
Pioneer
Defence
www.pioneer.net.au
DRONEDEFENCE

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This is an electronic countermeasures system which prevents drones from flying into or close to a protected location by disrupting its command and navigation radio transmissions; in any weather, day or night. It can be configured horizontally or vertically depending on the operational requirements.

As a system it uses multiple low-powered radio transmitters which are strategically placed around the protected site. When activated, they transmit a signal which is designed to overwhelm the drone's radio transmissions. This breaks the control and video link between the drone and its operator.

Fully programmable and can be activated via a suite of sensors or human input.

Key Features:

- Electronic fence to stop drones
- No impact on other devices
- Creates a 'roof' over facility
- Defeats drone swarms
- Disrupts command and navigation frequencies
- Scalable, to cover any size site

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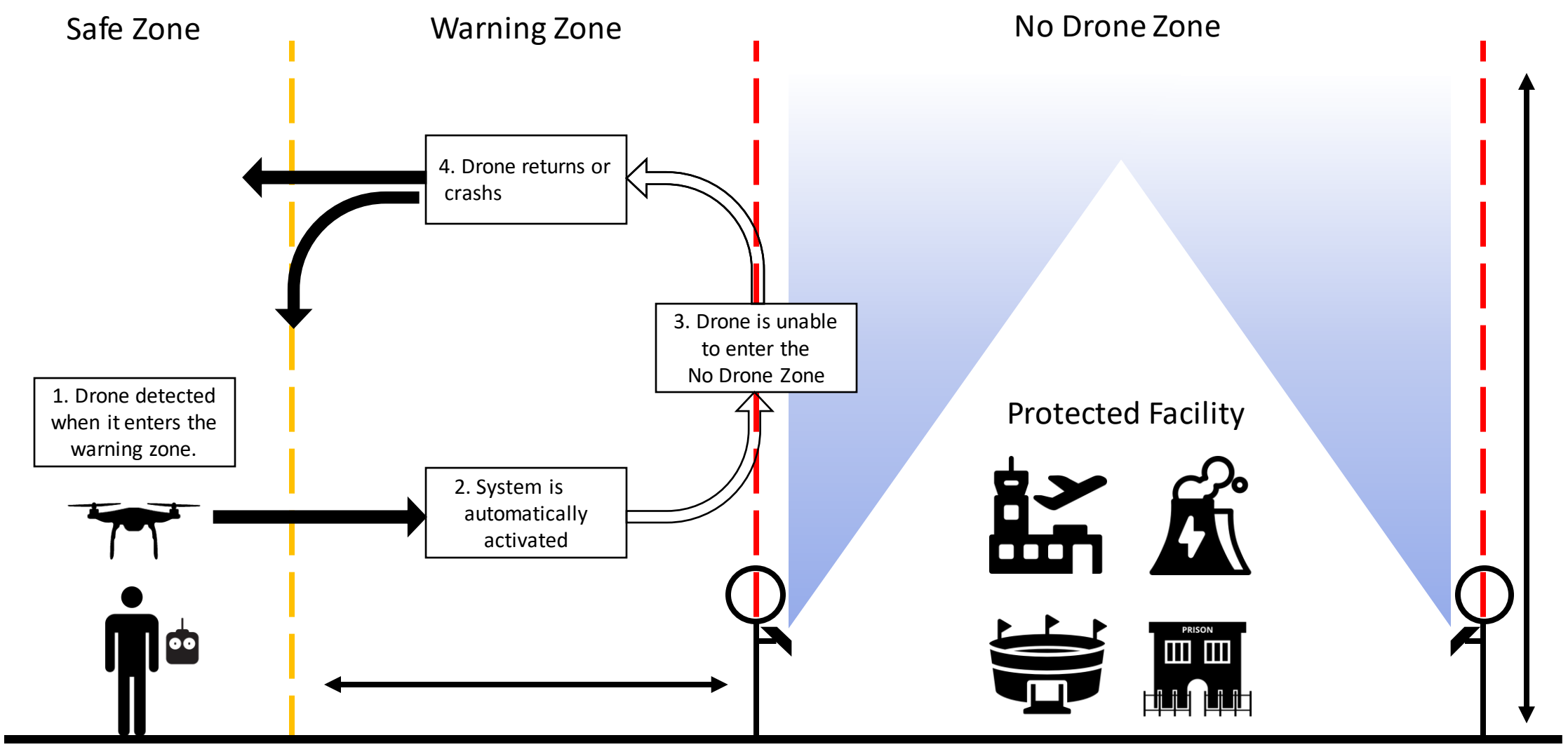

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Airport Deployment

No Drone Zone

Approach Routes Protected

Warning Zone

No Drone Zone

Approach Routes Protected

3. Drone is unable to enter the No Drone Zone

2. System is automatically activated

1. Drone detected when it enters the warning zone.

Safe Zone

Warning Zone

Not to Scale

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Warning Zone

1. Drone detected when it enters the warning zone.

2. System is automatically activated

3. Drone is unable to enter the No Drone Zone

Protected Island

Safe Zone

Up to 1 km

No Drone Zone

- Scalable, modular and can be integrated into existing security networks.
- It can be deployed along frontiers to warn of and prevent unwanted drone incursions.

Case Study – Guernsey Prison

In the summer of 2017 Guernsey Prison in the Channel Islands, UK installed the anti-drone system to prevent drones from smuggling drugs, phones and weapons into the prison. This prison will be the first in the world to have a automatic drone defence system.

When a drone approaches the prison, it is detected by a radio frequency sensor and then the system is automatically activated. This creates an invisible wall to prevent the drone from crossing the perimeter; an effective No Drone Zone over the prison.

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Benefits of the Drone Defence System:-

- **Scalable** - The system is infinitely scalable to match the perimeter size of any installation
- **Automatic** - Fully automatic 'Detect, Decide & Effect' function means no human input required
- **Integrated** - Can be integrated into existing Security Management System
- **Monitored & Updated** - If required the system can be remotely monitored and updated to ensure optimal effectiveness
- **Fully Supported** - Service, Maintenance and Software Plan options available
- **Multi-Sensory** - It uses multiple passive technologies to detect drones
- **Versatile** - Can be used to protect a range of fixed installations which need persistent drone defence
- **Plug & Play** - Can be a 'bolt-on' addition to your existing security network
- **Cost Effective** - Unrivalled performance for the price
- Future-Proof - Regular updates to ensure operational effectiveness
- **Modular** - When required, upgrades are easily integrated
- **Impact-less** - Has no effect on internal or external communication systems
- **Effective** - Will detect and stop 99% of drones & controllers
- **Localised Effect** - Highly precise
- **Protective 'Roof'** – When in Vertical Mode ensures drones can't drop down into facility