 - 2030

Source:  
[www.grandviewresearch.com](http://www.grandviewresearch.com)



IconicDRONE  
EDUCATION

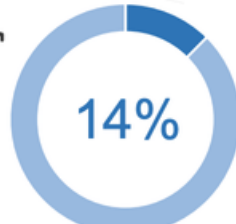
Aha!  
EDUCATION  
LLC

IconicDRONE  
EDUCATION

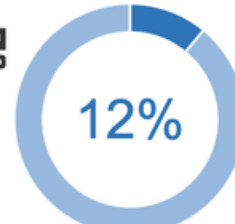
# JOB'S REPORT

## DRONE INDUSTRY INSIGHTS

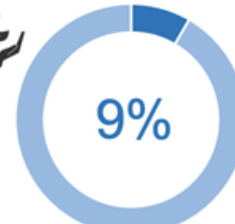
### CURRENT TOP 3 DRONE INDUSTRIES<sup>1</sup>



Energy

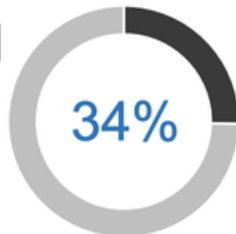


Construction

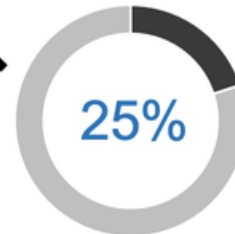


Agriculture

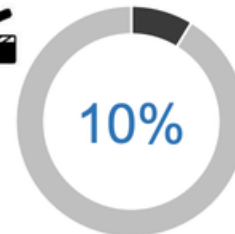
### TOP 3 DRONE APPLICATION METHODS<sup>2</sup>



Mapping & Surveying



Inspection



Photography & Filming

<sup>1</sup> The top industries were selected from 17 industry verticals defined by DRONEII <https://droneii.com/wp-content/uploads/2022/03/Droneii-Industry-Definitions.pdf>.

<sup>2</sup> The top drone applications were selected from 7 application methods defined by DRONEII <https://droneii.com/wp-content/uploads/2022/04/Drone-Application-Methods.pdf>.

source: DRONEII.com

April 27<sup>th</sup>, 2022

**DRONE**  
INDUSTRY INSIGHTS

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# INDUSTRY BASED CERT

## (2022-24 IBC LIST FOR ACCOUNTABILITY)

### # 534

2022-24 Industry-Based Certification (IBC) List for Public School Accountability

Updated 1/24/2023

IBC ID	IBC Title	Certifying Entity 1 Name	Certifying Entity 2 Name	Certifying Entity 3 Name	Certifying Entity 4 Name	Certifying Entity 5 Name	Certifying Entity 6 Name
530	Emergency Medical Technician - Basic	National Registry of Emergency Medical Technicians (1010)					
1071	Employment Ready Certification - Air Conditioning	ESCO Group (290)					
1072	Employment Ready Certification - Electrical	ESCO Group (290)					
1073	Employment Ready Certification - Gas Heat	ESCO Group (290)					
1074	Employment Ready Certification - Heat Pumps	ESCO Group (290)					
1075	Employment Ready Certification - Light Commercial Air Conditioning	ESCO Group (290)					
989	Engineering Technology Foundations	NOCTI (440)					
512	Entrepreneurship and Small Business	Certipost (250)					
990	Equine Management & Evaluation Certification	National Horsemanship Team Coaches' Association (1000)					
534	FAA Part 107 Remote Drone Pilot	Federal Aviation Administration (850)					
991	Facebook Digital Marketing Associate Certification	Facebook (Meta) (830)					
535	FANUC Robot Operator 1	FANUC America (840)					
536	Feedyard Technician in Cattle Care and Handling	Texas Cattle Feeders Association (540)					
537	Feedyard Technician in Machinery Operation, Repair and Maintenance	Texas Cattle Feeders Association (540)					
992	FESTO Certified Industry 4.0 Associate Fundamentals	National Coalition of Certification Centers (NCC) (860)					
993	Food Protection Manager Certification	American National Standards Institute (200)					
994	Food Safety & Science Certification	American Meat Science Association (690)					
995	General Management	NOCTI (440)					
539	Google Cloud Certified Professional - Cloud Architect	Google (860)					
996	Google IT Support Professional Certificate	Google (860)					
997	Graphic Production Technology - Job Ready	NOCTI (440)					
1000	HBI Pre-Apprenticeship Certificate Training (PACT), Basic Carpentry	Home Builders Institute (880)					
1002	HBI Pre-Apprenticeship Certificate Training (PACT), Basic Electrical	Home Builders Institute (880)					
998	HBI Pre-Apprenticeship Certificate Training (PACT), Brick Masonry	Home Builders Institute (880)					
999	HBI Pre-Apprenticeship Certificate Training (PACT), Building Construction Technology	Home Builders Institute (880)					
1001	HBI Pre-Apprenticeship Certificate Training (PACT), Core	Home Builders Institute (880)					
1003	HBI Pre-Apprenticeship Certificate Training (PACT), Green Core	Home Builders Institute (880)					
1004	HBI Pre-Apprenticeship Certificate Training (PACT), Heating, Ventilation and Air Conditioning	Home Builders Institute (880)					
1076	Heating, Electrical, & Air Conditioning Technology (H.E.A.T.)	ESCO Group (290)					

