CREATIVITY WITHOUT CRIPPLING COSTS

C-Products Ltd

C-Products is a marine survey company set up to manufacture specialised equipment and develop software. It has been successfully trading world-wide for the past two years. The company belongs to the Hong Kong-based survey services provider EGS (Asia) Ltd.

Having set up the LVB manufacturing company in the UK to build the C-Boom Low Voltage Boomer system, established a newly-developed geophysical software package and agreed a dealership with C&C Technologies to market the new C-Nav GcGPS in the Far East, the Board of Directors at EGS (Asia) Ltd decided that the next step was to create a wholly-owned subsidiary company to handle these items. This company would be responsible for handling the production and global distribution of the new C-Product range including C-Boom, C-View software and C-Nav GcGPS. The prefix to C-products arose largely from the already established name of the C&C Technologies C-Nav GcGPS.

Marketing
Andy Sharp, ex-Gardline, Seateam and DSND Subsea (Subsea 7) was employed in early 2002 to Ã”head upÃ• the marketing work. He was originally operating from Hong Kong at the EGS (Asia) head office but is now largely based in the UK. Marketing began with the production of a new dedicated website www.c-products.com.hk to which a thousand visits were clocked up in no time at all. Development also began of a full set of promotional literature designed to capture revolutionary aspects of company objectives. Original interest was largely generated as a result of the launch of the company's range at the OCEANOLOGY exhibition in March 2002, where systems were demonstrated onboard the vessel the Wessex Explorer on the River Thames. In an attempt at rapid follow-up and further promotion of the new C-Products range, a dedicated 'mailshot' and visit campaign was initiated over the first summer of 2002. This accompanied by magazine articles and adverts attracted a lot more attention to the fledgling company and numerous enquiries started 'pouring in'.

Track Record
Of course, C-products were in a very fortunate position. Not only could they boast a progressive, innovative and radical new C-Products range but their parent company EGS (Asia) Ltd, being an existing operator of the equipment and software, could genuinely claim that the items in the range were effective and had been well proven under arduous marine working conditions. EGS (Asia) Ltd was extremely busy, with numerous cable route contracts around South East Asia and the Pacific Rim and were regularly utilising all three of the C-Products range during operations; using them very successfully. In addition to the C-Nav GcGPS dealership, at this time C-Products were also grateful to receive agency agreements with Tritech International Ltd and Ocean Scientific International for the sale of ROV sensors and geotechnical sampling equipment, respectively.

C-Boom LVB
The C-Boom LVB was the original cornerstone of the C-Product range. EGS (Asia) Ltd had been customising and making equipment for very high-resolution nearshore surveys since the mid-1970s. The concept for the Low Voltage Boomer was based upon a theoretical, long-standing idea of the electronics engineer, Mr John Jopling, the main designer of the system. It was further developed by a team led by the EGS engineer Dave Holland, funded by EGS (Asia) Ltd, who helped set up a design, R&D and manufacturing plant at Bordon in Hampshire, UK. The C-Boom LVB is designed as a conventional catamaran-mounted boomer with under-slung plate, electronic modules and fender-like floats. However, unlike other boomers, the C-Products system is designed to operate off an adjustable range of between only 400 and 700 volts and has been run from a 1KVA generator.
The Power Supply Unit is very small and compact and the cabling of a narrow gauge type, making the boomer very easy to handle and therefore ideally suited for foundation studies in nearshore, estuarine and lacustrine environments and off small inshore-style craft. The C-Boom has proven very successful; data quality is good and numerous companies and institutes have either purchased or shown interest in
this profiling tool. Client purchases have included the USGS in Florida, KIGAM in South Korea, the FIO in China and the Geological Survey of Hungary. Although patronised by academic institutes, the system also proves an ideal solution for organisations that might not have the funds or necessary skills to operate conventional boomer technology.

C-View SDMP
In 2001 Mr Neville Laney, a specialist survey engineer with many years industry experience, was brought into EGS (Asia) Ltd to lead a team of dedicated system analysts and programmers. He brought with him his Data Rock Software, which was re-branded and developed much further. The C-View software created by the team soon became known as a Seabed Data Management Package and grew rapidly from being a data acquisition system into a fully comprehensive set of software options which now include various dedicated seismic, processing, hydrographic, charting, reporting, mapping, mosaicking and imaging elements. The C-View software, which is WINDOWS-based, has been well proven on a variety of EGS (Asia) Ltd projects ranging from large-scale marine cable route corridor assessments to nearshore site surveys. The major benefits of

the software include multichannel recording, excellent visualisation with WINDOWS operation, format flexibility and the ability to rapidly produce quality charts.

C-Nav GcGPS System

C& C Technologies, based in Lafay-ette in the southern USA, has for sometime had a close relationship with EGS (Asia) Ltd, including close marine survey co-operation on a number of international telecommunication cable network projects. C&C offered EGS a dealership agreement for C-Nav in China and the Far East in the spring of 2002 and, more recently, both EGSi (the UK-based subsidiary of EGS (Asia) Ltd) and C-Products are the agents for promoting and selling C-Nav in the UK and Ireland. In fact, as described earlier, it was the offer of C-Nav by C&C that originally led to the naming of the C-Products range.

C-Nav is a new concept in real-time high accuracy GPS positioning. The NASA Jet Propulsion Laboratory (JPL) conducted the majority of research and development on this project in their pursuit of providing centimetre accuracy for spacecraft. C-Nav uses a global network of reference sites equipped with dual-frequency geodetic-quality GPS receivers for simultaneous tracking and monitoring of the entire GPS constellation.

These sites then transmit data to two independent Network Processing Hubs (NPH) in the States, which provide 100 per cent redundancy. The data they receive is used to calculate orbit and clock corrections for each satellite in the GPS constellation. The corrections are packaged and up-linked to the INMARSAT communication satellites for global broadcast to all C-Nav users in 'real time'. Each C-Nav receiver applies these broadcast corrections while comparing the L-1 and L-2 frequencies to eliminate ionospheric and troposphere effects. The end result is a true Global GPS service with real time decimetre-level accuracy.

The Future

C-Products are proving that, given the right combination of innovative and cost-effective products, a fledgling agency can rise and prove successful even during these relatively difficult times for the world offshore survey market. The company aims at consolidating its success by continued provision of user-friendly, high-performance systems to institutes and smaller survey operators who perhaps have fewer resources and tighter budgets for securing equipment. C-Products will be exhibiting along with the EGS (Asia) Group of companies at OCEANOLOGY this year and those people with an interest in the products range are cordially invited to visit the stand and take a trip on the demonstrator vessel on the Thames - the Wessex Explorer.