1. Introduction

The South Western Regional Transfusion Centre has its Headquarters at Bristol on the Southmead Hospital site. This Sub-centre and Blood Bank is at Plymouth General Hospital, Freedom Fields, Plymouth.

This Sub-centre works closely with the Bristol Regional Centre and has a direct computer terminal link.

There are two donor collection teams working from Plymouth, but their work is controlled and scheduled from the Bristol Regional Transfusion Centre. Whereas there is a Blood Bank here, blood donations are not typed and tested for hepatitis, AIDS or CMV at this Centre. Such work is carried out at Bristol.

The Sub-centre comprises of a number of portacabins leading into the main building and stores. Processing of blood products and storage is in the main building.

The haemotology unit is split between this site and the Derrisford Hospital, and managerial staff therefore operate from both sites.

2. Staff*

Dr Prentice	-	Medical Director and Consultant
Mr I Wiseman	-	SCMLSO
Mr S Davis	-	SMLSO - In charge of Blood Products
Mrs Warren	-	CMLSO - In charge of Blood Bank.

Mr Wiseman was at the Devonport site during this visit.

3. List of Donations and Products made (1986)

i.	Total number of Donations	20,500
ii.	Concentrated Red Blood Cells	4,300
iii.	Platelets	5,100
iv.	FFP for clinical use	450 Units
v.	FFP for Fractionation	14,000 packs of approximately 310 mls
vi.	"Baby bags"	4,000 packs of approximately 200 mls 400 + packs of 50 mls

4.1 Inspection of Production Unit and Procedures

Production of blood products is carried out by Mr Davis in one main room of the old buildings. This room has a small office space overlooking the main room.

The equipment in the manufacturing room consists essentially of a number of Travenol Units for expressing plasma once it has been spun down, centrifuges for spinning down, a laminar air flow cabinet for performing "clean" work, a blast freezer, a platelet incubator and various benches to perform the work on.

Mr Davis has three part-time operators working for him. These have recently joined him and he has had to train them up specifically for this work. The operators have no previous experience whatsoever of this type of work.

* ie those concerned with the operations covered.

Due to the loss of the previous two operators working for Mr Davis, the schedule of production was severely reduced which has necessitated buying in of some product.

Mr I Wiseman the Senior Chief Medical Laboratory Scienitific Officer, works mostly in the Derrisford Hospital in Plymouth. It is possible that a new location of the complete facilities in Derrisford will occur in 1988. (See comments below).

Frozen Red Blood Cells have been made once at this unit. This was done in the case of a very rare blood group for a pregnant woman. There was no other donor in the UK who could supply the necessary blood for this very rare group.

It should be pointed out that this work is essentially of a clinical nature and is not therefore properly classified as a production operation as defined by HSC(IS)144.

Platelet production is continuing to expand. This is normally done in the afternoon in conjunction with the production of Fresh Frozen Plasma. Plasma is also produced here in the wedge (IPP) pack for Elstree. Last year approaching 15,000 packs of plasma of approximately 310 mls were produced using the SAG mannitol pack. As mentioned above due to staff shortage production was curtailed.

Fresh Frozen Plasma can also be produced as a by-product when platelets are made. Any extra requirement for Fresh Frozen Plasma is supplied from Bristol.

A new introduction is "baby bags". These comprise of 50 mls of product which is taken off into a satellite bag. The product has a five day expiry period and was started in 1986. Approaching 400 have been made in a ten month period and requirements for this product are expected to expand.

The main manufacturing area was reasonably tidy. A laminar air flow unit has a solid bench and this was the one part of the room which was untidy and required some attention. Materials were present which did not need to be, and considering the nature of the aseptic manipulations that have to be carried out under this bench, very high standards are necessary.

The design ie a laminar air flow unit inside an ordinary room is not totally acceptable for the aseptic operations to be carried out here. The main unit in Bristol has an aseptic suite to do such operations.

A new Cryo King blast freezer has recently been installed. The process comprises of freezing down for three hours at - 60°C before then being moved into the - 40°C cabinet.

The recorder chart on one of the freezer cabinets did not record below - 40°C yet the temperature was slightly below this figure ie - 43°C.

A number of sterile transfer bottles used in the blood transfusion service were noted, supplied by Manor Park from Bristol and these were dusty and dirty. There are also some old wooden crates which are redundant and serving no useful purpose.

Examination of the Standard Operating Procedures used by Mr Davis showed that some of these require updating and/or retyping. There was in fact no Standard Operating Procedure present for the freezing down of red blood cells. However, it should be noted in this context that the operations carried out were essentially a "one off" operation of a clinical nature.

Mr Davis undertook to obtain the Standard Operating Procedure which Bristol has, and which defines the methodology used.

The computer system operated is essentially the same as that which has previously been checked at the Bristol Transfusion Centre.

4.2 Quality Control

Mr Davis carries out any necessary testing and quality control on site. There is a small manual giving the tests and the methodology utilised on site. A copy of this is on file.

The major point arising in the examination of the methodology and the results, was that when Mr Davis is absent from the unit eg on holiday, quality control is not performed. Quality control methods have been built up in conjunction with Mr N Tanby of the Bristol unit.

Testing methodology utilised here is therefore very similar to the Bristol methodology which has been previously evaluated and will not therefore be commented upon separately here. Details of the methods are on file.

4.3 Blood Bank and Storage

The Blood Bank and storage operations are under the control of Mrs Warren, the Chief Medical Laboratory Scientific Officer (CMLSO).

Part of the area in which the Blood Bank is situated has been repainted in 1986. However, the general standard of the facility is extremely poor. Bench freezers are situated back to back, with a gap between them, down which was a surprising amount of debris. There are also a number of cabinets and cupboards which are extremely dusty and untidy. An old desk in the area comprises essentially of boards on supports. Matched blood is stored in one of the cold rooms ready for issue. The coldrooms used were kept in a reasonable condition inside. Coldroom 2 is used for the Plymouth Laboratory stock and included inside was Human Albumin supplied from Elstree. There is no necessity to store Human Albumin inside a refrigerator and this material would be better stored elsewhere.

A new Gammacel 1000 has been installed for the irradiation of blood products, to kill of white blood cells.

There is a storage corridor leading out of the main room which was in an extremely dirty and grimy condition. On one side of the corridor is a store of materials which included Fibrinogen which expired in July 1976. There is a "Major Disaster Unit" store which comprised of a number of outdated dirty materials half covered by a plastic sheet. If this unit is no longer actually used as a Major Disaster store, then it should be immediately removed. If, however, this is indeed material to be used for a major disaster, the matter should be remedied immediately.

A cupboard opposite, on the opposite wall, was literally filthy inside with debris, old papers etc.