Activate Windows  
Go to Settings to activate Windows.





# INDUSTRY BASED CERT

14YRS TO TEST, 16 TO USE LICENSE, PASS TEST  
BE IN GOOD PHYSICAL/MENTAL CONDITION  
READ, SPEAK, UNDERSTAND ENGLISH



# INDUSTRY BASED CERT

SO I'M CERTIFIED, NOW WHAT

- LEARN TO FLY A DRONE
- LEARN ESSENTIAL KNOWLEDGE AND SKILLS
- SPECIALTY SKILLS TRAINING
  - SAR
  - INSPECTION
  - EVENTS
  - AND MORE
- PRACTICE PRACTICE PRACTICE



# RECREATIONAL VS COMMERCIAL

## IF USING YOUR DRONE FOR ANY JOB OR COMMERCIAL APPLICATION, MUST HAVE FAA PART 107 LICENSE



- Paid use of drones (commercial)
- 20-30 hours test prep
- \$175 test fee
- Still Don't Know How to Fly a Drone

- Non paid use of drones (recreational)
- 45 minutes to complete
- Free online



# CRITICAL LAWS

not gonna be saved from this one!  
**YOUR MOM/DAD, PRINCIPAL, COACH,  
LOCAL POLICE, FAMILY FRIEND, OR  
ANYONE.. THE FBI/FAA GOVERN THIS**

**From FAA.gov**

"Failure to register a drone that requires registration may result in regulatory and criminal penalties. The FAA may assess civil penalties up to \$27,500. Criminal penalties include fines of up to \$250,000 and/or imprisonment for up to three (3) years. Apr 11, 2023"

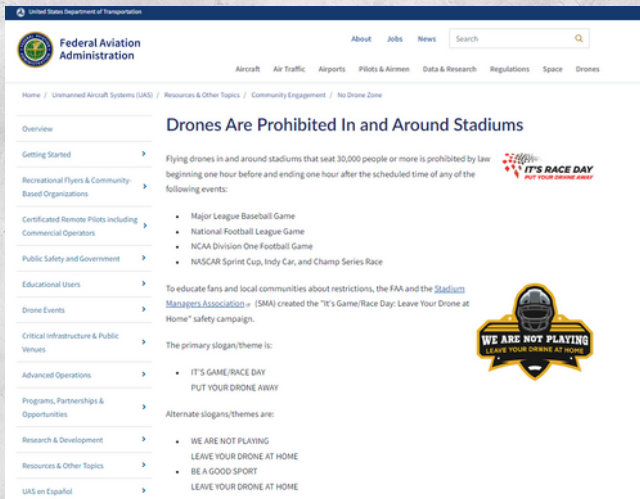
- **Flying at night, flying over people, flying in/near stadiums, flying without license, flying in controlled airspace without ATC approval, state laws, local laws, Drone Zones, and the list goes on....**
- **Governed by FAA and FBI (Click to See It in the News)**



# DRONES AND SPORTING EVENTS

## Schools Functions

Click



Click

## Non School

- NBA, NFL, NASCAR, NCAA
- 1 hour b4/after event
- stadiums 30k and more
- 'FBI Charges Drone Pilot'

### RULE DRONE POLICY – UIL AND TAPPS

The UIL and TAPPS have created the following policies for the use of drones by its member schools:

#### UIL Policy:

In compliance with all applicable FAA regulations and related law, subject to local discretion, drones may be used for practice purposes only.

Drones shall not be used in conjunction with any scrimmage or game.

