100 years of air surveillance

Aveillant is shaping the future

AVEILLANT

1930s

Radio Detection and Ranging (RADAR) uses separate transmitters and receivers to achieve, for its time, high accuracy and continuous surveillance.

1940s

The magnetron and duplexer enable the transmitter and receiver to be combined into a single, rotating antenna to provide 360 degree coverage at the expense of continuous surveillance.

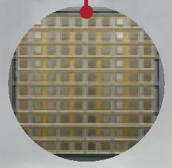
1950s

Klystrons and Travelling Wave Tubes provide more stability and power, allowing radars to be deployed on ships, aircraft and vehicles.

1960s+

Solid State Technology enables flat-panel phased-array radars with electronic beam steering. Due to cost, these are aimed at defence applications requiring high-rate tracking.

2000s



Cambridge Consultants Ltd creates a low-cost, high-performance, flat-panel phased-array radar using COTS technology which is the precursor of Holographic Radar™.

2011

Aveillant Ltd is formed to commercialise the Holographic Radar™ technology. Focusing on intelligent target characterisation, it provides a high-precision, three-dimensional persistent surveillance of the airspace.

2013

Holographic Radar is the outstanding performer in the US IFT&E Mitigation Trials and is demonstrated at Glasgow Prestwick Airport, successfully mitigating multiple wind farms. It is independently verified to meet UK and European performance requirements.

2014

CAA awards Aveillant a contract to demonstrate use of Holographic Radar™ in support of the Spectrum Release programme. The 25 nautical mile range version of Holographic Radar™ is released.

2015

Holographic Radar™ range is extended to 40+ nautical miles Development continues to improve intelligent characterisation and identification of targets, based on 100% time on target and continuous high-precision Doppler signatures.

2020+

To support requirements on spectrum efficiency, Holographic Radar™ is networked to provide next-generation regional and national high-precision volumetric coverage of airspace up to 60,000 ft.