

# **MY TIME IN THE NORTH THAMES GAS BOARD**

## **Some Reminiscences by Richard Reader**

### **How I Came to Work for the North Thames Gas Board (NTGB)**

My first degree was in mathematics from Cambridge University, and towards the end of my course I began to think about careers. I was advised that I could teach, go into industry as an applied mathematician, start in the very new field of computers, or look for work in Operational Research (OR).

Operational Research is a discipline that started during World War 2, when scientists and mathematicians were asked to apply mathematical analyses and scientific approaches to many complex strategic and tactical problems facing the armed services. After the war, efforts were made to apply this discipline to problems in industry and commerce. This seemed a natural career choice for me, and I made various applications, which resulted in a few job offers.

I accepted an offer from the Operational Research Dept. of the British Iron and Steel Research Association (BISRA) and started work in September 1962. My graduate apprenticeship there included a year full-time at the LSE on the post-graduate Diploma in OR, and experience of a variety of different types of OR projects in the steel industry.

By early 1968 I had been working at BISRA for over 5 years, and I found myself painted into a corner from a career viewpoint by having become (in the eyes of management) over-specialised in a particular project area.

I started to look for a job in OR elsewhere, and was attracted by an advertised position in the North Thames Gas Board – not least because the Head of OR there was Ernest Palfrey, who had been a student with me on the OR course at the LSE. He was appreciably older than me, and a successful entrepreneur as well as an academic econometrician. He had been an excellent fellow-student, highly intelligent and always questioning things: so, I felt that I could learn a lot from him as my boss. I therefore applied for the job, and in due course was called for interview.

I found myself being interviewed by a panel of three: Alan Bovington (Management Services Manager), Ernest “Ken” Kenward (Assistant Management Services Manager), and my friend Ernest Palfrey (Head of OR). As the interview proceeded, I gathered my impressions of the panel members.

Alan Bovington was ex-Public School, and a former Army Officer, with a corresponding manner of speech. I felt that I, as a former grammar schoolboy with (at that time) rather left-wing views, would not be likely to get on with him. But I reflected that my friend Ernest would come between the two of us, so there would not be too much contact.

“Ken” scarcely said a word, and I must admit that as a result I totally discounted him.

Ernest asked most of the questions, and I felt that we were on common ground.

I did my best and was rewarded with the offer of a job. However, Ernest telephoned me privately to say that he was not happy with the proposed salary that the Staff Controller’s Department had decided, and advised me to press for a better offer (possibly after a 6-month review). This was an example of Ernest’s at times unconventional approach to life: but I did as he advised and received an improved offer - which I accepted.

## **Starting Work in NTGB**

I joined the North Thames Gas Board on the 1<sup>st</sup> January 1968 - in those days, the 1<sup>st</sup> January was a normal working day, not a Bank Holiday! I reported for duty at 08.45 in the Operational Research Section of the Management Services Department in College House, Wrights Lane, Kensington (a former warehouse converted into offices just behind Pontins department store).

The 1<sup>st</sup> January was a good day to start my new job, as – like every member of the Board’s staff – I was issued with a bar of soap and a clean towel! This was an annual practice, started in the distant past, when white-collar staff mostly worked in offices on the sites of coal gasification plants, which were known for the smuts and fumes that they emitted. College House was far from any gasworks, and the adjacent tube line to High Street Kensington station (although on the surface, and visible from our windows) emitted noise but little dirt. However, the traditions were maintained...

Another customary practice for the 1<sup>st</sup> January was the tour of all the Kensington offices by the Chairman of the Board, who came over from his much grander offices in Kensington High Street to personally wish all employees a Happy New Year. Great was the activity in preparation for this visitation: piles of papers neatly filed away, books and reports put in order, and – of course! – a big sheet of pure white blotting paper issued to each person sitting at a desk, to replace the used sheet in their large rectangular blotting pad.

I wondered whether the Chairman might get the impression that no work was going on, so tidy and pristine were the offices. Then I reflected that he too would have taken part in similar exercises when he was more junior: it was all part of the way things had always been done...

