

# DRONE ACADEMY

24 APRIL 2025



Who are  
these guys?

What is  
engineering?

Why  
engineers?

What kind of  
Engineers?

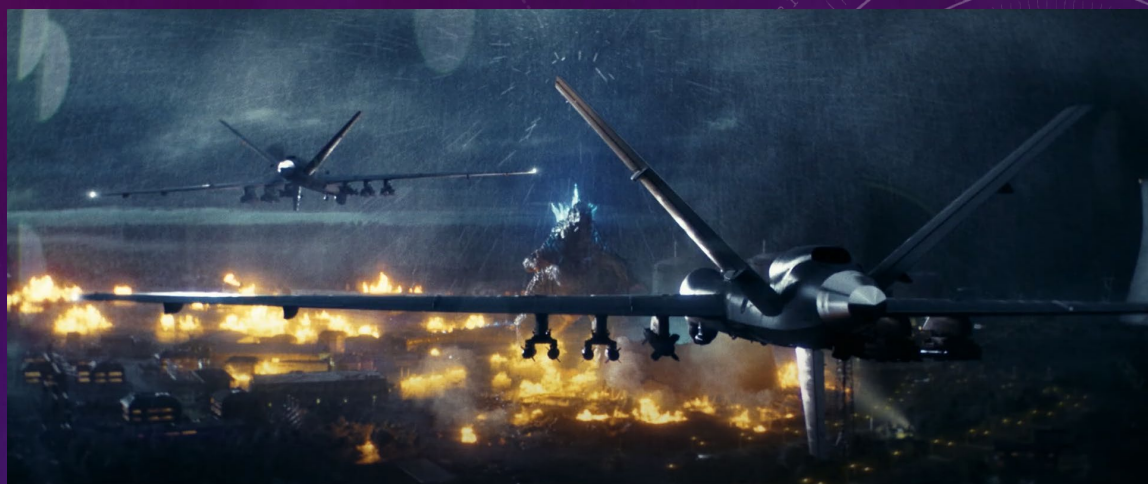
Engineering  
Exercise

Training

Take Flight!

# WHO ARE WE?

- Engineers from General Atomics
- Develop and engineer Unmanned Aerial Vehicles (UAVs)
- UAV, fancy word for Drone



You've seen our drone in movies. Guess the movies?



# WHAT IS ENGINEERING?

- Not Science... but you need to know science
- Not Math... but good to have a strong background in math
- Not Technology... but great to understand technologies

**Engineering is using skills to make things work**

- Applying Skills
  - STEM (Science, Technology, Engineering, Math)
  - Communications and Reading
  - Research and Learning new things
  - Art, People, Business skills and many more!



# WHY DO WE WANT ENGINEERS?

(MAKE THINGS WORK)



# DIFFERENT KINDS OF ENGINEERS

Computer

Software

Mechanical

Aircraft

Biological

Chemical

Project

Systems

# ENGINEERING EXERCISE - BREAKDOWN THE PROBLEM

## WHAT ARE THE 3 MAJOR THINGS THAT MAKE A DRONE SYSTEM?



(WHAT'S NEEDED TO SUPPORT THE DRONE?)

# ENGINEERING EXERCISE - BREAKDOWN THE PROBLEM

## MODERN AUTONOMOUS DRONE SYSTEMS





# AUTONOMOUS DRONE TRAINING

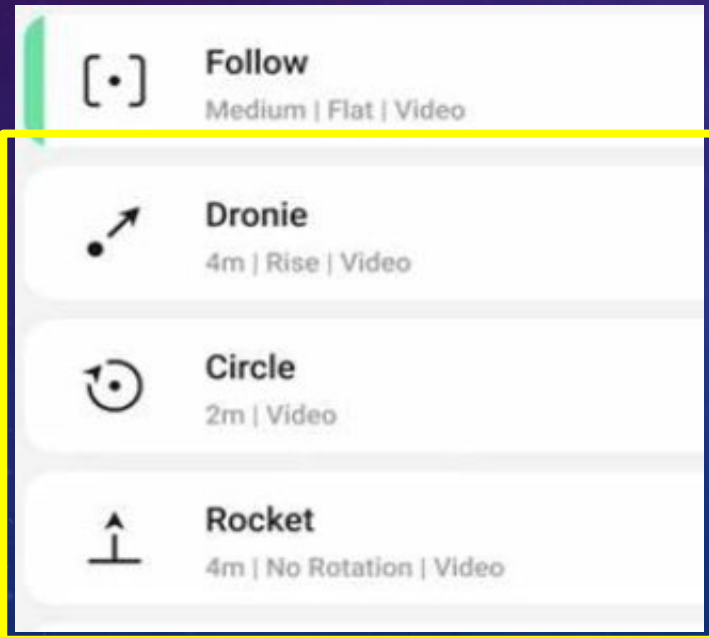
## Intelligent Flight Modes

- Dronie
- Circle
- Rocket



# AUTONOMOUS DRONE TRAINING

1. PRESS TO SELECT INTELLIGENT FLIGHT MODE
2. FACE DRONE AND HOLD BUTTON TO TAKEOFF COUNTDOWN



3. PALM TAKEOFF

4. PALM LANDING

# PRE-FLIGHT GUIDELINES

- 3 FLIGHT GROUPS, STAY IN DESIGNATED AREAS



**Lincoln Acres School**  
Elementary school in National City, Ca...

[More info](#)

[Add to project](#)



# LET'S FLY!

## PART 1: FLIGHT TRAINING

- DRONIE
- CIRCLE
- ROCKET

## PART 2: SKILLS TEST

- FOLLOW RELAY

Questions?