

Engineering and Maintenance Unit

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The Engineering and Maintenance Unit has 25 staff of all grades and experience and offers a technical design and maintenance service throughout the Institute. The main Institute buildings were built in the early eighties and before, therefore preservation of Institute assets is of paramount importance and careful, skilled inspections are carried out frequently. Corrective maintenance work takes place to ensure the expected performance and life of equipment, vehicle, plant or building is achieved.



The Unit is divided into sections that specialise in a variety of engineering disciplines such as electrical, electronic, refrigeration, heating and mechanical engineering. In addition, it provides an engineering design and maintenance service to cover scientific and ancillary equipment, and building services, including heating, ventilation and air conditioning. There is also a farm workshop section providing maintenance facilities for a substantial fleet of tractors and agricultural machinery. The workshops are generally well equipped to deal with the maintenance tasks assigned to them. The Unit also provides a general stores facility along with the cleaning and security service.

The rapidly changing and wide ranging scientific aims of the Institute ensure that laboratory alterations will always be a part of the Engineering Unit's work. With this in mind, the specialist services to laboratories must be as flexible and adaptable as possible. Over the last few years, systems have been introduced which allow the Unit to respond quickly and efficiently when changes are necessary, thus reducing laboratory disruption to a minimum. With planning, scientists can confidently bring new and diverse projects to the Institute knowing that a team is on hand to ensure the facilities will meet their requirements.

During 2000, as in previous years, many areas within the Institute were refurbished or enhanced, including laboratories in Buildings B, D, E, V and AF. Much of this work was carried out by our own staff and has resulted in high quality facilities being available in each of these areas.

An important part of the refurbishment is the need to comply with the increasingly complex Health & Safety legislation and the Unit strives to ensure that the Institute is able to provide a safe and effective working environment. Unit staff ensure that they are conversant with changes in legislation and approved working practices by attending specific courses and seminars, as well as working closely with suppliers. This extends to the training of staff in safe working practices, particularly when using hazardous chemicals and equipment.

One of the main tasks undertaken during the latter part of 2000 was the installation of a new data and voice cabling system capable of meeting Category 6 standards and the needs of the Institute into the foreseeable future.

A major part of the contract involved installing suitable containment to cope with the vastly increased number of cables and this required staff to be decanted whilst the work was being carried out. To minimise disruption, the contract was divided into 11 sections, each section being completed within two weeks, and staff moving back prior to the commencement of the next section. The most pleasing aspect of the project was the high level of co-operation between staff, engineering personnel and the contractor, which helped to make what was a difficult and daunting installation much easier than anticipated. The resultant benefits to network users and system administrators are faster access with more reliable and flexible connections.

The Unit is also involved in the installation and maintenance of increasingly sophisticated and expensive research equipment and the Unit staff have responded by learning and developing new skills and abilities in response to the ever-increasing demands.

The Unit is responsible for negotiating utility contracts with electricity, gas, water and telephone companies and makes use of the appropriate consultancies to ensure that the most efficient tariff is used.