Having previously worked in a Research Association, which had been founded after the war, I was not familiar with the extent and importance of tradition in the workplace. My eyes were rapidly being opened.

So, what was my actual first task on that 1<sup>st</sup> January? Well, my boss Ernest Palfrey showed me to my desk and handed me a substantial book: “The History of the Gas, Light and Coke Company 1812 – 1949” by Stirling Everard, formerly the Head of Management Services at NTGB, but now retired.

“Read this,” said Ernest, “and when you’ve finished it, come and see me to discuss the projects you will work on.” This was not what I had expected: but I duly sat down and started reading. The book was well-written, and somewhat to my surprise I found that I quite enjoyed it. But I still could not see why I had to read this book before starting work properly: it was only later that I came to understand the wisdom of Ernest’s action.

The fact is that almost all the senior managers in the North Thames Gas Board had started their working lives in the Gas, Light and Coke Company prior to the nationalisation of the gas industry in 1949. This was a company with a strong corporate culture, and a great respect for tradition. It was paternalistic – employees were expected to do their jobs properly without creating difficulties; and if they did that, then they could expect fair treatment as far as possible.

This culture had remained largely unchanged in the NTGB, which had been formed from the Gas, Light and Coke Company on nationalisation in 1949, by the addition of a few very small gas undertakings at the periphery of the Gas Light and Coke Company’s area of gas supply. Older employees addressed senior managers as “Sir” (there were very few female senior managers), and young upstarts like me had to come to terms with this expectation of a significant measure of deference. A good solution was to address these managers by their title – “Director”, “Controller”, etc. This was correct and could offend no-one – and it was a formula that I subsequently found useful at high levels of management in Gas Council and British Gas when matters got a bit fraught.

## How Did It Work Out?

Once I had read “The History of the Gas, Light and Coke Company, I was assigned some OR projects to work on. I had congenial colleagues who made me welcome, and I started to make contacts with managers within the Board who were current or potential “clients” for our work as an internal consultancy group for the analysis of complex problems. I soon found that Ernest’s perception that I would need to understand the corporate culture was absolutely right. But I noticed also that Ernest himself seemed to chafe under the paternalistic regime, which did not encourage questioning the status quo – one of Ernest’s strongest attributes (and an important aspect of many OR projects).

Additionally, I found that Alan Bovington was nobody’s fool, and was genuinely and deeply concerned about his staff. Somewhat to my surprise, I came to have a real respect for him and his management abilities.

As for “Ken”, the quiet person at my interview, I found that I was learning more about the realities of management from him than from anyone else in my life, before or since. He had started as a junior in Accounts in the Gas, Light and Coke company, and in a subsequent talk to the OR Section showed us his first payslip as well as several other documents and artefacts from that era. When some years later, I asked him why he was still only an Asst. Department Manager rather than much higher up in the management hierarchy, he simply said, “When you have been a Japanese prisoner of war, and have spent day after day burying your friends, you lose the ambition to take on more responsibility.”

This seriously took me aback: I had not previously met someone so strongly affected by wartime experiences, and yet there must have been many such had I only looked deeply enough. Not that Ken avoided community activities – in addition to his job, he was an elected Councillor in his London Borough, which gave him a big additional workload.

I continued to learn from Ken while I was with NTGB, and later visited him during his final illness to pay tribute to his influence on me and on so many others. He was such a modest man, but with a clear knowledge of what was right and appropriate, which he conveyed to us all. I still salute him – what a difference from my first interview impression!

As for my friend (and boss) Ernest, I soon discovered that being a congenial fellow-student does not necessarily make for being a compatible boss. His approach was so different from mine, and he managed – without so intending – to upset not only some colleagues in other departments but also some of his staff. He constantly questioned everything, and although it is part of the job in Operational Research to do just that during a project, it is not helpful to do it all the time and in a way that upsets people. Ernest simply saw issues so clearly and was so committed to “telling it like it is”, that on occasion he just rubbed people up the wrong way.

