**A Sketch of the 80 Year Development of the Industry and One of Its Participants – Keith Stewart REA, Life Fellow of our Institute and Oldest Serving Member**

I had the special privilege of spending an afternoon with Keith Stewart to tap into his memories - a wealth of history from a man at the tender age of 96. I can take no credit for the construction of this article – the words to follow are as he told them to me, I merely typed as he talked.

Keith’s industry background and personal life are so interconnected that it could not be an industry history without being a personal account.

On the occasion of its 80th anniversary, IRHACE NZ has to be proud of its record of support and encouragement to the HVAC&R industries. The original title of the refrigeration side was Institute of Refrigeration and Air Conditioning. Paralleling that and occurring later was the emergence of the IHVE – Institute of Heating Ventilation Engineers. They went their separate ways until 1977 when IRACE initiated a remit in their annual conference seeking amalgamation with IHVE. To this effect, IHVE were approached and over a period of a year or so, considered the proposition. They gradually worked up common ground to the formation of a combined institute. Tony King of Temperzone and Keith Stewart of Fletcher Mechanical were nominated as co-chairman to bring about the amalgamation of the two institutes. Over 18mths, and a lot of interaction, common ground was formally submitted. The proposal was put to IRACE at its next annual conference. By pure mischance it was rejected because instead of presenting the remit from the joint committee, the IRACE chairman put forward an ambiguous version of his own which confused the voters. This resulted in the amalgamation being voted out, but was put to rights a few years later.

Having changed to IRHACE NZ, it has been serving the industry well since then. The institute suffered a loss of interest in later years by the branches and it was difficult to maintain effective control in the industry to the point that several branches were on the verge of folding up completely, particularly Auckland. However, thanks to the sterling efforts of Alan Jaffe, Eric Saunders, Claude Smith and Keith Stewart the branch remained active. This branch committee persisted and gained strength until the present day size and influence.

In early stages in the development of the institute, it was largely held together at HQ level by Wallie Askew, the founder of apprenticeship skills competition. He also founded the IRHACE museum, which has since been abandoned. He was at the height of his career when he and his wife were taken in a fatal car accident while travelling. Keith and Wally were great pals and the news of the accident was devastating. Keith supports the competition by sponsoring his toolbox to the youngest entrant of the finalists thus linking the oldest member to the youngest.

The industry is inevitably fragmented in its aspirations and coverage of its particular needs. For example: Refrigeration covers a wide field, it started off as representing the heavy industries and the origin of the present institution stemmed from that area. Around the 1930s it was controlled by highly qualified by senior engineers who served the shipping and freezing industries but as the industry developed into wider fields, it broke up into industrial, commercial and domestic refrigeration. It was necessary that common ground be sought to bring these facets of the industry together – this is where IRHACE performed successfully. There were minor offshoots later such as automobile refrigeration. In the initial stages this was seen as a cowboy attachment as they had no industry training at the time yet were servicing and maintaining equipment without real knowledge of what they were doing resulted in a bad name for the industry. This has greatly improved as the years have gone on and there is now a more disciplined approach following the change of refrigerants.

There was also change taking place in the manufacture of local products. Back in 1922, the father of the Stewart boys came back from a US trip with a manufacturing license for Universal Cooler Corporation for household refrigerators. He imported Universal Cooler fridges for some time and gradually built up a small factory in Auckland for manufacture. There was some hazard in this as SO2 was in use at this time, which although efficient as a refrigerant, was a difficult medium to handle as at the required temperature it resulted in a vacuum state. This meant the slightest leak on the low side, moisture could be sucked in to form sulphurous acid and play havoc with various parts of the refrigeration equipment. Maintenance of the shaft seal was a real problem. Keith Stewart got involved at this stage at the tender age of 15. He used to help assemble the equipment in Exmouth Street, Auckland. Whilst proceeding to and from school, he was the original serviceman in that respect, where he relates an anecdote. On the way to school he was required to call into a very well known surgeon, of Jewish persuasion. When he went in to service the machine he was surprised to see the said gentleman sitting down to a breakfast of ham and eggs! Keith continued to maintain his interest in the refrigeration industry throughout his career. He watched the industry blossom as the years went by and innovations such as deep freeze developed and refrigerated counters for food display, broadened the coverage of the industry. When he left school, after a brief period in the motorcycle industry, he joined McAlpine Moors as their first apprentice in 1936. He was sent to Wellington on 3 September, 1939 (the day war was declared) to set up a branch installation and service department for Levin & Co. who were merchants supplying the farming industry. He was also to set up a branch of Refrigeration Specialties and spare parts organisation.

