

## An appreciation of Lynn Owen Kirkham, 1944—2020

Lynn Owen Kirkham,
Mechanical Engineer,
Organ Builder, friend and
mentor to countless
Mechanical Engineering
students at UWA over a 42
year career and friend and
mentor to me for 25 years,
had a massive stroke on
Tuesday evening, April 7th,
lapsed into a coma and
died on Easter Day April
12th, 2020.

With a love of swing music (his father played the saxophone in dance bands) and, despite several aborted attempts to learn the piano, he developed a love of classical music, which was extended to



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include organ music during his study at UWA in the 1960's. His initial foray into the world of organ building was in 1972-3 when he came to be known by Ronald Sharp, who was installing the organ in the Perth Concert Hall. Sharp became so comfortable with Lynn's knowledge, intellect and ability that he was left to virtually finish the mechanical setting up of the organ whilst Sharp was busy with the new organ at the Sydney Opera House. During this period he became acutely aware of some mechanical deficiencies in the Sharp organ and also aware of how he may use his mechanical engineering background to avoid them in the future, should the opportunity arise.

I had known of Lynn Kirkham since my teen years in the early 1970's when he became Secretary of OSWA and Editor of "Organ News", then the periodic magazine of OSWA. The Organ Society was a regular visitor to and topic of discussion in our household as my father, Bob, was an avid contributor as an organ historian, probably before such things were actually thought of.

I remember the magazine took on a very different look during Lynn Kirkham's tenure of several years, with trendy type-setting, a new front page logo and a very professional touch to what was, previously, a single page typewritten news sheet. I remember his visit to Albany in the mid 1970's to our place for lunch, dressed in snappy tailored sports clothing and driving a red sports car.

Fast forward to 1994 and I received a phone call from him, completely out of the blue, to ask whether I would be interested in assisting him, in a team of 4, to remove the 1972 FJ Larner organ from the chapel at Guildford Grammar School to allow remedial work to be done to the large west window. He had heard of my proficiency in piano repairing and tuning and also that I had assisted Paul Hufner with the installation of his magnum opus instrument at St John's Lutheran Church, Perth several years earlier.

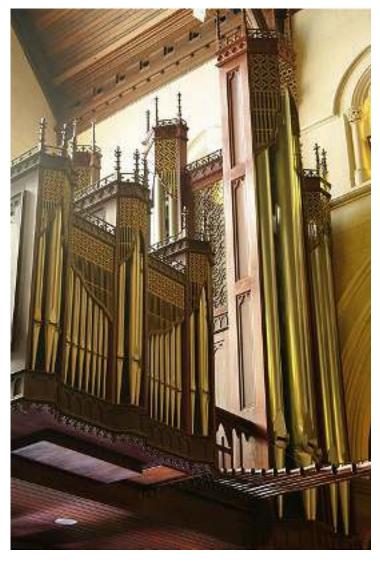
My meeting with him at this time was hardly different than 20 years previous. He was snappily dressed in tailored shorts, sports shirt and deck shoes and drove a grey French sports car and seemed so much younger than his 50 and a bit years. We spent two rather dirty but stimulating weeks removing the Guildford organ and storing it within the dining hall of the school. I mentioned to him, in passing, that if he needed assistance returning the organ to the

chapel please give me a call!

Another year went past and another phone call was received, asking if I would like to come for a few weeks before and after Christmas, 1995, to return the organ to the chapel. Of course, I said I would! I came and actually stayed until April 1996 and, effectively, did an organ building apprenticeship compressed into those 3 or 4 months, building a new mechanical action for the Guildford organ and then installing the organ again in the chapel. Lynn was the most inspiring teacher possible as he was able to combine a razor sharp intellect with work shop skills second to none. This is so often not the case with clever people and to just observe his logical solving of various problems was an object lesson in itself.



St Thomas's Roman Catholic Church, Claremont

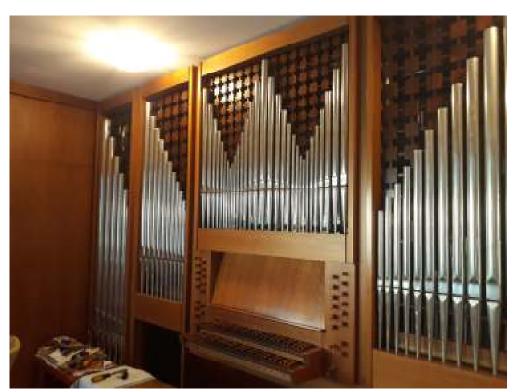


The Basilica of St Patrick, Fremantle

It was early on in this passage of time that he took me to see the organ at Trinity College. To say I was gobsmacked is no exaggeration and, for me, nothing regarding organs or organ building has ever been quite the same since. This, in terms of musical instrument making, simply set standards to aspire to.

