routines and the enquiry facilities and reports that these lead to. We have taken the Dragon's program as an example and have illustrated the various files in our diagram. The three important elements are: the transaction input routines, the transaction details and the stock item enquiry file.

The transaction input displays all have the same layout in the Dragon system. The transaction types are more or less self explanatory. We will concentrate for the moment on sales (i.e. on movements out of the stock register). But first it is worth noting that all business programs are designed to be as 'friendly' as possible, and will prompt the user to enter all the necessary information. This leads to two different programming requirements that have to be met if the system is to be successful.

On the one hand the program has to recognise certain data fields and perform arithmetical or other operations on the data. On the other hand the program has to guide the user and recognise inappropriately entered data. In other words, it has to perform checks on the data entered.

Once the user has entered the data, the reference number to identify the authority for the entries (the same number would be marked on the sales invoices from which these entries would be generated), and the item number, the computer will read the stock file to see if such an item exists.

If it finds the number, it will automatically display the description allocated to that item number. This acts as a visual check for the user, who can then enter the quantity sold.

From this information, the computer is able to extract a large number of enquiries and reports. For example, one of the options on the main menu, FILE ENQUIRIES, has a sub-menu consisting of seven options covering stock items, transactions and product groups. These are: STOCK DETAILS, SLOW MOVING ITEMS, RE-ORDER DETAILS, TRANSACTIONS (BY STOCK ITEMS), TRANSACTIONS (BY TRANSACTION TYPE), PRODUCT GROUP DETAILS and STOCKHOLDING.

The sales transactions affect all these reports. If a re-order report is requested, for example, the program will check to see if the stock sold on these two items has taken the quantity of stock in hand below the specified re-order level.

Every detail entered on the sales transaction display is relevant and is used in some way. The Dragon program enquiry display provides a clear illustration of how much management information can be derived from those sales transactions. The usage history gives an immediate indication of the speed and volume of commodities moved over the year, the average usage period consolidates this, and the last issue date and reference are also displayed.

Authorised Entry
The stock control program accepts transaction information, and checks the user's authority to enter information and that the transactions are valid. The stock file, which contains the individual stock item records, is on line during this process, and is updated by it. The program also contains a database module, allowing the user to inspect the stock control file and create reports on various aspects of the inventory