



DR JURAN'S FAREWELL TO THE UK



The progress of Total Quality as a business science has surprised none: the adulation conferred upon its champions may. This year's Users' Convention at the Cafe Royal marked the end of an epoch. Dr Joseph Juran was making his final visit to these shores and many who had begun their own careers advocating adherence to 'Juran principles', came to listen for the final time to his ideas on the growth of Quality. Although his paper, delivered at the convention's final session, was largely a collection of reminiscences, it contained the balance of fact, humour and telling irony which are his hallmarks.

When, for example, back in the early post-war days, he was asked how top management could be persuaded to attend seminars and conferences on the topic of Total Quality, he replied: "Pray for things to get worse", and apparently many prayers were answered.

"Now," says Dr Juran, quality is what shields societies from the harm and damage which unsafe product or environmental pollution create, and a greater adherence to quality systems will be demanded as concerns increase."

Dr Juran's presentation was entitled: *Development of Quality around the world*, a specification which he kept to rigidly! "History has shown us," said Dr Juran,

"that ancient Chinese bureaucrats, in the form of the longest standing continual central government in history, maintained quality by dividing commercial responsibilities into five coordinating ministries.

The first collected the raw material; another was responsible for the manufacturing process; a third distributed those goods. Then there were two ministries, of which the first established standards, not only for quality of manufacture, but also cost and productivity, and the second enforced those standards. They used innovations like recorded specifications, warranties and audits. In this way, the subjects of the Imperial Family produced some of the world's greatest ceramic and metal artifacts, priceless pieces now found in museums and palaces." By using this piece of recently published material as the central theme of his keynote address, Dr Juran acknowledged that Total Quality was a continual

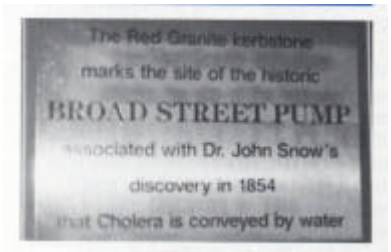
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and constantly increasing set of requirements for social and industrial betterment. A fact endorsed when David Hutchins concluded the convention proceedings with a presentation to Dr Juran. This consisted of a facsimile plaque from what is now Broadwick Street, once known as Broad Street, a commemorates rudimentary medical research and the early use of concentration diagrams in solving a problem. The problem in those days in London, was the frequent outbreak of cholera epidemics. By making a concentration diagram, Dr John Snow was able to identify the Broad Street water pump as the source of the epidemic.

An example cited often by Dr Juran as quality management.



The plaque therefore made an appropriate and symbolic presentation to mark the end of an illustrious career

EDITORIAL

In January 1980, Christopher Lorenz predicted in the Management Page of the Financial Times that Quality would be the topic of the decade. How right he was. But, the chances are that this was a cautious prediction because the way things are going, Quality will almost certainly be the topic of the next two decades. Looking back over several decades, it is easy to see how Quality has changed over the years, and to be able to predict where it is going in the future.

In the 1950s, Quality barely existed outside Dr Juran's famous 'Quality Control Handbook', first published in 1951, the same year as the Deming Prize was introduced into Japan. Throughout the 1950s Quality in the West was seen merely as an inspection activity related to the factory floor of manufacturing companies. In the 1960s, there was a growing awareness of the fact that inspection by itself was futile. It wouldn't matter how much you inspected a bad product, it wouldn't make it any better. All inspection does is to separate good from bad. Better would be to prevent things from going wrong in the first place. OK so far, but how? In the 1970s, manufacturing companies experimented with many approaches, and none of them were particularly impressive. In many cases the cure cost more than the disease, and this applied to the forerunner of BS 5750 and became known as the problem of multiple assessment. Incredibly, whilst the shortcomings of this approach were blatantly obvious, the proponents of this concept kept doggedly moving forward well into the 1980s. Up to this time Quality was still firmly established as a manufacturing concept and focused almost exclusively on products.