As the need for refrigeration of milk products emerged, so was it necessary for farmers to have milk coolers and cool rooms on their premises. With the connections that Levin & Co had, this proved to be a worthwhile time to be part of the industry. In the meantime, independent of refrigeration industry, Fisher & Paykel (F&P) emerged as the prime marketing organisation which manufactured washing machines and the like. They managed to acquire the manufacturing license for Kelvinator products, also named Leonard. They were served by Mason & Porter in the manufacture of washing machine gear boxes in quantity which coincided with a period where Keith’s father was persuaded to dispose of the manufacturing license for the household refrigerators he was building. Mason & Porter took over the license and proceeded to manufacture household refrigerators, with some successful changes to the design. This produced competition with F&P who persuaded Mason & Porter to give up manufacturing household fridges, which they called Masport, in favour of as much work as they could handle in the foundry area. So, two household brands disappeared from the market – Universal Cooler and Masport.

While the war was going on in 1940, Keith was active in the territorials – alongside spare parts and service work, he didn’t sleep much! He survived being called up by the army in Nov 1940 for training in the 6th reinforcements of the NZEF (expeditionary force) then spent next six years in the army.

The industry continued to flourish with the development of new products. Notable examples are: Patton Ltd – who have just celebrated their 90th anniversary and would be one of the oldest members of the industry. They started in 1923. They were developing components and importing components from overseas. George Patton, the founder, was a very clever engineer. Other firms such as McAlpine, Temperzone, Holyoake and F&P were rapidly developing in the manufacturing part of the industry.

It’s worth mentioning that upon discharge from the army, Keith’s former colonel had been appointed chief signal officer at army HQ. When he got into the job he found that the cipher department was in a shambles and he didn’t know where to turn to set it to rights. Although he’d been discharged on medical grounds – grade four, the lowest you could get - Keith was temporarily re-graded to grade three so that he could be seconded to HQ to help straighten out the mess and continued in that capacity for the next seven months whereupon he was discharged fully with the rank of captain. In 1950, he was re-enlisted for compulsory military training and spent nearly three years going to camps as an instructor.

Of the six brothers, four were enlisted in WWII, three in the air force and one in the army. The eldest, David, in the air force was reported as missing, believed killed in a flying situation. Keith still has files and records for the four serving members including his own.

While he continued his career in the army, the industry was busy servicing the US troops by way of cool-rooms and light industrial applications. Although McAlpine, like all employers, were obliged to hold positions until after the war, because the war lasted so long it became quite a burden. The individuals concerned tended to lose their skills and contact in the industry and upon return, reinstatement was a real problem. Keith himself had been off the tools for six years, and when it came to reinstatement – having left McAlpine when there were eight in the company, upon his return in 1948 there were 38! Where was Keith going to fit? Although a relatively senior serviceman, Keith volunteered to go back to the workshop for six months to regain skills and then be reallocated to duty. McAlpine agreed to this with some relief, and the six month period extended to eight. A crisis arose whereby he was offered to set up a branch for sales agent in Whangarei, W L McKinnon Ltd who was incidentally the local mayor and Tip Top agent. Keith agreed to go to Whangarei and serviced the area from Orewa to the North Cape for two years. That was a big territory for one man. The number of miles would have been millions but he never had a serious accident, nor encountered one while on the road. Whilst with McKinnon he was head hunted by F&P who were rapidly developing their operations but they had very little in the way of installation and service coverage. However, when it came to interviewing, F&P suggested that he continue what he was doing for them which he promptly rejected that as he’d had enough of it. Keith then became Stores Manager for F&P, which he did for four years. In doing so, he became the sixth member of the Stewart family to serve F&P: Hugh was a packer; David was a customs clerk; Colin finished up as Technical Director; John served an apprenticeship with F&P and was the founder of Hill&Stewart; and Alan, the only graduate in the family, was appointed as manager of the Commercial Division in refrigeration, during which he developed innovations in the industry. It’s quite a remarkable record that six brothers should be employed by the firm, several of whom were very successful.

