

Epreuve orale de DNL

Durée de préparation : 20 minutes

Durée de l'épreuve : 20 minutes

(10 minutes de présentation orale, 10 minutes d'entretien)

Drones are causing airport chaos – why can't we stop them?

By Chris Stokel-Walker for "NewScientist", "January, 2019"

For the second time in less than a month, suspected drone sightings have shut down a UK airport. On 8 January flights out of London Heathrow were suspended for over an hour. And between 19 and 21 December, more than 140,000 people at London Gatwick had their travel plans disrupted after drones were spotted above the airport.

5 **What would happen if a drone hit a plane?**

It could be nasty. Researchers at the University of Dayton Research Institute tried firing a 1 kilogram commercial drone into the wing of a plane at nearly 400 kilometres an hour and it wasn't pretty. The leading edge of the wing tore apart.

Can drones be stopped from flying over airports?

10 In principle, yes, but it's tricky in practice. Drones are too small to be picked up by traditional radar. This means they often have to be spotted by eye and so any action to stop them is slow and inaccurate.

How far away can the drone pilot be?

15 Pilots are also meant to keep drones in sight at all times to legally fly drones – meaning they can't fly more than around 500 metres away from where the pilot is standing. However, some drones can beam back signals to the pilot from 2 kilometres away, and there's an aftermarket of signal boosters that allow drones to be flown at illegally long distances. Some drones can also be set pre-programmed paths to fly autonomously.

Do airports currently have any protections?

20 In the aftermath of the Gatwick disruption, the airport installed a £1 million protection system. It comprises 360-degree radar and thermal imaging systems, as well as a radio jammer. It's one of a number of systems set up at airports around the world. For example, Ronald Reagan National Airport in Washington DC has a 30-nautical mile network of radio jammers to try to stop drones entering the airport's airspace.

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"Drones are bad news for airports"

Present the document and answer the following questions:

1. Explain how a drone works.
2. Now and in the future, how can we use drone?