However, in the late 1970s, the concept of Total Quality was coming up slowly on the outside track. Company by company, plant by plant, the realisation grew that there was a better way, that BS 5750 was not the centre of the Universe, but just one small element in an intricate mosaic. Quality Circles do not compete with SPC or with JIT, or Kaizen, or Poki Yoki, or BS 5750 etc etc, but that each of these concepts is important for its own reasons and in its own way. Furthermore, no one of them stands on its own. They draw power from each other.

The 1980s was the decade in which industry made the step forward. Some organisations got started and progress was made. Just at the end of the decade a further revelation was made. Quality was not a shop floor activity but a way of managing a business. Also, the concepts apply to any type of organisation whether manufacturing or service.

At the start of the 1990s, industry is now aware of this. Also, it can see the results of those who are making Quality work for them. Some of these organisations are achieving astounding results. What it tells us is that it is doable in our own society. If others can do it, we can do it.

The 1990s will be the decade of unprecedented improvement. This will carry us forward for another decade. All of us who are involved with this, are also involved in a social industrial revolution. In 30 years time, when those of us who are still around, look back on the 80s and 90s, we will be able to say, we helped make it happen.

This editorial began by depicting the 1950s. Dr Juran was the man of that decade in the eyes of the Japanese. On September 29, 1990, Dr Juran gave his last course in London. His first was at Birmingham University in 1948. Let us make the 1990s the decade where Dr Juran's philosophers put us in the forefront of the world's economy. What more fitting tribute can there be to the man whose vision, foresight and teaching have given the world so much.

David Hutchins

THE PREDICTIONS WERE CORRECT!

FAR EAST VISIT



Brian Tilley conducting "How,," Meet the Assessment Requirements of ISO 9000 series (BS 5750) at the Marco Polo Hotel, Singapore

It is not only Europe that is interested in the development of Quality Management Systems and the implementation of the ISO 9000 series. There is a growing realisation in all areas of the world that ISO 9000 not only has a great deal to offer in bringing about a degree of sanity to an ever increasingly complex business world but is also a necessary integral element of any Total Quality drive.

David Hutchins and Brian Tilley
Current interests in Asia resulted in



In-laying precious stones in marble coffee table in Agra applying the same method used to ornament the Taj Mahal

conducting a series of public seminars in India, Indonesia, Malaysia and Singapore during August. The exercise spanned one month and included management presentations, public seminars and conferences on the subject of just In Time, How to Meet the Requirements of ISO 9000 Series and Quality Assurance Audit and Reviews.

All of the events were well attended, enthusiastically received and generated much interest in DHA's approach to Quality Systems implementation.

Of course no business trip to such an interesting part of the world would be complete without a few days to sightsee and generally soak up the



Competition for bus drivers in Singapore. How about the UK?

local atmosphere, and during this business holiday Brian Tilley took the opportunity of indulging in the culinary delights of his lifelong love for squid cooked in a multiplicity of local ways!

We were all very fortunate in being in Singapore at the time of the 25th Anniversary of Independence which gave us a valuable insight into how that nation has managed to achieve so much in such a short space of time. Excellence is achievable in all walks of life, this is proven by Singapore, and is worthy of further study. DHA congratulates Singapore on its 25th Anniversary and its achievements to date.

Further seminars will be run in the Asia Pacific region throughout 1991. For further information please circle number 65.

SPC IN HONG KONG



Tim O'Hanlon, Senior Consultant, has recently been involved with a client in Hong Kong who manufactures video and audio cassettes and floppy disks. Over forty of the company's engineers, managers and supervisors are being trained in statistical techniques including problem solving, process analysis, capability studies, control charting and design of experiments.

CHINESE DELEGATION VISITS DHA

At the request of the IQA, a group of Chinese businessmen enroute for the EOQ Congress in Dublin, visited DHA's Ascot offices where Nigel Bauer, Operations Director (International), gave a presentation on TQM and ISO 9000. The group included Mr Zhao Xi Tai, Secretary General of Harbin Quality Control Association, Mr Chu Chun Rong, Director of International Department, China QCA, Mr Lhang Guihua, Deputy Secretary-General, China QCA and Professor Lang Zhizheng, member of the Permanent Council of China Standardisation Association and an advisor to the Beijing Government.

