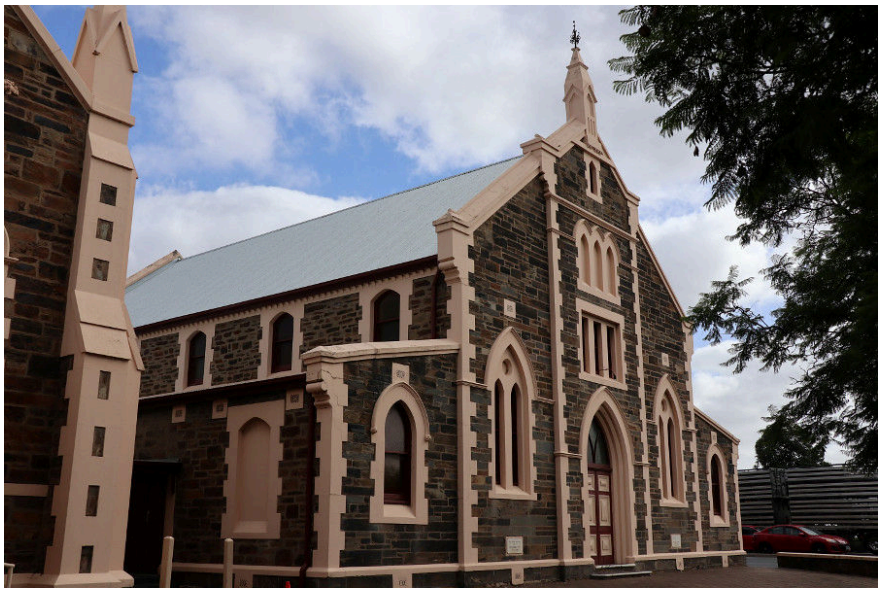
Payneham Road Uniting Church

You may recall an article last year about the demise of the Maughan Church, Adelaide, and its fine organ.
(*In The Pipeline*, May 2018)

Here we take up the story about how some parts of the Maughan organ has brought new life to another church in the Adelaide suburbs.



Payneham Road Uniting Church

The pipe organ in the Payneham Road Uniting (Methodist) Church was built by J E Dodd and commissioned on 10th December, 1918. It consisted of three divisions plus pedal enclosed in a case approx. 12 ft. long and 6 ft. deep. The Great and Choir (Choir with expression) were accommodated high up behind the case, and the Swell was situated at a lower level behind what was the original pulpit. The Swell spoke into the church through two small mesh screened panels. The organ was described as being the first electro-pneumatic organ action to be built by Dodd. The fairly ordinary rank specification included flue work up to 4' pitch on the manuals, a Trumpet on the Great, Cornopean and Oboe on the Swell, and a Clarinet on the Choir. The Pedal consisted only of 16' stops and included a Dolce and an Open Wood. The Pedal was reinforced only by an Octave Coupler. The blower was accommodated in a "well" under the vestry floor. Over the years it suffered the ingress of ground water, necessitating the use of an automatic pump at times to remove rising waters.

