



ROCC: Oiling the Wheels of Industry in the Data Centre

Above: Bob Matthewson – data centre manager at Burmah-Castrol UK Limited, is seen outside the company's Swindon headquarters, with the sculptures of the Burmese legendary lion or 'Chinthe', the guardian of the temples.

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THE first thing that strikes you on arrival at the Burmah Oil Company's headquarters in Swindon are the two massive sculptures of the Burmese legendary lion or Chinthe, guardian of the temples, which stand at the front entrance. This is the only pair to be found outside Burma and serve as a constant

reminder of the founder, David Cargill, who first undertook exploration ventures during 1876 in Burma.

The Burmah Oil Company plc was officially incorporated during 1886. One hundred years later Burmah Oil has become an international enterprise with interests in lubricants and fuels, speciality chemicals and shipping.

During this time the group

has been responsible for events which have helped to shape history. It was Burmah Oil which first discovered oil in the Persian Gulf in 1908 – the birth of the Middle East oil industry. The group which grew out of this discovery – The Anglo-Persian Oil Company – later became British Petroleum. Burmah also played a major role in the development of Britain's North Sea, drilling for oil in what was then an unknown and untested sector. Expansion continued during the 1960s, a time of acquisition, when Burmah Oil bought Castrol – now one of the world leaders in the development, manufacture and marketing of lubricants.

The Arab-Israeli war of 1973 rocked the oil industry to the core, causing a fourfold price increase of crude oil in a short space of time. The bottom fell out of the market and the ensuing instability dogged the industry throughout the late 1970s. This came as a great shock to all those involved in the business and it was not until 1980 that a more optimistic phase was entered.

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Computer technology had a fundamental role to play in Burmah Oil's new plan to set up a group data centre, at the same time, to provide data processing for the whole of the Burmah Group, at the worldwide headquarters in Swindon.

It was an undertaking which required significant commitment and investment in the management as the data centre would have to provide support services to a group employing over 7000 people with a turnover of £1.5 billion. "The on-line system could handle the volume of information involved in this endeavour and, anyway, it just would not be practical to have highly-qualified staff such as accountants entering the data that would be a sheer waste of human resources," comments Bob Matthewson, the data centre manager.

Up until this point ICL data preparation equipment which carried out work for Burmah Castrol UK only was processed in an IBM 3031 mainframe computer, although the two systems were not linked in any way. The data centre, therefore, had the immediate problem of selecting a system to undertake the required data preparation tasks, but it was also anxious to ensure that it could anticipate and satisfy any future requirements. "We felt that this aspect was very important," said Matthewson. "Furthermore, the system would have to be compatible with any other computer system the company had, or intended to purchase at a later date."

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These days the data centre is supporting the whole of the Burmah Group – providing data processing for financial transactions, the payroll and pensions; Costain Construction and Halfords. At the heart of the system are two mainframe

computers: the IBM 3081 running under MVS/XA, which provides a general bureau service such as electronic mail and TSO (an on-line service), while its NAS8023 system deals with many of the financial packages running under VM/CMS. This approach allows the data centre to expand the computer functions and to carry out systems development work while minimising the impact on the customer.

"When it came to upgrading the data preparation side we considered three alternatives," explains Bob Matthewson. "We already had the ICL punch card system which had been upgraded to a key-to-disk system, so it made sense to look at further ICL systems; on the other hand there was the IBM Series 1 range to consider. And then there was ROCC. "I'd come across the ROCC equipment when I worked at Halfords," said Matthewson, "and I was impressed by its reliability – it certainly seemed capable," he added.

Burmah Oil found that ROCC suited their requirements perfectly: as Matthewson said – "it was capable of providing far more than just data entry, so it was ideal for

our planned expansion requirements and we purchased the ROCC 2820 system with 12 workstations 18 months ago."

Halfords belonged to the Burmah Oil Group until two years ago, when it was sold to Ward White as part of the rationalisation programme, but it has continued to use the data processing equipment at Swindon. The ROCC system at Halfords head office is used for data preparation where programming, development and technical support takes place. "It is more cost effective for them to use our data centre facility at Swindon for access to mainframe computers – a service we are happy to provide," added Bob Matthewson when he explained what was happening at Halfords. "It is a big job as the fully-automated warehouse is responsible for ensuring that Halford's chain of 360 shops are kept fully-stocked. The Halfords staff work a shift system using IBM 3270 series terminals, with 50 VDUs via kilostream links to provide this service."

Each shop has at least one delivery per week. Deliveries are worked on a rota basis so each day 70 shops submit



On view in the reception area at Burmah-Castrol UK Limited, Swindon, is a model of a Burmese drilling rig and plant, presented to the Institution of Petroleum Technologists by the executors of the late Sir Boverton Redwood, Bart, DSC, FRSE.

This model was made in Burma more than 50 years ago, and was acquired from the Institute of Petroleum by the Burmah Oil Company in 1971.

A ROCC 2820 system is installed at the Swindon headquarters of Burmah-Castrol UK Limited. Eight workstations are located in the data processing section, where general and purchase ledgers account for 80 per cent of the data preparation workload.

The supervisor for this section is Pat Glastonbury, pictured standing.



their orders for stock and each day deliveries are made to 70 shops in total. The 'pull' list is fed into a minicomputer at the warehouse and driverless trucks travel up and down the bays stopping according to the program when a robotic arm picks the requisite items from the shelves. The route of each delivery lorry is known so that the goods can be packed in order of delivery on a first in/last out basis.

The ROCC 2820 system at Swindon is connected to the IBM mainframe which allows for the rapid transfer of data entries to take place. This occurs immediately each batch is completed so there is a steady stream of work ready to be data processed. The data preparation staff can telephone

customers direct to discuss any illegible items, which not only helps the speed of the operation, but also reduces key mistakes. Eight workstations are located in the data processing section, where general and purchase ledgers account for 80 per cent of the data preparation workload. Another four are located in production control. It is clear that, by developing a 'group management' policy, an even distribution of work could be achieved as operators could help out where required according to busy periods.

A measure of the success of this approach, and of the competence of the data preparation staff is demonstrated by the fact that, at the end of the last financial

year, the purchase ledger and bank reconciliation were being processed on the same day. Out of 11,000 purchase ledger documents punched, there were only four key errors, and zero errors out of 3000 bank documents.

The ROCC equipment is programmed to help check the data entries being processed, providing an invaluable facility.

As Bob Matthewson pointed out: "these systems are a tremendously powerful management tool but, at the end of the day, a company's most valuable asset is its people. ROCC systems are designed to be user-friendly and require little training – they positively encourage our data preparation operators to develop their capabilities."

The busy production department at Burmah-Castrol UK Limited where four ROCC workstations are installed.

Beverley Loveday – production control supervisor is seen attending to a data query on a customer file.

