

W.M.B.T.S. Vincent Drive H.Q.

### Background

During the 1970 and early 80s the W.M.B.T.S. was usually at the top of the production league table for both quality and quantity of plasma supplied to the Blood Products Laboratory and usually at the bottom of the costings table when calculated in terms of productivity. This was largely accomplished by Dr. Bird and myself following a policy of maximum automation of routine tasks together with a fairly tight control of staff expansion and by costing new projects. A corollary of this policy of automation was the fact that we made it clear to the staff that we expected staff mobility and redeployment to other tasks and co-operation in tackling the main routine functions of blood collection and processing. We were successful in our aims <sup>as shown by the</sup> and a virtual absence of industrial problems. This entailed hard work by management in organising staff meetings and sorting our personal problems at an early stage.

### Senior Staff Redeployment

The C.U.P.I.D. (Components Usage Production and Distribution) ~~system~~ <sup>software</sup> was introduced in 81-82 <sup>replacing</sup> much of the decision ~~taking~~ (stamping) that had previously been carried out by graduate and senior M.L.S.O. staff. ~~The~~ The routine sorting and authentication for issue was taken over by the computer with laboratory assistants, staff in the donor serology laboratory and medical staff (myself) making decisions and sorting donations. I had hoped and intended that the senior staff thus released would help in other

routine areas such as blood collection, donor serology, components production i.e. active production functions. Unfortunately this was not to be the case - direction was taken away from me and these staff and their successors have been placed in sections such as research, quality control, reagent preparation, special investigation department, accountancy, tissue typing <sup>and</sup> pheresis. Whilst ~~these~~ <sup>these</sup> functions ~~are desirable,~~ <sup>are desirable,</sup> ~~are necessary,~~ many were not adequately funded and have proved to be very expensive with <sup>their own</sup> separate budgets. The most serious impact of these changes is that <sup>much of the routine laboratory and donor session work has</sup> ~~they have~~ virtually stripped <sup>been</sup> ~~much of the routine work of the organisation~~ of qualified supervision. ~~and~~ The research work does not have direct practical application in furthering the efficiency or safety of production processes. *In my opinion all senior staff in these areas should be expected to contribute at least 50% of their time to one of the routine sections. Some of the graduates do this already, but there are also some who make little or no contribution to the daily routine. This area needs individual assessment discussion and direction.*

Equipment Replacement

Another serious development has been the embargo on replacement of equipment over the last three years. We had scheduled an upgrade of the I.T.L. Computer Processor three years ago aimed at providing fault tolerant, resilient equipment which would have enabled us to move onto a more secure position and enable us to construct a donor/patient data base. Distressingly this application was cancelled three years ago and again two years ago without consultation or discussion. The third application is now the subject of a review which further delays any plans. Meanwhile we are becoming dangerously vulnerable

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to equipment failure or loss of our highly skilled and specialised management services staff. Interruption of this machinery and loss of key staff could bring component production to a halt.

Blood grouping Machines and other Equipment to breakdown,

Another set of equipment ~~which is~~ vulnerable/are the blood grouping machines. The Groupamatic 360 which carries the bulk of the workload is approaching nine years old and the breakdowns of this machine are <sup>becoming</sup> increasingly frequent. In spite of my repeated requests the other two machines have not been interfaced into the main computer and this means that these machines cannot transmit the results and at the present time cannot undertake the routine workload of 1,600 specimens per day. Dr. Graham Morley commenced this task several years ago but abandoned it when working on the accountancy of the B.T.S. Little thought has been given to this problem which obviously is the heart of all the routine functions of the W.M.B.T.S. It is clear that we do not now have skilled staff available to maintain <sup>manual</sup> functions should either the computer or the blood grouping machines fail, the redistribution of staff to other tasks makes this obvious and there have been enough short term failures in the last three years to point up the implications of failure period of several days or longer. Ageing equipment also means increased maintenance charges and eventually refusal to maintain.

There are other areas in which non-replacement of equipment will begin to have effects. The transport fleet has an increasing age and this will in time mean more failures and a corresponding increase in maintenance costs. A similar situation exists with the replacement of smaller equipment, bleep systems etc.

### Blood Bags

Plastic blood bags have been in use at the W.M.B.T.S. since 1968 and it was always our policy to keep two suppliers in order that we would have both back-up supplies and price competition. Over the last few years we have drifted into the hands of a monopoly supplier and I am convinced that this is a contributory factor to the huge increase in costs. This problem has been ~~exacerbated~~ <sup>exacerbated</sup> by the refusal of the Blood Products Laboratory to accept any other manufacturer's single plasma pack. At the present juncture we are completely at the mercy of Travenol and have to pay whatever is their asking price. Certainly the SAGM system is an excellent development from the technical viewpoint but it is not as cost effective as has been claimed, particularly when we are tied to the Travenol cone type pack.

### Antenatal Testing

A primary reason for development of the centralised antenatal system, which is almost unique to the W.M. and the Trent (Sheffield) B.T.S.s, is the desire to maintain uniform laboratory standards in the antenatal work, to attain the advantages of mass handling as an economical process, ~~and~~ to detect suitable future blood

<sup>ensure</sup> donors and <sup>adequate</sup> supplies of Anti D and other blood grouping reagents. Although ~~delayed~~ <sup>has been delayed</sup> implementation <sup>to</sup> I am sure that the new computer system will further these aims but it will be necessary to put considerable human effort in <sup>to</sup> selecting and pheresing the donors of the rare and very valuable plasma containing antibodies. Although there are occasional moves from one or two of the larger district hospitals aimed at decentralisation, the need for the economies of the large scale testing have been paramount up to the present time. <sup>As</sup> Additional reason~~s~~ for the centralised service is the need for virological antenatal surveillance. This has included testing for hepatitis B which has a high incidence in the immigrant groups and rubella immunity. A third group of virus particles with implication for pregnancy are the H.I. Viruses and it is certain that within the next year or so, a demand for screening of patients in early pregnancy will arise both from the Consultant Obstetricians and the laboratory staffs. The aims of these requests will be for the protection of both the patients and staff.