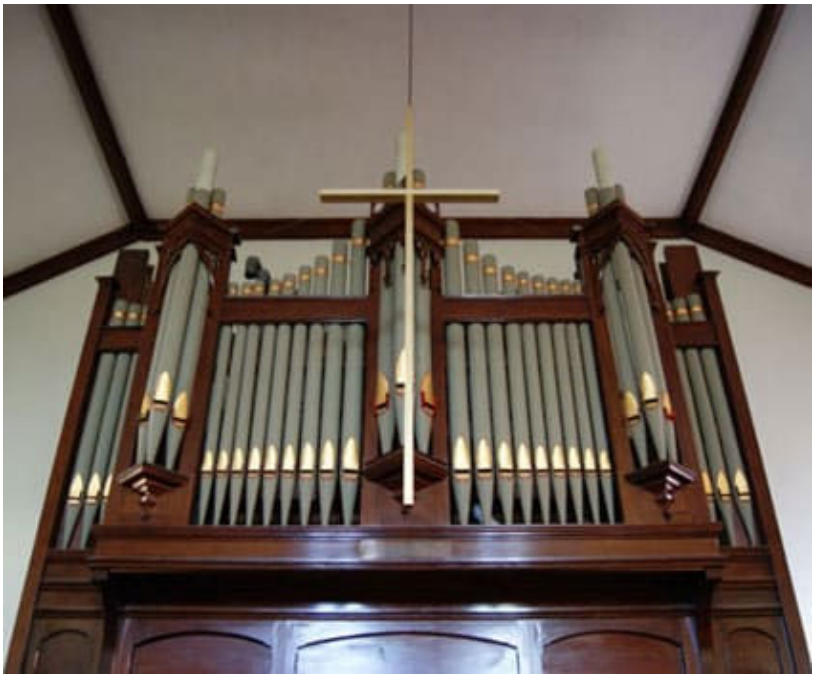
The organ has been the subject of upgrade discussions for many, many years. During the rebuild ample evidence was found of the work performed over a long period not only by Dodd, but by other such as L S Waters and possibly W L Roberts. The earliest photo of the organ shows a smaller case, and Dodd is thought to have enlarged the case at some time by extending it out each side by about 2 ft. The case pipes were extended using half (backless) dummy pipes to match the original pipes. Positive evidence was found by way of a label that Waters had electrified the pedal chests in November 1954.

As the years moved on the organ had become less reliable and was wracked with numerous wind leaks. The wind system was inadequate, necessitating the installation some years ago of a second blower to adequately blow the organ, especially in summer. Underactions

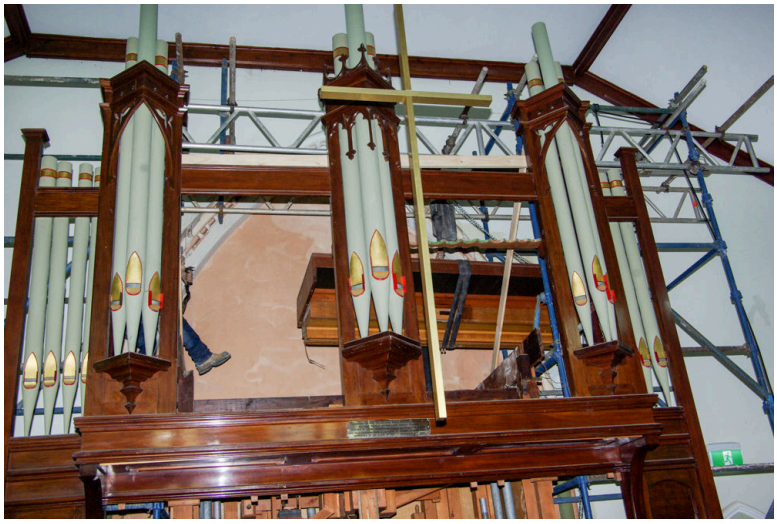
exhibited leaks and whistles, and the electrical system, added to over many years, was best left untouched unless a real fault was detected. Many organists commented that playing the keys was more like playing a wet sponge – the key touch, despite some overhauls, remained unpleasant.

In more recent times the subject of a rebuild was discussed at length. A new specification would include new upperwork, mixtures and mutations to balance the inherent ponderous tone of the blackmetal Dodd pipework. A reredos, erected in front of the case in 1967 was included in the plans affording, because of extra space, an opportunity to move the Great and Swell onto the same level and accommodate a blower under the organ. The church became very interested.

Then, two things happened that changed the course of the discussions. On a regular tuning visit around two years ago it was surprising to discover that the reredos had been removed, revealing the organ case once again. Any expansion plans conceived thus far had then to be discarded. Secondly, due to the recent closing of Maughan Church, several ranks of pipes and other items became available which could become part of a new specification for Payneham. The ranks selected became, at Payneham, the Swell Fifteenth, Great Harmonic Flute, the Great Twelfth and Fifteenth and the Great Trumpet 16/8/4. Mixture ranks from Maughan were redesigned to suit the new specification, and some of the Pedal Bourdon was used to add more weight to the Pedal. A revised specification was presented to the church and, after several meetings approval was given for the rebuild to proceed. It had been emphasised several times that because of the condition of the organ it was beyond refurbishing in stages, nothing less than a full rebuild would do. The church initiated fundraising and thanks to a most generous donation was able to request the work to commence well ahead of time.



