

UK TEST AND DEMONSTRATION FACILITY SHOWCASES SENSOR DEPENDABILITY AND INTEGRATION CAPABILITIES

Perimeter intrusion detection is an increasingly hot topic for the global security community. In identifying options for protecting high-risk sites against unauthorized access, users cite long-term reliability as the key criterion for selecting one system over another. With significant investment in field testing initiatives on several continents, it's no accident that Southwest Microwave is today's trusted source for integrated perimeter security solutions.

It is nearly impossible to imagine that nestled in the quiet serenity of England's picturesque Cotswolds region, peacefully coexisting with herds of grazing deer, is an elaborate security proving ground where sophisticated perimeter intrusion detection systems are being put to the test.

Keeping unauthorized intruders out is serious business for Arizona-based Southwest Microwave, Inc., an industry-leading manufacturer of outdoor perimeter security systems. Sensors from Southwest Microwave have fortified the world's highest security sites since 1971, and are installed across broad ranging applications, often in harsh climatic extremes.

Ensuring the reliability of these systems is critical, a mission that the company's wholly-owned European subsidiary - Southwest Microwave Ltd. - fulfills on a daily basis at its internationally-acclaimed 2000 square meter Test and Demonstration Facility in Eckington, Worcestershire, UK.

"Our customers say that 70,000 systems operating successfully in 80+ countries is proof enough that our sensors are reliable. We say that only by testing and monitoring these sensors ourselves - 24 hours a day, 365 days a year - can we truly be sure."

Martin Lomberg General Manager - Europe Southwest Microwave Ltd.



CONSTRUCTED TO BRITISH AND EUROPEAN STANDARDS

Built in 2002 on what was once a debris-laden plot bordering the firm's offices, the site went through a stunning transformation to become a shining example of industry best practices. This is due in large part to the project development efforts of Southwest Microwave's UK team.

"Building the UK Test and Demonstration Facility was no simple undertaking, especially given the challenging terrain and rural location of the facility", explains Martin Lomberg, Southwest Microwave's European General Manager.

"Soil had to be brought in by the truckload and graded. A special PVC membrane was then added against weeds and covered with vast quantities of imported gravel. The weeds

returned almost immediately, and the site has required monthly preventative treatment ever since."

Lomberg explains how cable ducts were put in end to end, concrete for a camera tower was poured and power distribution poles and boxes were installed. Fences were erected prior to adding the final layer of gravel, with each post mounted in solid concrete.

"The pigeons liked the razor coil best", he recalls. "When it first went in, they built nests and laid eggs. Safe as houses in there."

Safety is the name of the game at Southwest Microwave's Test and Demonstration Facility, which meets both British and European Standards. Fence construction is in strict compliance with BS1722 Parts 10 and 12, and includes chain link, 50x50 mm and 358 weld mesh and steel palisade.

Barbed wire, razor coil and catenary wire topping structures line the fences. This diverse configuration demonstrates the range of European fencing options, offering visitors a first hand look at the consistency of detection and pinpoint intrusion location achieved with Southwest Microwave's revolutionary INTREPID™ MicroPoint™ II and MicroPoint™ Cable cut/climb attack sensors across varying fence conditions.



Ensuring all-weather system reliability is critical. Year-round testing of the INTREPID™ MicroTrack™ II buried cable detection system, in extreme conditions such as deep snow or high winds, lets Southwest Microwave demonstrate consistent sensor performance in varying climatic extremes.



A variety of fence fabric and topping structures are featured to demonstrate a range of European fencing options and the $INTREPID^{TM}$ MicroPointTM II system's consistent detection across varying fence conditions.

ROUND THE CLOCK MONITORING

Along with the MicroPoint™ systems, many of Southwest Microwave's other detection systems are put to task at the site, including the covert, terrain-following INTREPID™ MicroTrack™ II buried cable sensor and the latest addition to the INTREPID™ family of intelligent intrusion sensors - the MicroWave 330 digital microwave link - which couples the company's field-proven RF detection technology with leading-edge digital signal processing capabilities.

The facility also incorporates several CCTV cameras and a fully-equipped weather station, complete with wind analysis tools and precipitation collectors.