SHORTS WIN National Training Award

Short Brothers plc were selected to receive a National Training Award for 1989, one of 80 winners arrived

at from a total of over 1,300 entries throughout the UK. Shorts award was made in recognition of the programme instituted in 1987 which has so far provided training for over 2,000 of the company's 7,500 employees in their Company-wide Quality Improvement

Three years ago Shorts made the decision to invest in Quality if they were to maintain their competitive position in the aerospace and defence marketplace. Assisted by DHA, the company embarked on a 'Company-wide Quality Improvement Programme' and established a new Quality Centre within its own full-time staff to oversee and provide training for the programme.

Having established a network of Quality Councils, the training programme began. The business benefits have been clear - 28 Quality Improvement projects were completed in the first 2 years with an annual saving of over £2 million.

STOP PRESS Shorts have just been shortlisted for this year's Northern Ireland Quality Award, sponsored by the Industrial Development Board and the British Quality Association. 'Good Luck!'

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QUALITY CIRCLES IN LIFE SCIENCE AT AMERSHAM INTERNATIONAL



The Quality Circle investigating the supply of glassware. Here seen investigating another glassware problem!

If you aim to be World Class in Quality Circles, then you have to match the standard set by those in Japan. And if you can't travel to Japan to see how they operate, then you have to hope some of them will visit the UK. Fortunately this happened in March 1989 when DHA arranged for three of them to show their skills at a seminar in London.

What was obvious to all was the advanced state of their problem solving and the benefits being reaped by company and circle members alike.

The challenge for us in the Life Sciences Business of Amersham International was to successfully blend Quality Circles into our Quality Improvement Programme. The first



Quality Circle investigating equipment availability proudly showing their new clip and holder.

problem was deciding when to start them - but this became clear from the people themselves. A year into our programme there was an enthusiastic demand for involvement, with people

from all areas volunteering to take part.

So we decided to start Quality Circles but first on a trial basis - thinking big, but starting small. Then, step-by-step, more people joined in as we learned more and more about what worked best in our business. But we were careful not to compromise on the basic principles of the problem-solving process.

Our first circle was in one of our production areas and involved everyone in the work area: Peter Delduca, Malcolm Jones, Calvin Hawes, Mike Looker, Gareth Harrold, Alan Simmonds, Alan Morgan, Lyndon Thomas, Sue Ford, Mike Morley, Norman Basketter and David Williams. They solved the problem of poor supply of glassware in their area. This glassware is made up of the flasks, beakers etc which are essential for the chemical syntheses that form the basis of their work. They found that the problem was not caused by lack of glassware but by poor organisation in their laboratory. They introduced a new system which was an immediate success. The result was zero stock-outs during the next nine months!

The second trial circle was in a different production area and included Martyn Birch, Jon Bloom, Neil Nixon, James Husband, Howard Marshall, Jeremy McDermott and Brian Roughley. This group investigated the availability of some of the smaller, but vitally important, pieces of equipment used in their work. Their analysis of causes eventually showed that breakage of equipment - rather than lack of it - was at the root of the problem. If they could stop the breakages, they would boost the availability as well as save £12K per year in maintenance costs. So they designed a simple clip and holder to prevent their fragile instruments from being accidentally knocked over and broken.

Our Product Development Group also contributed to our trials. Ian Durrant, Sue Fowler, Liz Harding,

Chris Read, Frank Craig, Adrian Simmonds and Bronwen Harvey volunteered for one of their Quality Circles. They found over 30% of their dispensing pipettes were inaccurate. This was an unexpected result and cast doubt on the validity of some of their results. It prompted them to liaise with their supplier and come up with a routine for regular calibration of all their pipettes. They also designed a record chart which is publicly displayed to ensure the routine is followed and the gains are held.