Deconstruction of the old organ commenced in July 2017. Pipework was removed and stored, old wiring cut out and the console stripped. Two of the three original Dodd slider soundboards had to be removed. Whilst the Swell could be refurbished in situ, the Great and Choir soundboards were being replaced and had to be removed. Because of their significant weight, it was deemed too dangerous to undertake the work by hand and so a scaffolding

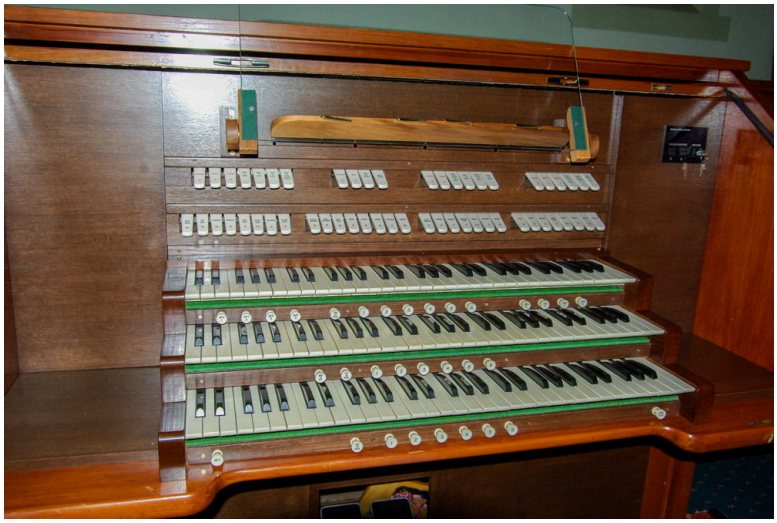


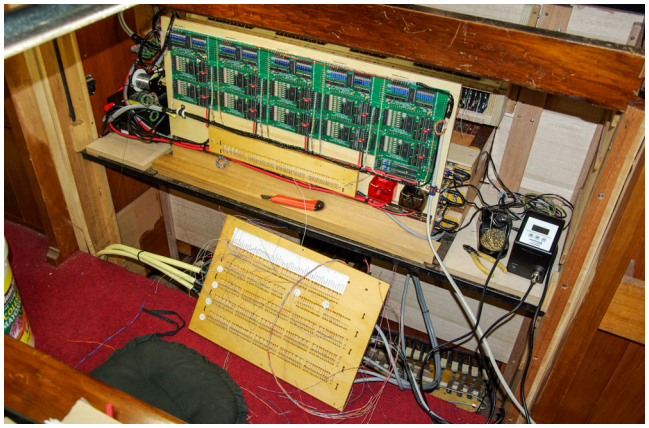
team was brought in to safely winch the soundboards down to floor level. On inspection, all three soundboards were found to be in remarkable condition. The Swell was fitted with soundboard seals and SLIC slider motors plus a new underaction, and refitted. The Swell bass offnote chest, consisting of the wood bass of the Swell Open, the Bourdon and bass of the Gamba, was fully overhauled and upgraded to provide correct support for the pipework, much of which was leaning precariously prior to the rebuild.

New soundboards incorporating direct electric action were made for the Great and Choir, along with new diaphragm chests for the Trumpet (4) Pedal Bourdon (3) and many others. In all, 17 new chests were made, the options to construct only emerging once old parts had been removed and available space assessed. The console was refitted as the shell of the console had to be retained. The 3 manual keyset from Maughan fitted perfectly, and a double row of stoptabs was provided to control the ranks. The keyset after refurbishment at last provided a pleasant set of ivory capped keys for the player. The console also houses the capture action, and a 15V 50A DC power supply to drive the tab units. A similar power supply drives the organ action and electronics.