#### TAPPS Policy:

Drones

Use of drones during competition

2. TAPPS rules are in compliance with all applicable FAA regulations and related law

3. Contests

a. Practice – subject to local discretion drones may be used

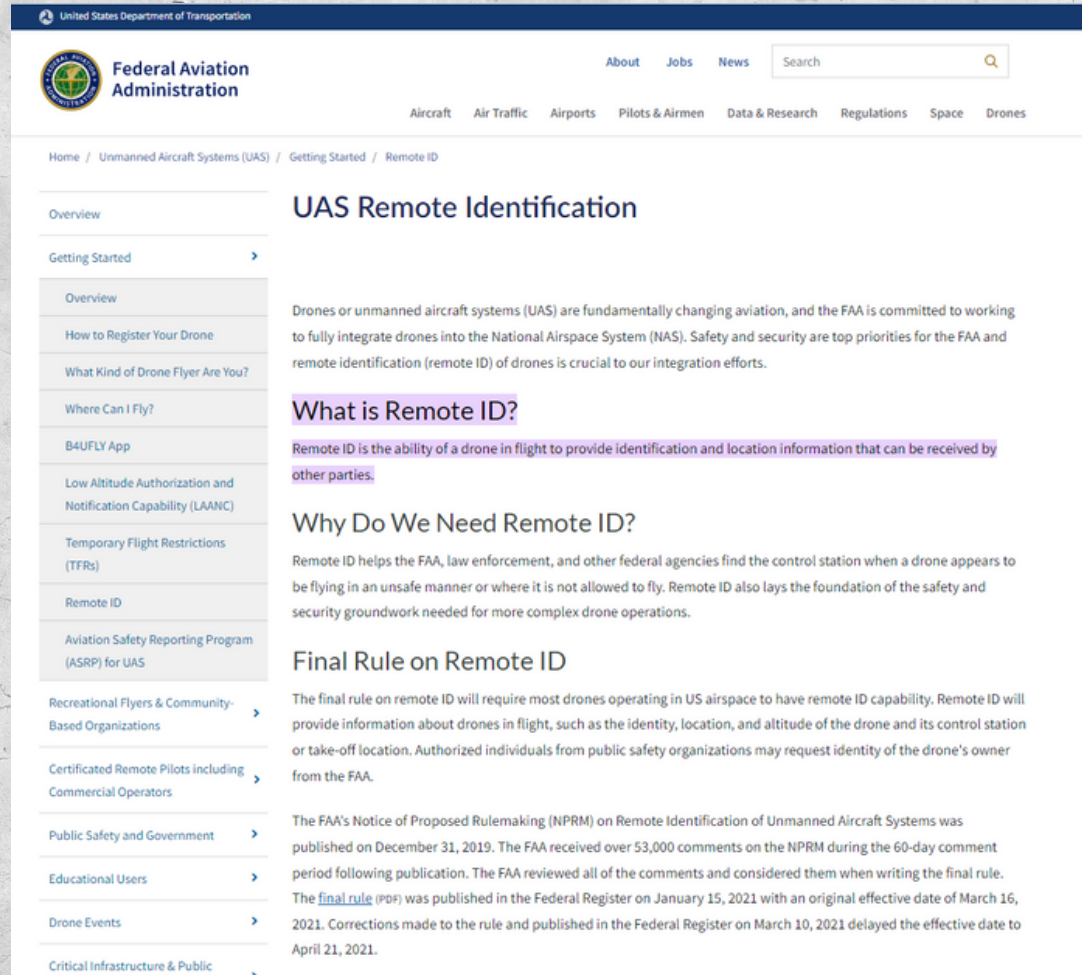
b. Scrimmages and games – Drones shall not be used during warm up, contest or half time



# UPCOMING LAW (REMOTE ID SEPTEMBER 16, 2023)

## FAA list of drones with remote id

click



The screenshot shows the FAA website's 'UAS Remote Identification' page. The header includes the FAA logo and navigation links for 'About', 'Jobs', 'News', and a search bar. Below the header, there are links for 'Aircraft', 'Air Traffic', 'Airports', 'Pilots & Airmen', 'Data & Research', 'Regulations', 'Space', and 'Drones'. The main content area is titled 'UAS Remote Identification' and contains several sections: 'Overview', 'Getting Started' (with a dropdown menu), 'What is Remote ID?', 'Why Do We Need Remote ID?', and 'Final Rule on Remote ID'. The 'Getting Started' menu includes links for 'Overview', 'How to Register Your Drone', 'What Kind of Drone Flyer Are You?', 'Where Can I Fly?', 'B4UFLY App', 'Low Altitude Authorization and Notification Capability (LAANC)', 'Temporary Flight Restrictions (TFRs)', 'Remote ID', and 'Aviation Safety Reporting Program (ASRP) for UAS'. The 'What is Remote ID?' section defines Remote ID as the ability of a drone in flight to provide identification and location information that can be received by other parties. The 'Why Do We Need Remote ID?' section explains that Remote ID helps the FAA, law enforcement, and other federal agencies find the control station when a drone appears to be flying in an unsafe manner or where it is not allowed to fly. The 'Final Rule on Remote ID' section states that the final rule will require most drones operating in US airspace to have remote ID capability and provides details on the rule's publication and effective date.

