DANGERS IN THE USE OF COMPUTER SYSTEMS

When a computer system is planned, there are a number of pitfalls to be avoided. These can be summarized as follows. (This note is based on the article by Fiocck, Jr., L.R. "Seven Deadly Dangers in EDP" HBR May-June 1962).

1. Incorrect Equipment
   Items of equipment may be acquired which, although excellent for certain tasks, do not suit the current application. This may be because they are not fully used or because they do not mesh with other items of equipment or manual procedures.

2. Ignorance of Procedures
   One of the commonest methods by which managers err in switching to computer methods is by failing to realize the inadequacies of their present methods. Most managers do not know how much their intended policies are distorted at lower levels of the organization, in order to fit expediencies or available procedures. Thorough analysis of current procedures is needed before it can be certain that the computer assisted procedures will be better than the existing methods.

   Computers can either be used for solving a number of problems independently, e.g. order processing, research, etc., or else the different data processing procedures can be supervised by one group or person. This gives a more disciplined enforcement of policy and procedure. Only centralized management policy direction can set the goals to be attained by a particular organization. This fundamental often eludes management long after a system is in operation.

4. Staff Resistance
   Every aspect of an effective system appears as an intrusion to staff members. Computer programming demands precise, written definitions of all basic policy and clerical instructions, many of which were previously verbal. Much subtle verbal decision making takes place at the clerical level. Staff fear that they are losing control of their areas of responsibility.

5. Inadequate Staff
   Great attention has to be given to ensuring that staff can handle the data processing problems.

6. Biased Evaluation prior to Installation of the System
   Cost savings, efficiency of the equipment, rental price, etc. do not give a valid indication of the utility of the system. The only valid measure of success is the effect on the performance of the organization as a whole.