



Babcock Networks.....

Implement a VoIP telephone system using Wi-fi technology.



The Company

When founded in 1930 the company traded under the name of J.L.Eve Construction, a traditional rigging contractor. In the modern day, Babcock Networks has evolved to become a specialist provider of turnkey network infrastructure services and is an undisputed leader in its field.

Over the last few years Babcock has diversified and strengthened its range of capabilities to offer end-to-end network solutions to the telecommunications, broadcast and power transmission markets.

Babcock Network's three core businesses, Transmission, Communications and Turner & Partners are all industry leaders.

The Challenge

Babcock's rapid growth meant that a larger training site was needed to cope with future expansion plans and to house more plant and equipment. In response to these requirements, Babcock relocated its depot and training facilities to a former RAF base in Newton, Nottinghamshire.

The new site required complete redevelopment before the relocation could go ahead. This included extensive renovation works to the original hangar and military buildings in order to create a pleasant office environment for transport, training and depot personnel, a spacious warehouse for plant and equipment and an in-house materials testing facility. The old hangar and surrounding buildings at Newton had no IT installation that could be adapted to Babcock's requirements, so a brand new infrastructure solution was needed, including an IT network, telephone system and wireless access.

Babcock's Wide Area Network was initially created, developed and installed by Abtec. The network spans through to all three of the groups divisions and consists of more than 14 sites throughout the UK. Due to this successful working relationship with Babcock, Abtec remained the primary choice for installing a suitable network at their new location.



Abtec Network Systems
The Mill
Great Bowden Road
Market Harborough
Leicestershire
LE16 7DE

Tel: 0870 78 74 500
Fax: 0870 78 74 501

Website: www.abtecnet.com
E-mail: enquiry@abtecnet.com

The new site needed a completely new infrastructure encompassing voice, data and wireless access. The wi-fi solution delivered by Abtec proved to be cost-effective, flexible and robust and ensured reliable connectivity between all of our buildings.

Phil Ash, Information Technology Manager



The Solution

Due to the rural location, a microwave radio station was identified as the best solution to manage all communications, as opposed to laying the more common copper wiring of fibre optic connections. This system delivers BT services and connections using a 60cm microwave dish mounted on the hangar building to enable connectivity to the outside world. Robust handsets were selected as they needed to operate wirelessly and effectively in the harsh, industrial environment of the depot, as well as integrate seamlessly with the telephone system.

The VoIP telephone system installed allows voice and fax communications to be routed easily and quickly around the site and by using Power over Ethernet (POE) Babcock achieved a significant reduction in costs and in the complexity of cabling solutions. The Wi-Fi wireless network enables improved and mobile access to data services and is particularly useful for people working outside, as their wireless handsets can transmit from anywhere around the site perimeter or within the hangar building.

Abtec installed 8 secure Cisco wireless access points within the hangar to enable SpectraLink Wireless Telephones

Netlink wireless telephones enable Babcock to take full advantage of the cost savings and simplified management of a converged voice and data infrastructure to significantly improve employee mobility, responsiveness and productivity. Netlink wireless telephones provided the richest functionality and the most extensive compatibility with the existing network.

Solving complex IT challenges at Newton necessitated researching and implementing innovative technology solutions and in the process Babcock achieved some notable firsts: its first utilisation of wireless delivery for BT services, first VoIP telephone system, first use of POE and first WI-FI network.



“The convergence of voice and data over a single platform has dramatically improved the functionality of our network. Thanks to Abtec, the wi-fi network was seamlessly integrated into our WAN.”

Phil Ash,
Information Technology Manager

Key Benefits

Project management of cabling, telephony and wireless systems

Converge voice and data platform

HP POE and Voice quos systems

Complete VoIP system enabling ease of use

Flexible and reliable system

Large telephony coverage

Fully integrated wireless handsets with feature rich functionality

Maintenance support on demand