To wind the organ, a new Laukhaff 3 phase blower of 1250cfm was imported from Germany and installed in a soundproof cabinet in the vestry, abandoning the "well" as a location. New wind trunks and five new sprung regulators were installed, the main wind trunks passing through the existing penetrations in the substantial church walls. A low level wood trunk supplies the Swell and Pedal, whilst regulators for the Great, Choir and Trumpet are fed by a high level 10 inch PVC trunk.

Control of the organ is via a custom built



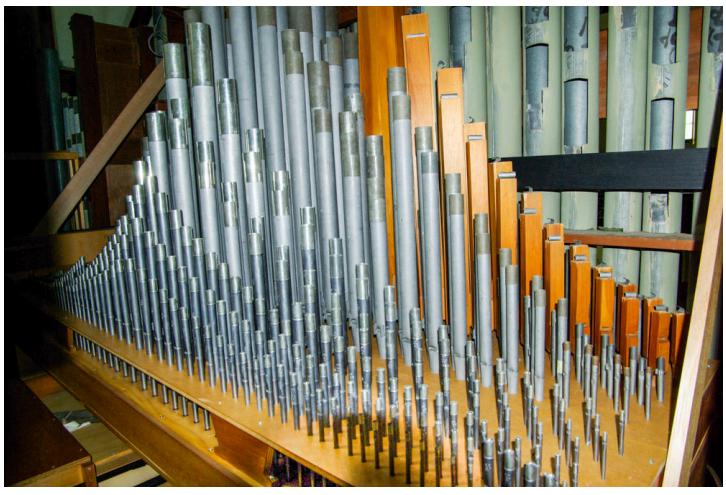


Logic control system (above) and refitted console (left)

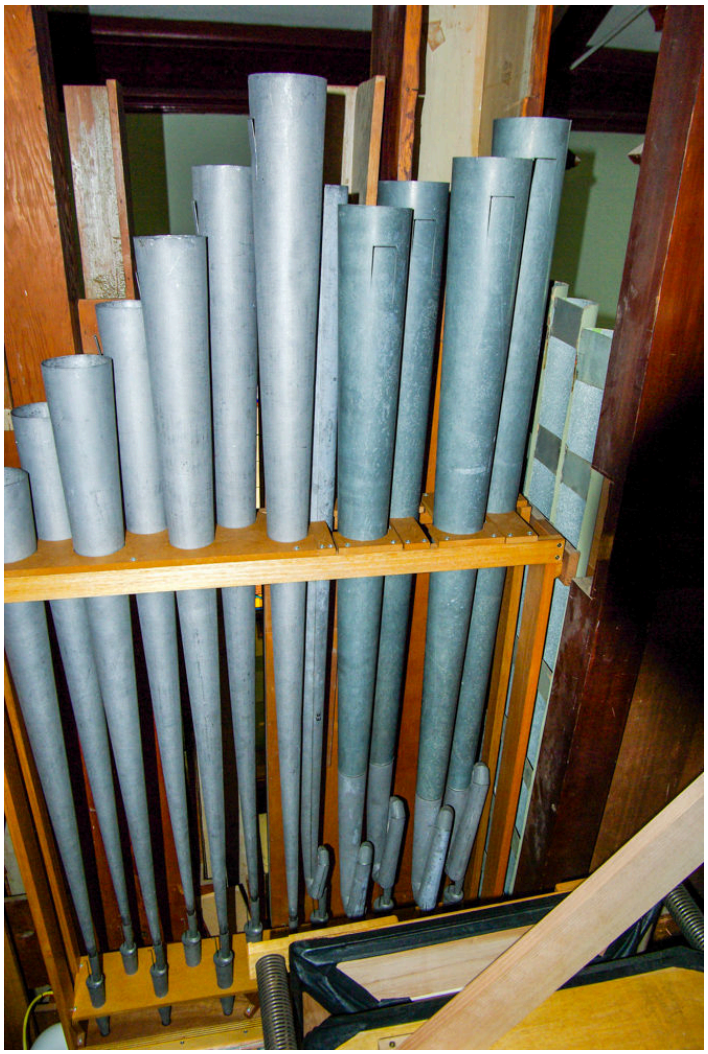
diode logic system mounted in the organ, with a 300 wire cable connecting the console to the organ. A 10 level capture system made by Australian Organ Systems manages the settable pistons and user preferences. Newly built swellshade fronts (2) are controlled by Petersen Swell Shade Controllers. Fluework earmarked for reuse was overhauled, revoiced and retuned, as the pitch of the organ was found to be flat to A440. Most reed ranks were sent to Melbourne for specialist overhaul by Australian Pipe Organs.