He also challenged customary employment conventions, as witness his phone call to me after my job interview. For instance, after the annual announcement of pay rises, he invited all his staff at a group meeting to reveal the amount of their salary and also their recent pay rise – and began by announcing his own! We all complied, despite feeling extremely uncomfortable – this was so counter to behaviours in our previous jobs. But it was part of Ernest’s aim of total transparency – which I respect in principle, even if I think it requires moderation in practice.

It began to become clear to me that I was having increasing difficulties in working under Ernest, and I started thinking about changing jobs again. But before I had got very far, Ernest announced that he had been appointed as Head of OR at The Reader’s Digest. He duly left NTGB, and I understand that he had a successful career in his new appointment, a tribute to his undoubted intelligence.

## **“Acting Up”**

I was asked to “act up” as Head of the OR Section for a time, and I felt quite honoured as I had not been with the Board for very long. After some months I expressed concern to Ken that I was doing the work but not even receiving an “acting up” allowance. I was told that it would no doubt be dealt with at the next annual salary review. However, it was not.

I was upset and consulted my local NALGO (the trade union, National and Local Government Officers' Association) representative – it was a condition of employment in NTGB in those days that staff had to join an approved trade union. The NALGO rep. advised me to give it another year before rocking any boats – wise advice, as I now see.

During that extra year, the Board announced that it had decided to create a Corporate Planning section in the Management Services Dept. and had recruited Steve Milner from the World Bank as the new Department Head to do this. Steve therefore succeeded Alan Bovington, the current Management Services Manager, who had been dismissed without warning. There was little employment legislation regarding “unfair dismissal” in those days, and I was saddened by the fact and the manner of Alan’s departure, as I had come to have a high regard for him. We were all glad to learn that after a little while he had secured an equivalent job in the water industry.

Soon after all that upheaval I was called to the office of the Staff Controller and offered a permanent promotion to head up the OR section at an improved salary. There was even an expression of regret for the delay, which had been caused by the need to have the new Head of Corporate Planning and Management Services in place before anything could be done about subordinate appointments. I accepted the promotion, of course, and found Steve Milner to be a good boss with whom I struck up a positive relationship.

I was still learning to adapt to the corporate culture, as witness my reaction to a subsequent annual salary review. In this paternalistic organisation, the Chairman liked to personally announce the salary review of every fairly senior manager in a private interview. So one day I received a phone call from the Chairman’s secretary to say that “The Chairman would like to see you about the annual salary review, and would such and such a date and time be convenient?” I checked my diary and realised that I had a meeting booked then with one of my project sponsors. I explained this, and the secretary said “No problem”, and offered me an alternative slot, which I accepted.

I happened to mention this to Ken Kenward, who nearly had a fit. “You have to understand,” he said, “that when the Chairman’s office offers you a meeting time you just accept at once and alter any conflicting arrangements!” Another lesson in tradition and respect for hierarchy...

However, my naivety had some good results – instead of sitting in the Chairman’s waiting room with my fellow Section Heads from Corporate Planning and Management Services, I was in the company of managers from entirely unrelated departments. These included the famous Mrs Crouch, Head of Catering, whom I subsequently learnt to be a legendary figure within the industry. I recall a singularly extrovert and dynamic character with a force of personality that I have seldom encountered since. I don’t remember the meeting with the Chairman: but I do remember his waiting room!

## **Running the OR Section**

My appointment as Head of OR started a happy three years of work for me. I was in charge of a small group of young graduates and support staff, with the common aim of applying what we had learnt about OR at university in order to help NTGB management in dealing with some of its more complex logistical problems.