During the war the industry appears to have thrived and has continued to do so since. Many small companies emerged, some have failed but the successful ones have produced some very good service to the industry.

In the 1950s, his father died suddenly, leaving a small manufacturing business with no takers so Keith took on the business for the family, incidentally with the blessing of F&P, and continued to operate that for the next eight years – taking him out of the refrigeration industry for this time.

He was obliged to sell the business in 1987 when the financial crisis occurred and went on holiday with his wife for the first time in three years to Mt Maunganui. There he met up with a fellow holiday maker and his wife and hit it off well. At the end of the holiday he asked Keith ‘What do you do?’, ‘Not doing anything, just sold my business’, replied Keith. ‘When you come back to Auckland, see me before you see anyone else’, which he did. Lo and behold, the fellow holiday maker was the GM of Fletcher Construction. Keith was appointed as his PA for the next five years and was then posted back into the industry per medium of Fletcher Mechanical, in which he was taken on as a supervisor on contracts. While with Fletcher Mechanical, Keith was appointed to their computer bureau where he served for four years as System Analyst.

During his time with Fletcher Mechanical, the personnel officer suffered a breakdown. He was faced with the great difficulty of dealing with five unions representing seven trades and this proved too much. Keith was asked to replace him, turned it down stating ‘I want to live a bit longer’. However, they approached him a third time and he laid down the law – ‘I get a car, and any decision I make on the job with the men would be honoured by management’. If that didn’t happen then he would resign. So he took on the job, and despite many difficulties over union matters and awards, he had four years of successful tenure without a single strike or work stoppage. It got to the stage where Keith set the hourly rates for the whole industry because it became accepted by the workers that what Keith said, went – so when it came to award rates they waited until Fletcher made a declaration and took that as the norm.

Keith served out his working life with Fletcher until age 62, whereupon he embarked upon retirement. However, retirement was no sinecure. Keith continued to operate the Project Planning Consultancy he had set up three years prior to retirement and planned several major multi-million dollar projects in the next few years. This included a two year engagement with F&P Production Machinery Division for the Automotive Production Line for Edison Corp. of U.S.A. This two million dollar machine was conceived, built and delivered in two years in time and within budget. During this period Keith was appointed Lecturer at Auckland University for teaching Project Planning as part of the Building Services Degree.

In all his frenetic 50 years of working life Keith has managed to maintain his interest in other activities. Keith has brought up two daughters and assisted his late professional wife, Ngaire Lovie Stewart LTCL, QSM who taught speech and drama, including running the Auckland Junior Theatre for 38 years in which Keith acted as stage manager, scenery maker, prop maker, electrician, and sound man. The swan song (the last performance) was a tour to Japan in the 1980s. In his spare time Keith served for 50 years as Church Elder, chorister and was a yachtsman for 30 years.

How Keith had any spare time is a marvel to me, but his history is an accolade of achievements and makes him a member of the highest calibre. It was a pleasure to record this article on his behalf, may it be as enriching to you as it was to me.

Article by Keith Stewart as told to Julie Keegan

Photography by Julie Keegan