

# Hidden depths

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WITH PRESSURE ON RAIL INDUSTRY COSTS LIKE NEVER BEFORE, IT'S THE JOB OF **LEN PORTER**, CHIEF EXECUTIVE OF THE RAILWAY SAFETY AND STANDARDS BOARD, TO ENSURE SAFETY REMAINS PARAMOUNT – BUT NOT AT ANY PRICE. AS **ANDREW GOODMAN** DISCOVERS, FOR PORTER, IT'S A DIFFICULT AND DELICATE BALANCE, BUT ONE HE HAS ACHIEVED BEFORE

**TO THE PASSENGER, THE TOPIC OF SAFETY ON RAILWAYS IS** something of a feast or a famine. For 99.999% of the time passengers get on trains as part of a daily routine without a second thought for their safety. Train travel is statistically safe, and most of the time it feels just like that. Then something goes wrong and an accident becomes the lead story in every national news medium. Suddenly everyone wants to know exactly who is responsible.

And the task of strategically managing safety on railways always has that as a backdrop. Safety management has the desperate job of trying to raise awareness and maintain vigilance, so that when accidents happen, as they undoubtedly will, there is clear evidence that what could be done to prevent it, was done.

The prevailing atmosphere across the industry when I met Len Porter, the man charged with heading the industry's independent safety body, the Railway Safety and Standards Board (RSSB), meant that the topic of safety was thankfully not headlining the agenda. With the last major accident some 18 months ago, and with all the current news about the spiralling costs of rail and how much it can be funded from the public purse, it was something of a breathing space for some sensible thought on railway safety.

And that stability over the last year has clearly been helpful to both Porter and his team behind the setting up of RSSB, which was formally established in April this year. For the safety whirlwind has a history of unseating predecessors in command of the brief. At privatisation, responsibility for strategic safety was originally embodied in Railtrack and its Safety and Standards Directorate. With unease after a number of high-profile accidents, including the Southall accident, that directorate metamorphosed into the pseudo-independent Railway Safety, but still linked to Railtrack.

It was Lord Cullen's public inquiry into the Ladbroke Grove train accident that lay behind both the creation of the independent RSSB – and the introduction of Porter to the industry.

'A key recommendation in the Cullen Report was the need for a new independent rail safety body,' recalls Porter, and he should know – he was an expert witness at the inquiry.

So what brought Porter, with a background in the oil and gas industry, to be an expert in telling the rail industry about how to manage safety?

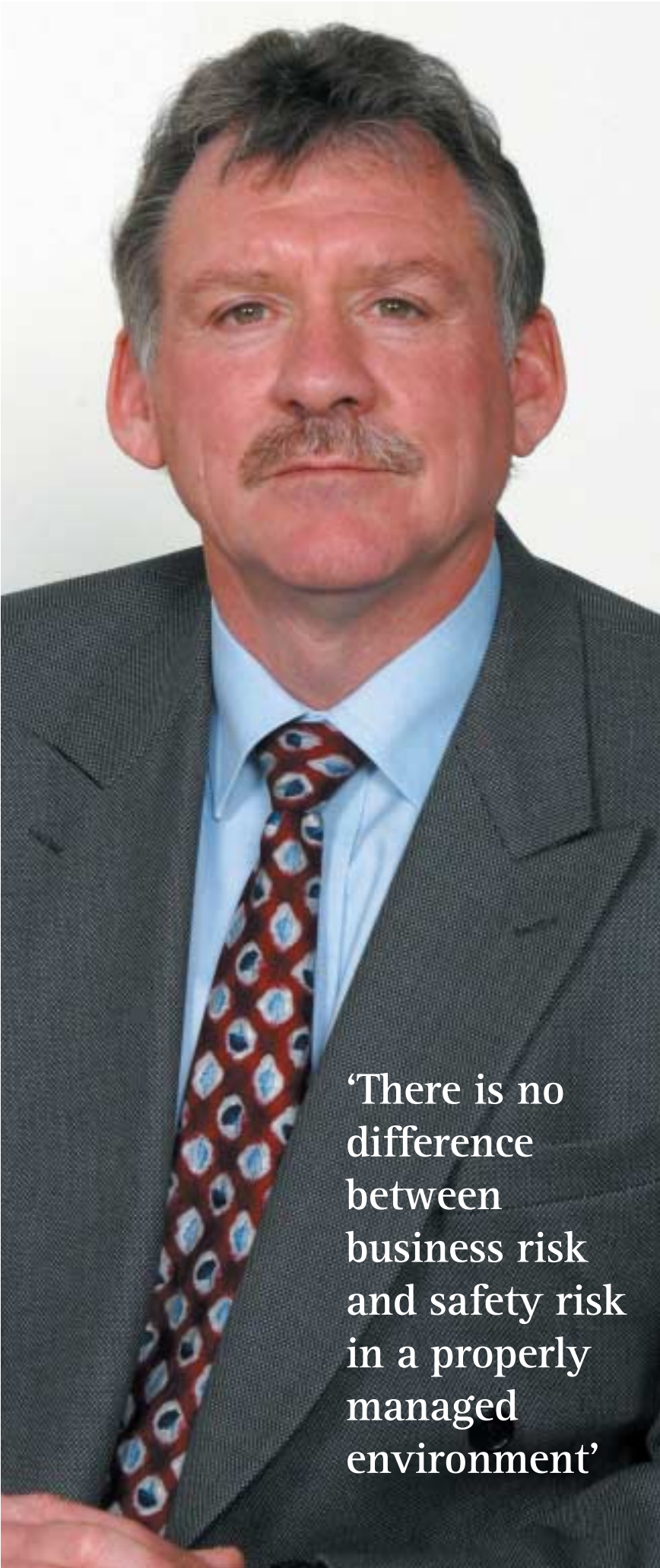
It's a fascinating story, and one that is a good harbinger for the future, as Porter recalls: 'I was a materials engineer having left university in 1974 with a degree in metallurgy and joined International Nickel working on material development for the RB211 engine project for Rolls Royce. However, soon into the project Rolls Royce went into receivership.'