Problems we looked at, with varying degrees of success, included:

- Minimising the feedstock costs of the Board's gas manufacturing plants within the complex constraints in the purchase contracts – a project that ran on and on until we realised that the search for a perfect model was too costly, and settled for a simpler model
- Determining the optimal number and locations of gas appliance showrooms across the District – an ambitious project, which raised good questions, but gave only limited answers
- Minimising the costs of the Board's supply of natural gas from the Gas Council according to the Council's Bulk Supply Tariff – a successful project from NTGB's viewpoint, but less so from Gas Council's
- Control of appliance stocks within District warehouses
- Optimising the number of warehouses – the project showed that costs could be saved by moving from the policy of “one warehouse for each of the 5 Districts” either to a single warehouse, or to just two warehouses
- Advising on whether a team of specialist fitters should be created for “de-conversions” (restoring an appliance to work on town's gas when a customer moved from a converted area to one that had not yet been converted) – a very small but satisfying exercise (the answer was No).

There were many others, of course. It was a big period of learning – for me as much as for my OR officers. As a mathematician, I found it hard to accept that “the best is the enemy of the good” – i.e. that the search for the truly optimal solution may take so long that it is better to settle for a near-optimal solution that can be found quickly. And, as a manager, I had to understand that my staff were individuals with feelings and ambitions, not robots!

### **Staff Development**

Like me, my OR officers had arrived in our organisation with a training in finding the solutions to complex problems, but with little experience of adapting to an unfamiliar corporate culture. In my case, the solution was to make me read the organisation's history: but I couldn't see that approach working well for less “bookish” colleagues. So, I instituted team meetings on Friday afternoons to help address this issue, as well as the running of the OR section. I asked Ken Kenward to come and talk about the Gas, Light and Coke company, and he used anecdotes and memories of individuals and events to bring to life a whole culture that was in the process of disappearing, but was still strong among senior management.

Surprisingly perhaps, I came to have quite a respect for this culture, which actually got things done at a time when social values were very different from those of today – e.g. the construction of the (then) biggest gasworks in the world on the banks of the Thames at Beckton.

What else could we do to acculturate our young graduates to the realities of our employing organisation? Well, occasional works visits were obviously essential, and we organised one to the carbonising gasworks at Nine Elms, where huge vertical retorts turned coal into coke while producing vast quantities of coal gas. It was hot, smelly, visibly dangerous, and a complete contrast to our office environment.

Another visit was to a gas reforming plant – similar to a small oil distillery, but where natural gas was turned into Towns Gas to be compatible with the coal gas distribution system and appliances. I recall my mathematicians talking to the plant engineers, and discovering that when their mathematical model said “shut down the Beckton CRG plant”, this meant hours of hard work for the plant engineers, as these big chemical plants can't be shut down without a long lead time and a lot of careful control. This really brought home to me the importance of contact with the operating end of the business for those who sat in the ivory tower of corporate headquarters.

Another issue that we addressed in our team meetings was the need to talk cogently about what we were doing. Most of my staff were young graduates with an academic science or mathematics qualification, and little experience of communications. They had to represent our section at meetings with our internal clients, and therefore needed to learn how to present well, and to think on their feet.

I had the idea of adapting the “Just a Minute” format from the popular radio programme of that name – but with some changes to make it educational. I instituted a half-hour session during our weekly Section Meetings, for each of which one team member was appointed “organiser”, and the rest of us were participants.

The organiser had to find a dozen or so subjects (not necessarily work-related) about which any team member should be able to speak. He or she wrote each of them on a slip of paper (keeping everything secret). All the team members’ names were also written on slips of paper. At the start of a session, the organiser drew one topic and one team member’s name from either pile of slips, and the team member had to walk to the front of the room and speak for one minute without hesitation, deviation or repetition on the designated topic. The organiser used a flip chart to mark up every hesitation, deviation or repetition, and that at the end of the minute the total score of mistakes was announced.

Every team member (including myself) took part in these sessions – and every team member took a turn as organiser. All graduate staff members were required to take part, but it was optional for support staff as they did not have to represent the section at external meetings. It was remarkable how people improved in their presentation skills as the weeks went on. The senior people needed to maintain their credibility by achieving good scores, and the more junior members were very motivated to challenge them. An unexpected side effect was the enhancement of team spirit, as we all came to enjoy these sessions, stressful though they might be, and to learn more about each other.