click



# REGIONAL PROGRAMS OF STUDY (UAV)

**DON'T FORGET TO CHECK OUT NEW COMPLETER RULES**

click

## Transportation, Distribution, and Logistics Career Cluster

The Transportation, Distribution, and Logistics Career Cluster focuses on careers in planning, management, and movement of people, materials, and goods by road, pipeline, air, rail, and water. It also includes related professional support services such as transportation infrastructure planning and management, logistics services, mobile equipment and facility maintenance.

## Drone (Unmanned Flight) Regional Program of Study



The Drone-Unmanned Flight regional program of study introduces CTE learners to the occupations and education opportunities related to operating or designing an unmanned aircraft using a ground-based controller and the systems of communications between the controller and the aircraft.

### Secondary Courses for High School Credit

#### Level 1

- Introduction to Unmanned Aerial Vehicles (UAV)
- Introduction to Aerospace and Aviation

#### Level 2

- Robotics I

#### Level 3

- Robotics II
- Digital Electronics
- Engineering Science

#### Level 4

- Practicum in Manufacturing
- Scientific Research and Design

### Postsecondary Opportunities

#### Associates Degrees

- Airline Pilots, Copilots, and Flight Engineers

### Work-Based Learning and Expanded Learning Opportunities

#### Exploration Activities

- Participate in SkillsUSA
- Explore virtual aviation websites

#### Work-Based Learning Activities

- Work part-time at an aviation services agency, drone company, or airline company

### Industry-Based Certifications

- FAA Part 107 Remote Drone Pilot
- Certified Aerospace Technician\*
- IS CET Certified Electronics Technicians\*

\*IBC sunseting 8/31/24



# HOW TO REGISTER YOUR DRONE \$5 BUCKS SAVES YOU \$250,000 AND UP TO 3 YEARS FED PEN

The screenshot shows the FAA DroneZone website. At the top, the United States Department of Transportation logo is on the left, and the Federal Aviation Administration logo is in the center. The text 'FAADroneZone' is highlighted with a yellow circle. To the right of the logo are navigation links: 'Recreational Flyers', 'Certificated Remote Pilots', 'Public Safety & Government', 'Educational Institutions', 'Where Can I Fly?', and 'UAS en Español'. Further right are links for 'Contact', 'Drone Events', and 'Log In'. Below the navigation is a large banner image of an air traffic control tower. On the left side of the banner, there is a dark blue box with the text 'Apply for an Airspace Authorization' and a link 'Create Account'. Below the banner are three main content blocks: 'Welcome to the FAADroneZone' with a sub-headline 'FAADroneZone is the official FAA website for'; 'Account Log In' with input fields for 'Email' (containing 'Enter Email Address') and 'Password'; and 'Helpful Links' with a list of links: 'Register your drone', 'Download the B4UFLY Mobile App', 'Take T.R.U.S.T.', and 'UAS en Español'. A 'Windows' watermark is visible in the bottom right corner of the screenshot.





DRONES IN  
HIGH SCHOOL/COLLEGE/INDIVIDUAL  
IBC / CCMR 100% TURNKEY



Click



# START EARLY! START NOW DRONES IN ELEMENTARY/MIDDLE

[click](#)

SCAN ME



WE ARE EXCITED TO ASSIST

DRONE PROGRAMMING EDUCATION



PLUS

## DRONEBLOCKS

[CLICK TO LEARN MORE](#)



# MORE INFORMATION IN HOW TO BEGIN

click

## Drone edu for

- schools
- K-12
- companies
- goverment
- individuals

## Other

- drone obstacle courses
- drone/STEM mobile classroom
- drone competition

aha education, llc

HOME K12 - COLLEGE BUSINESSES GOVERNMENT INDIVIDUALS COACHES - SPORTS OBSTACLE COURSES MORE...  
LOG IN

**Aha!**  
EDUCATION  
LLC

210-850-7230

5TH-12TH GRADE (5BC / CODING) INDIVIDUALS COLLEGES (BUILD A BUSINESS) COACHES/SPORTS  
GOVERNMENT VISIT OUR ONLINE CLASSROOM SITE BUSINESSES COMPETITION



# CONTACT AHA

Talk to Aha COO  
Josh Beatty  
210-850-7230



[Message  
\(click here\)](#)