The Guildford project was completed under a lot of pressure due to an impending deadline and we became very good and firm friends. So much so that he invited me to stay with him in his town house in Claremont on my increasingly frequent trips to Perth with organ work. He welcomed me to base myself there until around 2005 when his personal circumstances changed and he needed the property to himself.

I thought so much of Lynn Kirkham that in 2002, on the birth of our son, we named him William Lynn.



The organ of Annette Goerke, City Beach

Between the years 1997 - 2004 we worked on several different projects together, this time with he providing advice and design input to projects I had on the go, such as at St Thomas, Claremont, (he provided the design work for the blower house and blower inlet system) and also at St Matthew's, Guildford (he designed and built the new pneumatic



The rebuilding of the Sydney Conservatorium 1973
Pogson organ of 3 manuals and 37 speaking stops in the refurbished Verbrugghen Hall by South Island Organ Company featured a flexible wind-pressure regulation systems designed by Lynn Kirkham.

drawstop machines). He also provided design services and hardware to the South Island Organ Company, for whom I have worked since 1997, with the organs at St Patrick's Basilica and the Sydney Conservatorium.

It has been my great privilege to maintain his beautiful organ at Trinity College since 1998 but also his beautiful house organ built for our Patron, Mrs Annette Goerke, between the years 1976 – 99. This instrument is a true work of art and discipline and contains innovations in its mechanical action used later at

Trinity College (1983-4). This organ was built almost completely by his hand (some larger case components may have been outsourced), mostly in his father's house basement workshop in Harborne Street, Wembley and a better standard of craftsmanship you'll be struggling to find anywhere.

I hadn't seen so much of him in recent years, especially since his retirement from UWA in 2009, but we were both involved in the recent and ongoing Trinity College project and again, very happily, in frequent contact.

My life has been one of incredible opportunity and no greater opportunity has been afforded to me than meeting and working with Lynn Kirkham, to have had the opportunity to learn from him and to be able to count him as one of my few really close friends.

We, within OSWA, are all the richer for having had such a talented and lovely man in our midst, one of the most "giving" people I've ever met, and how tragic and extremely sad that he has been taken away far too soon in this way.

Vale Lynn Kirkham.

Patrick Elms



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## Trinity College Chapel Organ



Trinity College has embarked on a project over the last 5 years to complete the fine organ in the school chapel. This work has included designing and supplying a 7 toe lever combination system (provided for in the initial design of the organ but never installed), supplying tremulants to the Hauptwerk and Oberwerk divisions and carrying out a program of tonal finishing to the instrument.

The organ was designed and built in 1983-84 by Lynn Kirkham. He took leave of absence from his position on the teaching staff at the University of Western Australia for a period of 18 months, rented a factory unit in Bayswater and recruited several skilled staff members to assist in carrying out the building of this instrument. It was his intention to see how this project worked out as to whether he might seek further commissions. In the end it was proved to him that full time organ building to such a high standard was not feasible in

Western Australia and he returned to his teaching position at the University of Western Australia (UWA) after its completion.

Lynn Kirkham had developed his love of the organ initially through listening to the newly installed Winthrop Hall organ, installed during his undergraduate years at

UWA in the 1960's studying Mechanical Engineering. Here he was able to hear renowned organists Michael Brimer and Annette Goerke perform regularly and the neo classical sounds of the JW Walker instrument was very new and refreshing in Western Australia. He was, shortly after this, to become very interested in quality HiFi systems and, at this time, recordings of the old organs of Europe, particularly those of North Germany and the Netherlands, were becoming increasingly available. A little further on, in the 1980's, he was able to travel Europe and hear the warm, vocal sounds from these instruments first hand and form his idea of what an organ should sound like. Through his association and friendship with Annette Goerke he was also introduced to the 17th and 18th Century Classical French organs of Dom Bedos, Clicquot and Thierry.

It was against this background that he designed the Trinity Chapel organ sound, in consultation with Annette Goerke. He decided that the Principal

chorus work should be modelled after the Northern German/Dutch ideal of warmth and a vocal-like character. The flutes are wide scaled and blending after the French Classical school and the reeds fall between the two styles: the manual Trompete and Krummhorn have wide, open French shallots and the pedal Posaune is more in keeping with the Germanic Principal chorus. The manual chorus mixtures are modelled after the famous Schnitger organ at St Martini and Nicolai, Steinkircken.

Before any organ building commenced he had colleagues from UWA carry out extensive acoustical testing on the chapel so that the pipe scaling could be carefully worked out to suit the acoustical properties of the space. He also consulted extensively with pipe makers Jacques Stinkens, Holland, so that informed decisions could be made with regard to suitable pipe scales, materials and, most importantly, voicing style.

He then spent 8 months on the drawing board designing the organ down to the finest possible detail, so that every

possible problem was solved before the first piece of timber was cut. His mechanical engineering background was fully utilised and this is very evident when viewing the internal construction and design of the instrument.