It was a setback that Porter used to his advantage: 'I moved into the North Sea oil industry – just as the full potential of the possible resources there was becoming clear, and a huge new business was gearing up to exploit it.'

Porter, the metallurgist, became involved in the identification and control of metal corrosion of oil and gas production platforms in the seawater environment. He specialised in nickel-based alloys and their performance in marine conditions. After a short while, it became clear to Porter that there were very serious problems in this area due to a lack of reliable inspection data.

He explained: 'I was aware of the scale of the problem and realised that it presented a major opportunity for somebody with my background, so I promptly resigned!'

With his technical knowledge and coalface experience of the problems, it proved a shrewd move to become more actively involved.



‘There is no difference between business risk and safety risk in a properly managed environment’

‘I enrolled in a commercial diving course and became a professional diver. At that time, most commercial divers were either UK or US former Special Forces. They were expert divers, but not trained metallurgists or underwater inspectors.’

Porter became that missing link.

‘I was almost the first trained eyes to look down there and see and understand what was really going on. Yes, there were remote underwater observation vehicles, but these were unsophisticated. They provided poor data – and poor data leads to poor information and, ultimately, to poor decisions. I was at one time the only graduate metallurgist with a full range of commercial diver qualifications.’

It was a powerful mix of knowledge and experience, and by the early Eighties Porter had developed his own major niche business specialising in how to do inspection and non-destructive testing: ‘We worked all over the world, but predominantly in the North Sea oil and gas industry, developing inspection procedures, training and qualifications and we played a key role in helping better understand the condition of assets and the preparation of whole life integrity management programmes.’

By the mid-Eighties, Porter’s business developed when he started to apply similar principles and procedures to the above-water environment on the installations, with the use of risk-based methodologies. Like the metallurgist under the water, Porter once again looked at everything with a new set of eyes.

He said: ‘At the time, the oil and gas industry was heavily compliance-based in its safety regimes. On a production platform, for example, regulations called for the industry to inspect low-risk cold sea water pressure systems in a similar manner to high-risk, high-temperature, hydrocarbon carrying pressure systems. It wasn’t good economic, or good safety, sense. We helped to develop processes focusing on business criticality. And by that I mean increasing business performance by spending less but also improving safety performance. There is no difference between business risk and safety risk, in a properly managed environment.’

For Porter, the timing was ideal, with the industry facing a crisis as oil prices fell through the floor. His was a message and a methodology that found real resonance.

He said: ‘Suddenly, an industry that had been awash with money needed to economise big time. The cost/risk balance means getting risk as low as reasonably practicable, but that means being reasonably economical too’

Porter’s practical approach was further placed in positive focus after the Piper Alpha disaster of 1988.

‘The industry developed sophisticated non-prescriptive regimes over the next four to five years and moved towards a verification regime, rather than straight certification’.

