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RGP(59) 2

WORKING PARTY ON FUTURE RESEARCH GROUP POLICY

Suggestions for stopping or moving work

At the working party meeting on March 17th, it was agreed that members would send to the Secretary a list of projects which they thought could be stopped or moved away from the Research Group, and that these lists would be assembled into a paper circulated by the Secretary.

Replies have been received from members, and in all cases these contained a lot of comment in addition to a list. The material has therefore been assembled in three parts:-

1. A list of projects which it is already agreed should be stopped.

2. A list of additional suggestions for stopping, transferring or curtailing projects.

3. A selection of comments directly related to the exercise. More general comments on Group administration have been omitted.

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2nd April, 1959.

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ANNEX 1. Work already due to stop

Project	Total staff involved	
1.20	28	Mineral dressing
4.15	33	Graphite technology
7.1	3	Balloon flights
7.3	15	Music
8.1	2	Photographic plate group
	5	Beta spectroscopy lab.
8.9	2	Neutron spectrometer
8.14	5	Extensive air showers
Total	105	

ANNEX 2. New suggestions for stopping, reducing or off-loading work

Project	Staff involved		Remarks
1.10	64	Raw materials	may be considerable reduction.
1.20	11	Geological survey instruments	Put to industry ✓ Is offshore
1.31	8	Aqueous processing	To R. & D.B. withdrawn
3.1	21	Gleep (proposal to refuel)	proposed by them committee to drop. ✓ (probably committed to keep it)
4.1	15	Aqueous slurry technology	Rely more on international collaboration
4.2	9	Liquid metal systems query need for this work going to be stopped	Suitable for University ✓
4.4	33	OLMR systems Organic Liquid Moderated (?) Reactor	Rely more on international collaboration ✓ should be closed down
4.11	13	E.M. plant	an list for ultimate removal?
6.4	110	T.I.G.	should stay Falls short of suggested criteria for retention in R.G. (See note 3.1)
6.5	290	Isotope production & marketing	Separate from R.G.
8	257	Machine development (PLA, cyclotron, tandem generator and gevatron)	Effort should be contracted as jobs are completed
8.25	~~20~~ 1	High voltage generator	To a University? no
8.6	34	Cyclotron	To National Institute unlikely
8.7	9	Chemical Engineering research	Put to contract no. needed.
8.21	4	Mass spectrometer R. & D.	To industry or R.& D.B. no
8.22	20	Tandem generator	To National Institute no
9.3	-	Canteens & catering operation by staff.	Put to contract
	only 7 people	Hostel management	
		Housing management	
		Housing repairs & maintenance already out.	
		Grounds department 75 → 60 now	
		Office cleaning	
60-70% of these are already		All transport operations (passenger - emerging)	
	✓	Non-active laundry	
	✓	Window cleaning	
	✗	Fire service (to County)	
		Reproduction of unclassified documents	all out except urgent.
being done for slide making W/C prints		Unclassified photography	
9.4	-	Engineering development	Put to contract
		Direct design & construction of large facilities	
		Building maintenance	
9.6	15	Health instruments	Put to industry
9.9	19	Computing services	Rent from industry

ANNEX 3. Selection of Comments

3.1 The qualifications for retention of work within the Research Group should be

(a) Originality
(b) Scientific advance and prestige
(c) Exclusiveness of facilities
(d) Immediacy of demand (in supporting work)

3.2 The main cause for dissatisfaction among physicists is the bad ratio of machine builders to machine users in the Basic Physics heading. The number of people actually doing basic physics is probably not much above 100 - 5% of total professional staff.

3.3 It seems the wrong policy to keep all the project work attached to the Research Group's facilities. Industry should be encouraged to obtain their own reactors and let us rent space for loops! This would spread reactor experience in the industrial world quickly and increase their competitive power and assist us in obtaining information without increasing the sites any further. It may be necessary to have industrial teams in the Research Group for the short term tasks, but in the long run Industry should stand on its own feet; this is usual in the U.S.

3.4 It is not a good plan to hand out cash to Universities, in the hope that they solve our problems in their laboratories. The job of the Universities concerns pure and unbiased research. Project work destroys the spirit, which is so difficult to create. They should not become Harwell outstations.

3.5 The starting up of nuclear energy departments should be much more vigorously encouraged to help us in selected fields of applied science, such as radiation studies in chemistry and solids, metallurgical problems, chemical engineering questions, reactor physics assemblies, etc. Here, in contrast to the ivy-towered University departments, we should place contracts and assist by seconding some of our own experienced staff to get things moving. Without the latter, technical Universities and Institutes will never start with the momentum necessary to produce results in a finite time.

A particularly suitable field is the accelerator field, where our accelerator teams should work on the spot with benefit to both parties. This would, in future, reduce the load at A.E.R.E. considerably.

In the U.S. I believe no A.E.C. laboratory has ever built equipment for Universities; but money is provided. The Universities should learn about the way in which large projects are handled.

3.6 One might hope that Europe and the U.S. could supply much more of the basic information than we have obtained up till now. Not a large administration is required for this, but technically well oriented staff.

3.7 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.

3.8 All establishments in the Research Group should be to a marked degree self supporting in administration, services provided by administration, engineering and services, and in associated technology.

3.9 Having played a very major role in setting up the National Institute, A.E.R.E. 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 to give support to the National Institute in cleaners, canteen staff, transport and so on to the tune of 200 people.

3.10 At present the administration looks after too many things which it could 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.

Many services should be put out to contract (see 9.3 in Table 2). 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.

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.

3.11 How much semi-routine development and testing now goes on at Harwell (e.g. of fuel elements, cans, etc., calibration of sources and health monitors etc., routine examination of ores etc.)? This work, if it exists, does not help to preserve the research atmosphere of the group and where possible should be contracted out to industry.

3.12 Consideration might be given to transferring certain central administrative services to London. Much more was done in London during the M.O.S. days, and not too badly.

3.13 The Authority, as a public organisation spending very large sums of taxpayers' money, must be above reasonable reproach. This involves not only high standards of administrative and technical integrity, but also a reasonable amount of demonstrable short-range benefit to the nation as well as more fundamental work.

3.14 The philosophy of an overall staff limitation is reasonable, and in fact essential to sensible future planning. It is the most effective spur to sensible management and planning if it is not abused.

3.15 The administrative and financial procedures of the Group - and indeed of the Authority - must be regularly and positively reviewed in relation to their manpower requirements, in the same way as the scientific and technical programme. A competent O. & M. team is essential.