

CONFIDENTIAL

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Future Programme of the Research Group

The problem must be attacked in two ways simultaneously. It is quite inadequate to limit the process to considering the scientific policy of the divisions, that is in trying to get rid of certain projects or activities to other establishments or to industry or stopping them altogether. There is a very clear contribution which the Directorate can make to revitalising A.E.R.E. and the Group generally.

It seems to me essentially obvious that something must be done about administrative and engineering policy. Both of these seem to have become aims in themselves, and one gets the feeling that if all the scientific staff disappeared the establishment would still have a very considerable size.

An essential feature of my philosophy would be to make all establishments in the sphere of influence of the Research Group to a marked degree self supporting, in administration, services provided by administration, engineering and services, and in associated technology. The link between establishments should then be a scientific and technical one not administrative and engineering. Each establishment would then accept its full share of responsibility in setting up a balanced community, and the central establishment would not become choked out of scientific existence. This scheme should apply to Winfrith, Grove, Amersham, any new CTR establishment (although I still feel that room could be made at Harwell) and also to the Rutherford Laboratory of the National Institute. I must expand on the latter since I am particularly affected. It is in the interest of the National Institute to retain a scientific and technological link with A.E.R.E., and as for the point of view of A.E.R.E. it should surely be that having played a very major role in setting up this new establishment it should reap the maximum scientific and technological benefit and not give up all these advantages in a desperate struggle to shed the load. It is not at all encouraging to find that A.E.R.E. is heading for a situation where it will give away its scientific and engineering staff willy-nilly, in order in the end to be in a position to give support to the National Institute in cleaners, canteen staff, transport and so on to the tune of 200 people.

With this general philosophy in mind the detail can be considered under three headings, administrative policy, engineering policy, scientific and technological policy.

I Administrative Policy

I am not one of the rebels who would wish to return to complete anarchy in such vital spheres as finance, but much can be done to streamline our administrative policy. At present the administration looks after far too many things which it could well get rid of. It is much diluted with low grade effort, and it not only makes its own job difficult but also detracts from the effort which scientific staff should give to their real purpose in the establishment.

The following should be handed over to private enterprise:-

- 1) Canteens, and all other catering.
- 2) Non-Active cleaning.
- 3) Non-Active laundry.
- 4) Non-Active disposal.
- 5) All transport (including cars and buses).
- 6) All building maintenance.
- 7) Grounds department.
- 8) Unclassified publishing.
- 9) Unclassified photography.

Effort could be saved by other means such as making more use of casual purchase rather than contracts, selling houses to tenants and a host of other ways.

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Having done all these things the dilution of labour might be avoidable. We should certainly return to a more "Scientific Administration", with more professional staff who can think for themselves without the aid of the administrative machine.

Further decentralisation could well be a decided advantage. We have many administrative tasks to do out in the Divisions which have to be shuttled backwards and forwards between the Divisions and Administration in a most time consuming and inefficient manner.

It would certainly be worthwhile employing an "efficiency expert" to bring these things into effect. He should be skilled in exposing the obvious fallacies in trying to save money by instituting systems and controls which when viewed in true economic light are even more expensive. He might be paid on a results basis or a fixed fee to encourage speedy action.

II Engineering Policy

I am a strong advocate of side by side working between scientific staff and engineers, and at working level will accept an equal partnership. I am strongly opposed to the "tail wagging the dog" situation which is very nearly if not already upon us. The whole approach of engineers as policy makers is entirely wrong for a research establishment. They think in terms of the family tree and the well defined responsibilities, and they try to direct instead of being directed. If the control of engineers does not revert to the Scientific Staff then the best that can happen to A.E.R.E. is that it becomes an engineering research and development establishment, it will certainly not be a scientific establishment.

Some positive steps which can be taken are as follows:-

- 1) Engineers Engineers should as far as possible be sent out to work with the Scientific Staff under the direction of the Scientific Project Leaders.
- 2) Design Designers should also be dealt with in the same way. Within the project they could have their family tree connections with the appropriate engineers but interaction with the Scientific Staff should be freely exercised at all levels.

More use should be made of specialised design services and drawing offices in industry.

- 3) Manufacture The emphasis should be placed on local support workshops and the development workshop, the rest should be farmed out to industry on running contracts and so on.

Private enterprise might even be encouraged (on a competitive basis) to set up manufacturing facilities right outside or even inside Harwell.

III Scientific and Technological Policy

Each Division Head clearly has a great deal of soul searching to do, but the task could be made easier by a lead from the Directorate.

I still maintain that the central theme of the Research Group is physics whilst recognising that other disciplines have very vital contributions to make. I cannot however see why the very centre of the Research Group should carry vast quantities of effort which is more logically the province of the Industrial Group if not of Industry. I have the Chemical Engineering Division

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in mind. It is extremely difficult for the individual Division Head to see his own division in an unbiased fashion, and since Harwell is so great he has a restricted field of knowledge outside his own division. I find that there are few specific examples on which I feel competent to judge, but surely in the Directorate or Scientific Administration there are people with a more overall view of affairs which can at least lead them to make provocative suggestions.

As far as my own division is concerned and its relationship to the National Institute I have written separately to Mr. Willson as requested in his note to Division Heads. I am convinced (although maybe biased) that all the things I want to do are in the best interests of the Research Group, but this is not the immediate topic of discussion.

Outside my Division I feel reasonably confident in making the following suggestions.

- 1) E.M. plant - to Industry.
- 2) H.T. set - perhaps to a University.
- 3) Reactor facilities are so numerous do we really need GLEEP?
- 4) The Harwell Cyclotron should be transferred to the National Institute.
- 5) The Tandem Generator should be transferred to the National Institute.
- 6) The Group of Electronics Division concerned with electronics for accelerators should be integrated with the National Institute.
- 7) All computer services should be rented or use should be made of a computer in the National Institute.

I must emphasise that I only make suggestions 4) to 7) in the light of my general remarks made earlier that the scientific link between the Rutherford Laboratory and A.E.R.E. should be very strong. So strong in fact that for these facilities A.E.R.E. could be the major user if at all necessary or desirable.

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31st March, 1959.

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