In 1994, and by then with turnover approaching £20 million and a staff of 200, he and his business partner sold the business to Lloyd’s Register in a deal that tied Porter in with the new company for a further five years.

And, as Porter explains, it was during this time that he became involved with railways:

# 'The rail industry faces challenges, just like the oil and gas industry were facing back in the Eighties'



'After four years, late in 1998, a few senior oil industry managers had moved into the rail sector and were not satisfied with the approach that the industry took to Railway Group Standard setting and compliance management. They asked Lloyd's Register to review the process, and Lloyd's Register asked me to lead the project.'

For the first time, but by no means the last, the parallels between his experience within the oil and gas industry and the rail industry were apparent.

'I had a real sense of *deja vue*; I really felt I had been here before!'

And as in the oil and gas industry, events tragically moved quickly – just months later the Ladbroke Grove accident happened. Porter subsequently found himself in the Ladbroke Grove Inquiry (Part 2) as an expert witness, explaining the difference between certification, verification, validation, accreditation, and the role of safety in engineering asset management.

So when a key recommendation in the Cullen Part 2 Report was the need for a new, independent rail safety body, Porter was an obvious choice to lead it.

'I knew Sir David Davies, as Railway Safety Chairman, was to retire – but then quite unexpectedly they decided they would advertise for the post of CEO. I got a call from a colleague asking why I didn't apply. I couldn't turn down the opportunity of such a huge challenge, so I applied and was interviewed by the 'G6' including Richard Bowker, Chris Garnett, Tom Winsor, John Armit, Paul Kirk and Tim Walker of the HSE. I got the job and started in April 2003.'

Porter believes his lessons from oil and gas will be invaluable in the rail sector: 'I see my challenge to be the chance to move the rail industry culture from prescriptive and standards-based, to one based on a consideration of what I call "whole of life" system integrity. We [the industry] have been spending too much money, yet we still have not had all the risks covered. The amount you spend on controlling risk should be directly proportional to the level and priority of the risk, and its impact on the business. It's no different to that sea water pressure system being treated to a different safety regime than the high temperature hydrocarbon system. We have to get our priorities right and adjust accordingly.'

Porter is unfazed about Network Rail's decision to take maintenance in-house: 'John Armit did phone me and explain why they were making the move. It can be done in or out of house; it does not matter. Both can work, it's all to do with good systems and processes – and having good management in place. I advocate simplicity.'

But Porter is conscious that such change needs careful

introduction, as he refers back to Piper Alpha: 'There was a relaxation of procedures, coupled with a change in maintenance staff who were properly qualified but lacked site specific experience. It led to disaster. The same management processes apply in railways. We must be disciplined in our use of management process to control this or we will develop problems. I am confident that Network Rail understand this.'

But, I suggest to Porter, surely after the Railtrack Safety Directorate then Railway Safety, to many the exact workings and objectives of RSSB are cloaked in mystery.

'RSSB is a company "of the industry", managing Railway Group Standards, the development of which is supported by a number of teams, including a safety strategy and the risk team. We look at safety in a holistic way, focusing on risk and seeing safety risk as part and parcel of business risk. We have a board of industry representatives – seven non-executives from suppliers, train and freight operators, Roscos, Network Rail and the SRA – who meet once a month to examine what we do. We have an advisory committee that meets once a quarter to provide advice to the board and members of RSSB.

'RSSB's role in "Formal Inquiries" is to establish root cause and feed back lessons to the industry, and to consider the impact on our own Group Standards. We are also actively involved in assisting the process of setting up the independent Rail Accident Investigation Branch. We are responsible for the industry wide research programme – it's about half of all the RSS budget – looking at the industry's principle policy, management and engineering problems. We take the lead in national and strategic initiatives like route crime, level crossings, SPADS and human factors.'

He continues: 'We produce the industry's Annual Safety Performance Report and the Railway Group Safety Plan, which we will supplement next year with a Railway Safety Strategy, for the first time. All of RSSB's activities are industry activities and would have to be done somewhere in the industry if they weren't done in RSSB. We do not fulfil the same role as the HSE, which is the safety regulator.'

But can this all be achieved within rail's ever-squeezed budgets? Porter is confident in his answer: 'RSSB is part of an industry that wants to reduce costs, improve performance, and continue with improvements in safety. With money now so tight, but the need to continuously improve safety management as important as ever, RSSB and the rail industry faces challenges just like the oil and gas industry were facing back in the Eighties. The answer is that there is a better way to manage the whole of life integrity of the system.'

'I know there is a way because I have seen it done before!'