## **Project planning**

Coming from a Research Association, in which there was an ethos that R&D is full of uncertainties and so cannot be planned, I was very familiar with the view that an OR project would take as long as it took, and could not realistically be controlled. However, I had in my previous job been asked to look for project management tools that would help to plan and evaluate R&D projects while having due regard to the inherent uncertainties. So, I was keen to bring a degree of planning and control into my OR Section’s projects.

The teams were asked to produce network plans for their projects using a system like Critical Path Analysis but with additional provision for representing key uncertainties. The plans were displayed on large notice boards, and enabled teams to estimate possible resource requirements to achieve project objectives on a probabilistic basis. Plans were updated at monthly project reviews, and time spent on each project was noted on time sheets. Control charts were created showing time actually spent on each project, plus the latest estimate of expected time to complete.

Most projects took longer to complete than originally hoped, and the control charts enabled slippage to be seen, and then extrapolated to give a more realistic estimate of likely completion date. One project proved to be always a month from completion, so an in-depth project review was carried out. We found that the computer model took so long to update that the results arrived too late to be used. A less complex model gave adequate answers on time, and that was what we used.

## **Office accommodation**

Our open-plan office was in a former warehouse, and all the hard surfaces led to a high noise level most of the time. To mitigate this, we asked for extra large notice boards on which our project plans could be displayed. The lower part of these boards could not easily be used for detailed plans, so we put up various decorative posters.

Some of these posters had been given to me by a friend who worked in Moscow selling second-hand ICL computers to the USSR. They were vibrant and alive, although as the textual elements were all in Russian, I had no idea what they depicted (my outlook was very insular in those days).

So I was very surprised when Ken Kenward came into my office and said, “When someone reaches a certain level of management, he is expected to know what is or is not acceptable”. I had to ask what this was about: and was told that my posters depicted Lenin and glorified his achievements. Although few people could read the wording, there was no doubt that the Chairman would recognise the images when he came round and would take exception.

I recalled Ken’s earlier story of a Gas, Light, and Coke Company Chairman who, on one of his unannounced visits to a showroom, had used his walking stick to slash to ribbons an aspidistra – the pride and joy of the showroom manager, who had placed it there to make the shop more attractive. But the Chairman thought that it was old-fashioned, and that was that.

After thinking it through, I replaced all my Soviet posters early next morning with less controversial material. Some battles are not worth fighting!

Our offices were in an old building, and early one morning I kept hearing a sort of regular bumping noise. Tracking it down I found that a mouse had fallen into my waste basket and kept trying to leap up the side to escape. On another occasion, I and another member of the male staff were asked to remove a mouse from the ladies’ toilet, as no-one wanted to use it while the mouse might still be there. We were so embarrassed at the need to go into the Ladies – but we did the job!

Yet another unexpected visitor was a locust that landed on my desk one fine day. Higher up in the building were the offices of the Anti-Locust Research Centre, so I caught the locust and took it upstairs. They laughed at my fears of a breeding colony of locusts getting established in the UK, saying that our bird population would soon finish them off. They said that my locust must have been one of those that they used to release from their windows in a sort of race...

## **1. Conclusion**

I came to have a lot of respect for the Gas Board and its ways, even while remaining aware of some of their disadvantages. The system worked, even though it led to some inefficiencies. My task was to work within the system even while trying to help change some aspects to reduce costs or to improve performance. I saw myself as reasonably compliant with management requirements, even while at times asking awkward questions – which is what OR people are supposed to do!

So I was really surprised by a chat with my boss, Steve Milner, who observed that some of his peers had really difficult subordinates. I remarked that at least he didn’t have such problems with me – and was amazed when he nearly choked over his coffee cup! Clearly, I was not as compliant as I thought – another surprising learning experience...

But overall, I have to assess my four years at North Thames Gas Board as very happy ones – building and developing a team of good people, making relationships with operational managers, and supporting them analytically in making significant decisions.

I have no regrets about my time at NTGB, and only moved on to a promotion in Gas Council’s R&D Division because the post there – R&D Planning Manager – would enable me to build further on my earlier experiences in the R&D field. How that worked out is of course another story,,