GTX Case Study

Defence Sector



DARA DRAW ON GTX EXPERIENCE

They usually only come to your attention when they appear on the television news. Saving someone's life at sea as part of the Royal Navy Rescue Service; engaged in frontline activity in one war zone or another somewhere in the world; helping to transport food and medical supplies to the latest group of refugees; helping to rescue flood victims from the rising waters. They are the helicopters of the Royal Navy, Army and Royal Air Force.

However, have you ever considered what it takes to keep the Chinooks, Sea Kings, Lynxes and Gazelles available for flying at a minute's notice, 365 days a year?

The answer is about 1100 dedicated professionals and a lot of sophisticated hardware and software located at the four Defence Aviation Repair Agency (DARA) establishments in the UK.

DARA Fleetlands, based near Gosport in Hampshire, was established in the 1940's. It now has overall responsibility for the maintenance, repair and overhaul of all helicopters, helicopter engines and selected mechanical components for all 3 services.

In addition they carry out repair and overhaul of the Tyne and 'Concorde' Olympus Marine Gas Turbines, currently deployed in the Type 42 Destroyers and Aircraft Carriers. The Engineering Services and Design Division of DARA Fleetlands is the engineering and design authority for all the test benches and test rigs, without which the work of DARA Fleetlands would not be possible.

This 'Centre of Excellence' makes full use of the latest computer hardware and software technologies to ensure that the test benches and rigs are designed to the highest standards. CAD has been used since 1989 and a network of AutoCAD seats is now implemented.

However, DARA Fleetlands is often faced with making changes to equipment that, for one reason or another, are only recorded on paper drawings. Like a lot of other companies and organisations world-wide, DARA Fleetlands have turned to GTX to help them solve their Paper-to-CAD problems.

Using a large format scanner, and a combination of GTXRaster CAD and GTXRaster CAD Plus licences, DARA Fleetlands are now able to bring their old paper drawings to life and combine them with their new CAD designs and models.

Running inside the AutoCAD 2000 environment, GTXRaster CAD enables the Engineering Services and Design Division to work with their scanned images efficiently and effectively - just as if they were working with CAD models.



Image clean up and enhancement are possible with GTXRaster CAD, as is the ability to make changes to the scanned files in either Raster (Scanner) format or Vector (CAD) format, a technique known as 'Hybrid' editing.

More often than not it is necessary for DARA Fleetlands to make a full conversion of their scanned images into vector (CAD) format. GTXRaster CAD Plus enables this conversion to occur quickly and accurately, with the minimum of interactive intervention. Vectorising using GTXRaster CAD Plus produces native format AutoCAD '.DWG' files that are 100% compatible with AutoCAD 2000.

DARA Fleetlands are looking forward to making even greater use of the GTX technology in the future. It is helping them remain on top of their daunting task of keeping the nation's military helicopters available and serviceable for the important and often vital work that they undertake -- even when they are not 'starring' in the T.V. news.

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GTX Corporation Company Profile:

GTX Corporation is the leading supplier of scan-conversion and editing products that provide complete integration and interfacing between scanned drawing archives and Computer Aided Design/Drafting CAD systems.

GTX was founded in 1984 by Dr. Marvin T. Ling, to bridge the gap between paper engineering drawings and electronic format (CAD) and to solve the timeconsuming problems of storing, retrieving and editing paper drawings.

GTX is a privately held corporation headquartered in Phoenix, Arizona with offices in Basingstoke, England and Taipei, Taiwan. GTX sells its products through a network of authorized distributors and resellers throughout the Americas, Europe, Asia, the Pacific Rim, the Middle East and Africa. The Company also licenses its technology to third-party CAD vendors for integration and sale under their own private label.

GTX technology brings intelligence to manually created drawings and allows companies to gain productivity and lower costs to effectively maintain, revise and store their engineering documents. The solutions are designed and developed for use in Mechanical CAD (MCAD), Automated Mapping and Facilities Management (AM/FM), Architectural, Engineering and Construction (AEC), Geographical Information Systems (GIS) and Service Bureau (SB) markets.

Major users of GTX products include public utilities, aerospace/defence, telecommunications, automotive and heavy manufacturing industries.

The GTXRaster CAD® Series utilizes the GTX Software Toolbox libraries for raster editing and raster to vector conversion within the AutoCAD® environment.The range comprises of a series of modular software programs, ranging from simple trace-over, to highly intelligent conversion. Raster manipulation and editing makes use of GTX's proprietary Intelligent Object Picking™ (IOP) which provides drafting modifications with the ease of raster and the power of CAD. Automatic conversion provides true AutoCAD® geometric entities such as lines, arcs, circles and text. The text recognition module is based upon hybrid-neural net technology. This allows users to train the software to automatically recognize text characters associated with individual drawing types and standards