These successes have made it easier for us to gradually expand Quality Circles to most areas and laboratories in Life Sciences. They are proving to a great success and are popular with those taking part. Of course it is still early days. We need to work hard to ensure our Quality Circles are given every opportunity to succeed. Only then can we come near to matching the skills of those Japanese Circles. In the meantime we hope we can enjoy at least some of the benefits that were so obvious at that memorable seminar last year in London.

Alan Hodgson

Quality Improvement Manager



Members of the Quality Circle concerned with dispensing pipettes, seen using their newly calibrated pipettes.

TOTAL QUALITY USERS' CONVENTION 1990

The annual DHA Quality Conference gets more interesting each time. Not just because new names are willing to discuss the 'trauma' of adopting participative Total Quality concepts, but also there are those companies that have become World Class by so doing.

An idea that simple, formed the core of the opening speech by David Hutchins: "Develop a Quality culture", he said, "and you become internally and externally effective. When everyone begins to realise that quality-related costs are equal to 20% of sales, then growth and stability are close to hand. Lower the failure rate; increase appraisal time; reduce prevention control and you get a better than 50% saving on cost".

Ideas which may sound radical to many, but which are already helping large multi-process companies and small specialists to capture market share and thus grow the business. Following David onto the platform for the first presentation was Roger Alcott, Planning and Training Manager at H J Heinz. With the title: 'The Quest for Continual Quality Improvement', the semantics of the sessions were established, Quality could not be a programme, as that implied a beginning and an end: Quality was a process, continual or continuous, it had to be forever. And so must the learning! With that established, Alcott explained why a company with a name and brands so prominent on

supermarket shelves actually needed to implement a TQM operation. Figures indicated that for H J Heinz, the cost of failure was £49 million per annum. "We have to compare ourselves to the best," said Alcott, "and in so doing, we set out a table of crucial factors: brand share, volume, innovation and Quality. No longer could we rely on customer complaints to gauge failure." "And it must be remembered that at the start of the last decade our competitors were own-label products from the retailers who were also our customers, which is why we had to find sustainable alternatives to our existing initiative - H I I - Habitual Incremental Improvement. We had the will, but lacked structure, training and understanding."



Perhaps though the most memorable thing Alcott said, was that Heinz is learning to recognise and respond positively to people - reward success, not only punish failure. Such change are difficult in mature company cultures, but Heinz has begun the long march.

Quality CIRCLES

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Alan Hodgson, Roger Alcott and Brian Tilley the morning's Chairman

Virtually unknown to most people only a decade ago, Amersham International is one of Britain's most successful and innovative companies and Dr Alan Hodgson, Quality Improvement Manager, spent the second session of the morning describing how far Amersham had come since it began a Quality Improvement Programme.

"After two and a half years of the programme," he said, "you would have thought that the Quality revolution had been won. Now we know that Quality is a more complex proposition, particularly in respect of our operation as a major supplier of radioactive and non-radioactive materials for medicine, industry and research."

Amersham's approach to Quality has been clearly focused and took three distinct processes: The Vision; Management Action; Company Involvement. Under the stewardship of a council formed of senior management, Amersham began the move through the four identified stages of Quality - innocence, awakening, commitment, world class.

As Dr Hodgson noted: "Waiting for results from the implementation of the Quality initiatives were the hardest thing. Truly, nobody has the patience to wait 18 months to find out whether something is correct or not. So we learned an immediate lesson, in amongst the major projects either break them down to measurable stages, or mix them with smaller ones. Results are a magnificent motivator: Amersham has made a £540,000 reduction in cost of poor Quality from the original projects and a further £500,000 from Manufacturing Excellence projects."

Dr Hodgson's parting shot was an



Alan Hodgson and Richard Kirby discussing the proceedings with Maxine Slade of CMB Technology

exhortation to those assembled to 'stick with it !'

CMB, or Metal Box as we once knew them, are regular presenters at DHA conferences, and this year Richard Kirby, Quality Manager at CMB Engineering, Oxfordshire, delivered a paper entitled: 'Getting a Measure of Where You Stand.' This too dealt with concepts of achievement and conveying understanding to the sceptical or non-committed in terms of measured success. It was Kirby who coined the phrase of the conference: "ISO 9000 is a tool for success, not a badge of merit."

