

## Closing Down an Industrial Research Laboratory

SIR,—It was until recently assumed that British industry suffered from a chronic shortage of qualified scientists and engineers (QSEs). While the need may remain, demand is now weak and highly selective. A pointed demonstration of the current situation has been given to those of us whose jobs and laboratories have been "rationalized" out of existence during recent company mergers and takeovers.

The following is a brief description of what happened during the dissolution of a particular industrial R and D establishment, where the writer worked. It is hoped that worthwhile lessons can be drawn by other QSEs, managements and the professional institutions. Few of us doubt the necessity of concentrating expensive R and D facilities, but the means of closing used for modern R and D establishments need careful consideration. Not surprisingly, there are more accounts in the literature of the inauguration of new research establishments than of the converse process.

A significant difference from the closure of factories is that the QSEs affected are well educated, well informed professionals, trained to question previous authority and unlikely to accept arbitrary instructions without convincing explanation. This does not prevent the company management achieving its objective, but the intelligence and skill required may be underestimated by administrators used to financial planning.

Chronologically, the first symptom of trouble will be widespread rumours. These lead to recruiting difficulties and precipitate resignations. A surprising number of scientists, however, may remain during this phase. A variety of motives can be assumed, apart from inertia. Not least is dedication to the task in hand and an enthusiastic team.

The eventual official announcement of impending closure is tersely worded to minimize controversy. Those unfortunates from head office charged with reading it to the assembled laboratory staff seem to prefer an afternoon delivery. In this way, embarrassing lunchtime hospitality is avoided! All organized research immediately ceases. However, much remains to be done before the site can be cleared and sold or re-used. In the writer's case, three months' warning was given. From some points of view, longer would be preferred. It takes time to transfer to another location projects, information, research teams and equipment which the company wishes to retain. Those QSEs, technicians and supporting staff declared redundant must find new work. This entails interviews on and off site with recruiting teams from other employers and Ministry of Labour staff.

A few dedicated individuals may complete projects for their own satisfaction or out of a sense of moral obligation to colleagues. Other staff occupy the time between interviews in several ways, depending on their temperament and status. Obviously, much time is spent in discussing events and their possible outcome. A good deal of mutual assistance in job hunting and selection occurs. New and marketable skills are passed on. In a typical laboratory, there are usually facilities for handicrafts. These are utilized in less and less clandestine fashion for private projects. Examples are metal work, carpentry, car and radio repairs, photography.

Certain services and especially heat, light, food, drink and cleaning must be provided to the end. Local management is faced with a difficult task, for its authority has been abrogated, yet official duties need to be organized and administered.

A solution sometimes adopted is to import a "care-taking" administrator to preside over the orderly conduct of affairs. This is not a popular task and it may not be possible to find an individual with the necessary combination of local knowledge, tact and firmness. Otherwise, a very heavy burden falls on those charged with the

administration of the redundancy terms. The man or woman concerned has to understand and apply the complex legal procedures laid down by the state in accordance with the company's interpretation. Union representatives, if any, and the inevitable "sea-lawyers" on the staff will detect the slightest anomaly in decisions regarding terminal payment, leave entitlement and notice period. All this occurs while the administrator is seeking a new post for himself. This frequently leads to a conflict of interest.

The pattern of demand for QSEs and team leaders from the writer's laboratory was somewhat unexpected. With regard to specialization, electronic and mechanical engineers and mathematicians were in great demand. Chemists and metallurgists found things much more difficult. Physicists were intermediate.

Laboratory assistants readily found posts regardless of age, qualifications, experience or ability. Senior technicians and technologists without good qualifications were much more difficult to place. Young, recently qualified graduates in all disciplines found new work readily. QSEs over 30 were not in great demand. The older they were, the more difficulty they experienced. Team leaders were often told they were "too senior" for vacancies they could readily fill. People in the 40-50 age groups faced severe problems, regardless of background. They were also penalized over pension transfer rights.

It should, however, be pointed out that only a few of the redundant QSEs remained unemployed one month after dismissal. The majority of those in employment have increased their salaries, albeit after some relocation expenses.

A rough breakdown of the new employment of the QSEs is as follows. Naturally, the sample is too small to be statistically significant.

Nature of new employment	Private industry	Transfer within company	Emigration to USA	Civil service and nationalized industries	Higher education	Premature retirement
% of QSEs moving to the sector indicated	60	4	4	14	14	4

The loss to industry may well be worse than appears here, if individual ability is assessed.

When moving projects, it is best to try to move the nucleus of the team with the project. However, any attempt to select an elite from a close-knit team creates dissension. Financial inducements are limited by the desire to avoid disturbing salary structures at the new location. Rehousing is a problem, particularly for young people living in rented accommodation. The lump sums provided under the Redundancy Payments Act are a capital disincentive to remain with the present employer.

Equipment transfer is no problem with catalogue items. But specially constructed prototypes are virtually useless to all except their original creators.

Companywise, R and D cut-backs cannot be assessed in the short term. The vulnerable laboratories are those which are not fully integrated into company operations and forward planning. Large R and D centres will only succeed if they identify and serve the anticipated needs of the company.

Difficult problems are raised for professional societies. Their membership includes company management and individual QSEs, so that a neutral stance causes least controversy.

The potential in the universities for retraining the older redundant QSEs to fit them for a new career cannot be realized unless such people can be adequately financed during their return to college. Hard-pressed companies are unlikely to provide the cash.