"One of our key objectives is to offer European end users, specifiers, consultants, systems integrators and installers the opportunity to observe Southwest Microwave's leading-edge perimeter detection systems installed and operational in a real world environment", explains Lomberg.

"There is no other facility in the UK or Europe with such a wide range of equipment, meeting government standards, that demonstrates how perimeter security equipment would operate if it were installed at an actual site."

All detection devices are networked and integrated into PC-based monitoring and control systems, which interface to onsite CCTV equipment for instantaneous evaluation of an alarm at the precise location where it occurs. Infrared lighting and video recording devices ensure that alarm activity and climatic data are captured on a 24 x 7 basis and stored for later analysis.

"We want to know the cause of every alarm that occurs at this site. Day or night", Lomberg says.

"With 24-hour event monitoring and audit trailing, our technicians can call up alarm history and illustrate to visitors how our sensors react during specific weather conditions, which are often a concern."

In fact, the demo facility was intentionally sited North / South to illustrate just how effectively INTREPID™ fence sensors eliminate weather-related nuisance alarms. Southwesterly winds are the region's strongest, coming up from the Atlantic through Bristol Channel. Winds like these will cause a traditional fence sensor to go into alarm. Southwest Microwave's intelligent fence sensors can differentiate between a point impact, such as a cut or climb attack, and a distributed disturbance, like wind or heavy rain. Visitors see for themselves that the INTREPID™ systems will alarm only for legitimate intrusion attempts.



Hands on training for new INTREPID™ MicroPoint™ II, MicroTrack™ II and microwave sensor users in Southwest Microwave's state-of-the-art onsite training center, provided by Tony Phelps, Southwest Microwave's European Technical Manager.



Visitors get a first hand look at INTREPID™ MicroWave 330's enhanced crawl and vehicle detection and its unique Fresnel suppression algorithms, which discriminate between intrusion attempts and environmental disturbances to prevent nuisance alarms.

"Understanding how successfully the equipment operates here gives our visitors confidence that it will perform reliably back at their facility."

Since it was first commissioned, the UK Test and Demonstration Facility has hosted officials from around the globe representing security-sensitive government and military agencies, transportation authorities and utility providers who have gone on to select Southwest Microwave solutions for their critical infrastructure protection needs.

COMPREHENSIVE ON-SITE RESOURCES

Southwest Microwave Ltd. has a broad portfolio of onsite services to complement the Test and Demonstration Facility. The company's Deer Park offices are staffed with experienced applications engineers, sales consultants and technical service personnel who can provide system design recommendations, detailed project quotations, system commissioning services and technical support.

Monthly onsite hands-on training and product certification for new users of $INTREPID^{TM}$ systems are also offered.

Southwest Microwave's Test and Demonstration Facility showcases an extensive range of perimeter intrusion detection and monitoring equipment, including:

- INTREPID™ MicroPoint™ II Fence Detection System
- INTREPID™ MicroTrack™ II Buried Cable Detection System
- INTREPID™ MicroWave 330 Digital Microwave Sensor
- Long Range Passive Infrared Sensors
- Dual Technology Sensors
- Alarm Monitoring and Control Systems
- Infrared and Halogen Lighting
- CCTV and Digital Video Recording Devices
- · Weather Monitoring Equipment



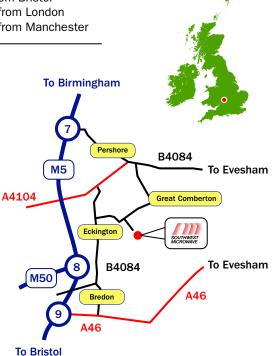








35 miles from Birmingham 50 miles from Bristol 105 miles from London 110 miles from Manchester



TOUR QUICK FACTS

DURATION: 3-4 hours

HIGHLIGHTS:

- Comprehensive review of Southwest Microwave's perimeter intrusion detection systems
- Hands-on sensor demonstrations
- Alarm monitoring and weather station demonstrations
- Project review with experienced applications consultants

RESERVATIONS: To schedule a tour of Southwest Microwave's UK Test and Demonstration Facility, call +44 (0) 1386 75 15 11



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