He also provided the most controversial: "American managers are motivated by dollars - European managers by ego."

In essence though, Kirby dealt succinctly with the critical need for measurement of problems to stimulate action and allow concentration at the point of that activity to be facilitated by the Managing Director. Moreover, the Managing Director must communicate to others what the measurements mean and how adjusting them makes a constructive difference.

The first morning ended with an audio-visual presentation by The Bald

Eagles Quality Circle. These were a group of process operators and technicians from Tioxide UK, makers of titanium pigment for numerous industries, and with a turnover of £709 million, the second largest producer in the world. In the explanation of the problems under investigation, The Bald Eagles used an excellent home-produced video which showed precisely what test procedures were used for quality control. Some images came from an environmentalists worst nightmare rusting, leaking and fume filled corners with 'toxic matter' dripping off the walls. A wasteful and 'risky' process.

At the behest of The Bald Eagles, a plan has been adopted which makes testing a responsibility of the staff. In addition, two new test-control cabins were built adjacent to the



John Eveson: "HMSO employed a structur method and pushed TQ down from the top"

sampling points. The cost of the two cabins and the new test equipment amounted to £13,800. Savings directly attributable to the project are not yet fully calculated but according to Keith Hunter, the Circl Leader, amount to many thousands of pounds. This from time saved and reduction in the incidence of re-processing a sub-standard batch.

Further evidence, if any were still needed, that a policy of letting people bring their brains to work is the most compelling Quality too. The afternoon session was chaired by Warren Winslow and opened by John Eveson Corporate Manager TQM, at HMSC. HMSO has changed dramatically over the past decade from being the printer of telephone directories, to a

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supplier of print and print related material with a turnover of £362 million. Under Eveson's tutelage, HMSO has moved toward a Total Quality Management organisation, utilising philosophies and theorems from all the major 'Quality Gurus - Crosby, Juran, Deming'. Says Eveson: "One of the first things we recognised, was the cost of poor Quality, in our case, 30% of revenue.

We moved ahead in 1989 and from lessons learned from other TQ companies, employed a structured method which covered all departments and pushed the whole thing down

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from the top. As a result, we are now operating with a Corporate Quality Council."

Like most others who spoke on the first day, the slowness of building and time lag for measured results are THE major obstacles to overcome.

Hilary Millichamp is Customer Care Manager for BUPA at the Staines Business Centre and she too recognised the slowness aspect as her biggest recurring problem. Hers was a particularly graphic account of introducing Quality into a service company: the 'not a real situation argument; 'it's been tried before'; 'I'll believe it when I

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see it'. All the cop-out arguments which have stifled many initiatives.

She concluded though by saying: "I found that if I could keep people wanting to improve, they would become team members, and enjoy the peripheral aspects of their membership, the social, outdoor and energy raising activities which cement effective teams."

To prove that DHA is not the epitome of the adage: 'Those that can do; those that can't teach,' Warren Winslow, DHA's European Operations Director, boldly proclaimed: "We Practice What We Preach."

"DHA is founded on Total Quality and that now drives the business. We have a clearly understood mission statement and all meet to establish and approve the goals for each year. The annual audit allows us to focus upon the elements which provide our success and separate those external revenue related activities from internal cost of poor Quality issues," said Winslow.

One of the most intriguing slides of the conference was DHA's own Total Quality Activity Matrix for 1990.

Winslow then went on to detail how a project to eliminate "deficiencies in manuals" was undertaken - the is one was simple and effective and the results of the project lead to a conclusive need for more in-house production capability. If only such solutions were available to Nigel Clements, Regional Quality Leader at British Rail - London Midland Region. British Rail, we were told, was a three dimensional matrix organisation: Regions - production; Sectors - the railway business; Functions - professional and standards. It employs 135,000 people and has a turnover of £3 billion. Clements' problems related to introducing TQM, how to get the infrastructure established to facilitate broader implementation.

"We started with a 'leadership 500' course. The most senior management in BR went on a one-week course where the emphasis was on effective leadership.