Rebuilding of the organ continued in earnest during 2018. New soundboards were installed, cables run and terminated, and winding connected to all the chests. The Pedal Open Wood (12 pipes) was removed and stored in the church gallery. Retrieving them from their temporary resting place, they were placed across the pews and modified to raise their pitch prior to reinstalling them in the side cases. It was a four man lift to guide them back into their positions.

As an example of some of the strange things discovered during the rebuild, the



Great organ chest



Trombone pipes

Open Wood C side pipes were mounted on the chest marked as C#, , and vice versa. Some Pedal Dolce pipes were refitted, but are now dummy pipes. Noting that the Swell had very restricted openings into the church, and that the screens previously mentioned were behind the pulpit rail, several of the wood filled panels across the front of the organ were refitted with metal screens to improve sound egress. This has helped the Swell , especially the new Fifteenth and Mixture which are mounted on a chest suspended from the roof of the swellbox.

With all necessary work completed, the organ was powered up around

September to conduct electrical testing and commence tonal work. This work, coupled with comprehensive tuning, took place in stages as access to some pipework, e.g. the case pipes, becomes very difficult once the major soundboards are populated with pipes. The Great Open bass in the case, and the Open Wood, were the first to be regulated and tuned. Other pipework was added progressively, each rank being regulated as it was installed. Regulating pipework – the business of assessing the power of individual pipes within a rank – requires considerable concentration and teamwork between the organ builders. This was achieved, but it was amazing how being located next to a very busy intersection a truck exhaust outside could sound like a pedal pipe cypher, or a siren sound like a clarinet that had lost its way.

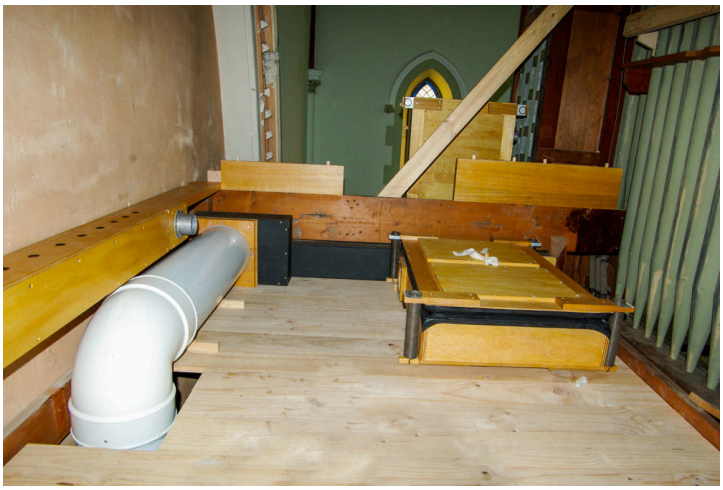
The Choir chest

With completion imminent, the local organists were brought in and encouraged to use the organ for worship, even though it was in a somewhat raw state. Feedback from them allowed finishing touches to be applied and small problems attended to before the official opening.

The organ was re-opened with a recital on Saturday, 10 November, exactly 100 years to the day from when it was officially opened and it was re-dedicated on Sunday, 11 November 2018. The project was filled with challenges and hurdles, but all were met and overcome. The position of stewardship adopted by the Church, which said that our forebears provided the organ and it is our task to preserve it, was pivotal to the success of this rebuild. For this, it is appropriate therefore to accord lasting credit to the Church

Peter Hosking

Photos of the organ reconstruction by Peter Hosking



Winding for the Great and Choir divisions and the Trumpet

This article first appeared in the Organ Music Society of Adelaide Inc. ***Newsletter***, April/May 2019, entitled Payneham Road Uniting Church Organ Rebuild. Reproduced here with the kind permission of Brenton Brockhouse, Editor.