



Overview of Drone Technology

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Topics Overview

- UASs in general
- UAS capabilities
- Sensors
- UAS limitations
- Tips in starting/supporting a UAS program

Types of UAS

- Toy UAS \$
- Hobbyist UAS \$\$
- Commercial UAS \$\$\$
- Professional Grade UAS \$\$\$\$

Toy UAS

Manual Flight and Limited Capabilities

No additional sensors



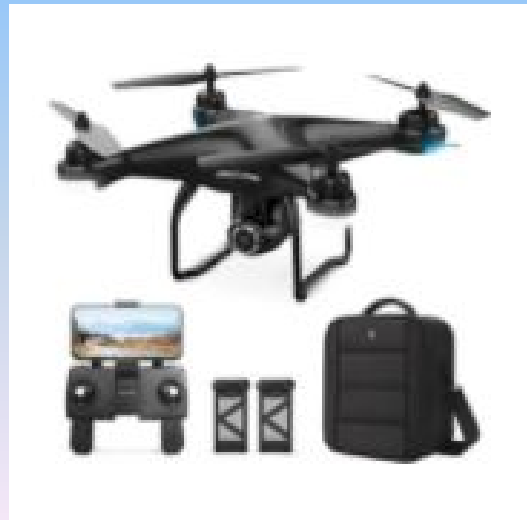
Hobbyist UAS

Better built

Has more features

GPS

May have some basic programming capability



Commercial UAS

Fully Integrated System

Tends to be specifically targeted to a task

GPS positioning

Programmable flight

Multiple sensor capability

Typically comes as a complete turn-key system



Professional Grade UAS

Typically, custom designed for need

Comes as a “turn-key” system

Quite good at what they do

Typically, quite expensive



UAS Sensors

- There are a multitude of sensors designed for industry use.
- FLIR
- LiDAR
- Hi Res Color Video and Photographic images
- Multispectral imaging
- Hyper spectral imaging
- Optical Gas Imaging
- Sensors tend to be more expensive than the UAS itself

UAS Limitations

- Typically Battery Powered – flight time varies
- Limited in Weight that can be carried
- Limited to line of sight by the pilot
- Must have FAA Small UAS Remote Pilot Certificate

Tips in starting/supporting a UAS program

- Have FAA certificated UAS Pilots
- Choose the right UAS for your needs
- Have all the support equipment – computers, software, supplies, batteries, etc.
- Keep good records
- Continually follow the FAA's procedures, policies, and Regulations. Changes occur all the time.

YOUR QUESTIONS

GIVE THEM TO ME

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