This was reinforced by statements like: 'The customer is number one' (whoever the customer is); 'the workforce is valuable and should be



Hilary Millichamp: a graphic account of introducing Quality into a service company

regarded as a customer'; 'there should be a commitment to excellence'; 'enterprise, initiative and innovation must be encouraged'.

With DHA we worked through a list of aims: develop momentum for



Clements: "With DHA we work 1 thrugh a list of aims"

cultural change; develop local quality strategies; begin transformation."

Clements then went on to show that BR is in fact a classic operation in which to establish TQ.

"We found proof of need! And could identify the projects. Now we are organising to guide the projects and for diagnosis ... just as Dr Juran advised



Warren Winslow: "DHA is founded on Total Quality"

DHA CONSULTANTS IN TOTAL QUALITY

in his Universal Sequence for Breakthrough."

He then went on to use an example from the Leadership 500 course: "One syndicate had to study and identify training deficiencies. It appears that if proper programmes of training are not introduced and higher numbers recruited to the courses, BR will soon have too few drivers to service the existing passenger timetables (laughter here from seasoned commuters). The cost for failing to provide the training would cost one depot, Derby £563,000 per annum in additional payments as overtime.

To train and provide an additional 22 drivers to meet the increased needs, the cost would be £51,637."

It was apparent though that despite the difficulties that BR and its staff are currently experiencing, it is enjoying the immediate benefits of TQ, ie higher morale and a sense of progress.

DAY TWO

Nigel Bauer chaired the morning session and dropped this idea on us immediately: "Total Quality promotes competition and its benefits stimulate wider support in any organisation."

An idea which Bob Northey, TQ Adviser at Courtaulds Textiles, was happy to expand upon. Courtaulds' Quality programmes are some of the longest established in the UK and have undergone many changes. But it was the simple message which promoted



Dr Blanton Godfrey, Chris Saunders, Bob Northey mid Nigel Bauer

TQ initially which is most illuminating: when showing prospective Japanese customers around a modern inspection and garment repair department, management were startled by the response, "why do you need to inspect and repair if you make it right first time?"

Something well understood now, but in 1984, people thought that improvement came only through inspection.

Perhaps to use Northey's words: "A change of managerial style from enforcer to consultant has enabled people to grow and communicate and harness the potential of the employees. The more we tell people what is going on the more they ask how and why things are improving, the more they seek to be part of the improvement. So by using communications, training and measurable improvement projects, everyone can own the company's success." This acted as a neat complement to Bauer's opening statement.



Delegates at the evening reception

Shell UK Exploration and Productions TQM Manager, Chris Saunders, had a comedy of errors to tell. According to him: "Shell Expro attacked TQM in typical style: planning top down with everybody involved and doing the jobs quickly.

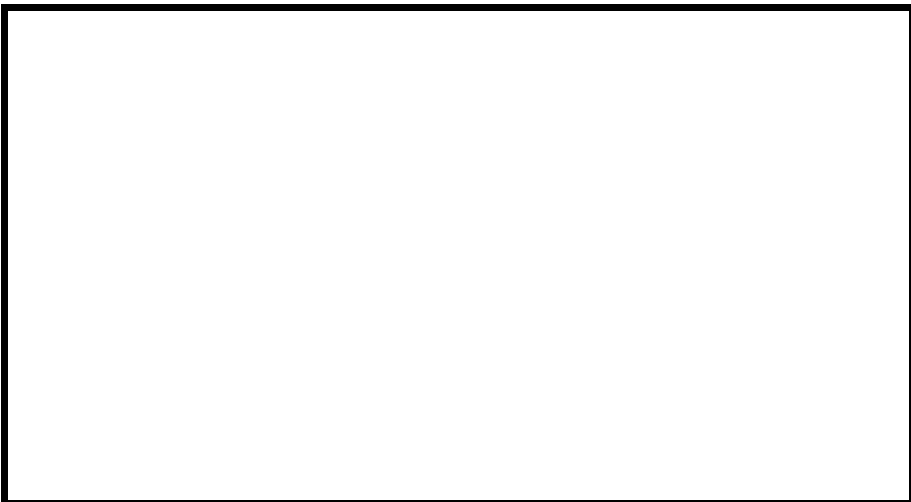
However, in a rare pause for breath we looked round and found that stalls were being assaulted by one initiative after another. And, up went the umbrellas, then worse, people began to throw the 'grenades back'.