There are several innovations in the Trinity organ not seen on other instruments anywhere at this time.

The first is the use of schwimmer wind regulators (built into the bottom of the wind chests to save much room) using weights to provide wind-pressure rather than the usual springs. Sprung regulators tend to provide steady, lifeless wind characteristics to an organ, partly due to there being no wind trunks providing odd dynamics between the wind supply and the pipes and partly due to the characteristics of the springs used to produce the compression. As schwimmer regulators are upside-down in an organ, a scheme of levers had to be devised to suspend the bellows weights under them. A benefit of using weights (which Kirkham had fully realised) is that the inertia of the mass adds a dynamic to the wind supply and he "tuned" this by adding a shock absorber or "damper", which is adjustable, so that exactly the desired amount of musical effect is produced. The result is a beautiful vocal effect to the sound as the regulator reacts to the tempo of the music being played.

The second innovation at Trinity is the



pre-tensioned stranded wire mechanical action. Kirkham designed the mechanical action train of the organ down to the very last detail so as to remove as much mass (and thus inertia) as possible to reduce the playing weight and response. The keys themselves have return springs fitted so that the pallet springs can be made lighter as they then don't have to return the keys as well as the pallets. The pallets are made of straight grained American redwood and are of a T section design for structural stability and also to remove mass from them. The wire trackers are then connected to a springing system at the key end, which pulls against the spring at the pallet end and this system keeps the light tracker wire taut at all times. The result is a



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delightfully light and responsive key action on the moderate wind-pressure of the organ of 75mm WG.

The success and beauty of this organ is universally known. It is an instrument of outstanding tonal, mechanical and visual qualities. When Josef von Glatter-Gotz, owner of Rieger Orgelbau, Austria, visited Perth in the late 1980's and was shown the organ he immediately and seriously offered Lynn Kirkham a job on his staff in Austria designing organs. This offer was declined, never the less it was very flattering and much appreciated. There have been many such assessments of the organ since that time by a wide variety of people with high qualifications in a variety of associated disciplines.

The organ was completed in 1984 under some financial pressure and there were several features left incomplete (the combination action and Tremulant) and also Kirkham never felt confident in tackling the tonal finishing of the instrument. Luckily the pre-voiced pipes from Stinkens were so good that this was hardly an issue.

In 2015 Trinity College decided it would like to finish the organ to its original design and concept and a committee was formed under the Head of the Music Department, Dr Robert Braham, with Dominic Perissinotto as co-ordinator and consultant.

Naturally Lynn Kirkham was approached to design and provide the combination action, which comprises 7 toe levers with the following functions: 3 toe levers providing "general" combinations; 3 toe levers operating each of the couplers; 1 toe lever providing "general cancel". This system is now in place and only requires the setting up of the "general" combinations.

The original specification of the organ only provided for a tremulant to the Oberwek division but it was felt that the Hauptwerk, with its splendid Cornet decompose, was equally deserving of one. The provision for this has now been made and installation of both tremulants is imminent.

A glitch interrupted the project in late 2018 in that the school decided to extensively renovate the chapel. Part of the reason for this was the intention to introduce air-conditioning to the chapel in the form of a new ceiling containing air-conditioning ducts and outlets. This caused alarm bells to ring with both the original builder of the organ and also the organ builder who has cared for it since 1998. It was considered quite possible that altering the volume and shape of the room would also alter the acoustic for which the organ had so carefully been designed. A meeting was convened, concerns raised and, to their eternal credit, the school followed up by scrapping plans to install above ceiling air-conditioning. They also went further in conducting their own scientific testing to the existing chapel acoustics to ensure that the work to the chapel did not alter the acoustic. Happily it appears that the new acoustic is actually slightly better for the organ.

At the completion of the chapel works, most unfortunately, the solid jarrah case of the organ was extensively damaged in the chapel cleaning process and it has been necessary to completely strip the casework of its original finish and repolish it, a very expensive and lengthy exercise.

The final part of the project was to tonally finish the organ. As previously mentioned the pre-voiced pipework from Jacques Stinkens is so good that it is only deemed necessary to correct one or two speech defects in the basses and then to tonally regulate everything for volume, pipe to pipe and within the ensemble as a whole.

Huge credit must be given, firstly, to the Bursar of Trinity College, Mr Michael Burgess, in that the trials and tribulations of the last few years have been met head on by the school and the best possible outcomes have been achieved to preserve all the qualities of the instrument. Dr Robert Braham and Dominic Perissinotto have well and truly played their part also in conceiving of the project initially and then following through as required to make sure it's happened.

It is a great tragedy and a matter of enormous sadness that, with his untimely death on April 13th, Lynn Kirkham cannot participate in the completion of his beautiful musical instrument, commenced some 37 years ago. A true work of art and a legacy that will stand the test of time.

Patrick Elms