

# INS Expo Flight Demo Summary

**The objective of this briefing is to familiarize the audience what Unmanned Aircraft Systems (UAS) are and explain how UAS can be beneficial to a site security, what makes them a threat and how to mitigate that threat through Counter UAS (CUAS) equipment.**

Hello and welcome to the flight demonstration!

Please pay attention to the pilot at all times and follow their instructions.

- All of these aircraft can be ordered off the internet.
- The Baby Shark platform represents a Hybrid aircraft; a merger of fixed wing and multirotor.
- The multirotor components give the baby shark VTOL capabilities, whereas the fixed wing attributes (with lift generated by forward flight) give it much longer flight times.
- The Mavic2 Zoom will launch to observe the baby shark in flight. It will then peel off to demonstrate an observation of the PIDAS fen1ce, allowing the operator to use the zoom lens to achieve greater resolution on target. This is useful for perimeter security of a protected site.
- The Mavic Pro will be flown to demonstrate the SCORPION CUAS System. The MP can be flown in WIFI Mode, which the SCORPION can detect and mitigate, sending a command to the MP to “return to home”

## **Demo Aircraft:**

### **Baby Shark:**

- Showcase hybrid vehicle
- Stream analog video

### **Mavic 2 Zoom (M2Z)**

- Stream HD Video from high altitude
- Patrol and Visual verification


### **Mavic Pro (MP)**

- Have wifi mode
- Use for counter





## Demo Flight Plans:


### Flight 1: Baby Shark

- Vertical take off from 
- Transition to forward flight, fly out, turn around fly back, loiter for a while
- Fly to landing area, VTOL, land at

### Flight 2: M2Z

- Take off from 
- Climb to altitude
- View group
- View Baby shark loiter
- Patrol perimeter
- Land at 

### Flight 3: MP

- Take off from 
- Climb to altitude
- Breach fence
- Use counter to deter
- Land at 