We then embarked upon a process aimed at producing 10 projects by the end of 1989 and provided courses in the tools and techniques which were perceived as necessary to achieve them. Then came the problems: Team sponsors were not certain of their role and teams performances suffered as result. Now we brief each sponsor early on.

Teams lacked facilitation. The idea that teams would need any external support was greeted with cries of 'empire building', so some teams made little progress, or slow progress.

Holding the gains. Because we underestimated the work required to ensure that gains were held, a corrective action team was formed. We still need to resolve this one and is likely that we will have a formal Quality System to ensure that gains are held."

It seems that Shell Expro will continue to seek a Quality solution to its unique problems, but as Saunders said: "When you are making hundreds of millions of pounds profit, everyone asks - why bother?"



I M P R O

During the past few years, the Juran Institute Impro Conferences have achieved World Status as a forum for the sharing of experiences in the application of Total Quality concepts. Originally held each Autumn in Chicago, the event switched to Atlanta, Georgia, two years ago and consistently attracts around 1000 participants. This year was no exception. Atlanta was the constituency of President Jimmy Carter, and the birth place and final resting place of the black rights leader Dr Martin Luther King. The dream of Dr King was that all men should be equal. The dream of Total Quality is total participation, perhaps unintentionally the similarity between these two dreams makes Atlanta a fitting venue for the Impro events.

This years convention was marked by a very special development in that for the first time there were no less than five British organisations presenting their achievements. All of the five were of an extremely high order of quality and each indicated an in depth appreciation of the application of Quality concepts.

All of the British presentations which included British Telecom, British Rail, CMB Engineering, Edwards High Vacuum and Bombardier Shorts Ltd of Belfast, at least equalled the quality of the best of their American counterparts and

there was a great sense of pride amongst the British delegates who witnessed their performance. Richard Kirby of CMBE who is fast gaining an enviable reputation for originality gave a masterful performance on the subject of measuring quality achievements. It was a novel idea to suggest a new unit of measure - Juran Units! Whether they will ever be included in the SI Units Metric System remains to be seen! John Snell of Edwards High Vacuum further developed his theme presented originally at the DHA TQ Users Workshop where he indicated 000's % increase in sales revenue due to the application of TQ in the design and development function. David McKeaver from British Rail did much to lift the reputation of British Rail in the eyes of those Americans who had travelled in the UK with a very well presented account of the first year of TQ. David has been heavily involved in the London/Midland region TQ Programme which is now producing significant improvements. The presentation by Brian Ambrose, of Shorts Belfast, which was packed with typical Irish humour ("If we improve the quality of our missiles, we sell more target aircraft!") impressed the audience with the fact that the

company is now achieving £15 millic per year savings with the target of £9 million in three years. The fact that Shorts are now taking on extra labour with productivity up in all departments is a clear message as to the power of TQ. The British Telecom delegation again gave a good account of themselves in a session chaired by Ruth Smith of AMREP, an organisation from Singapore which is working in close collaboration with DHA. Many delegates commented not only on the achievements of the British organisations, but also the quality of the presentations, the high profession level of the visual aids, and we can say without reservation that the UK was well represented. Hopefully, at Impro 91 we will be even more strongly represented, and we encourage all of our clients to submit proposals to present at future events. What has been proven beyond all doubt from the achievement of these and other British companies is that not only does TQ in the manor presenter by DHA really work, it is 'do-able' in our own Society, in our own companies by our own people. There is no question that given the vision, drive and inspiration from the top there is nothing that our companies cannot achieve.

IMPRO 91 will again be held at the Marriott Marquis Hotel, Atlanta from 28-30 October if you would like further information when available please circle number 55.

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