# **GOETZE & GWYNN PROPOSAL**

# **Restoration of the Thomas Elliot Organ at Crick Parish Church**

## SUMMARY

The organ was inspected by Edward Bennett and Dominic Gwynn on November 11th 2003. It is an organ which we have known and appreciated since the 1970s, when we started as organ building apprentices in Northampton. Indeed, I remember the 1978 restoration taking place.

This proposal refers to Canon Nicholas Thistlethwaite's report and recommendations of October 25th 1998. Since it includes a preliminary history of the organ, I have not included one here, except for the occasional remark under the separate headings, either in the light of observations made in the organ itself, or in reference to the research of Canon Hilary Davidson (Choirs, Bands and Organs Positif Press 2003). It also includes a stop list, with the subsequent alterations. To avoid duplication of information I have not re-produced this information in this report.

This report lists the extent of the alterations, which are as few as for any organ of this size in the country, as well as the deterioration that the organ has suffered over the years. Some of this deterioration was corrected in 1978, some was not. Some of the 1978 restoration has stood the test of time, and some was carried out with materials which we would not now use. The standard of the 1978 work was mostly good, but it is evident that it suffered from a condition which most organbuilding in Britain suffered from at that time, a disabling shortage of funds. We hope that the proposed restoration project can overcome that problem.

Nicholas Thistlethwaite's short history refers to the letters published in 1837 by George Cooper, which denigrate Thomas Elliot's organ, as well as the means by which he was paid. It should be added that it is difficult to find any decline in this organ from the high standard of craftsmanship in Elliot's other organs which have survived more or less intact. We have restored two of his organs, at Thornage All Saints and Belton House near Grantham; they were both excellent instruments.

It does not need to be said that this organ is a wonderful survival from its time and place. Thomas Elliot was one of the finest organ builders of his age, and this is one of the few church organs that survive more or less intact from the pre-Victorian period. The recommendations for future action which follow this description of the organ's condition echo the advice of Nicholas Thistlethwaite.

## **GENERAL CONDITION**

The organ is generally in good condition. It is not very dirty, but the dirt is fairly gritty, which is best kept out of the organ. It would help to roof in the Great, at least. It may originally not have been roofed, as the organ stood in a low alcove at St James's Chapel, and the Victorians generally approved of unroofed Great organs. In this church a roof would help to postpone subsequent cleaning and repairs.

There are areas with woodworm holes. It looks as if they are no longer live, but they should be checked and treated, especially if there have been problems elsewhere in the church. There is no sign of moth. The only other sign of pests that we could see were the bats, which have splashed the front pipes and left droppings. The restored front pipes would be varnished, which would help to protect them from the splashes, and a roof would help to discourage droppings on the inside pipes.

There has been mildew (eg. on the ribs of the bellows) but it is not now active, from which one suspects that the organ's environment is now drier than it has been.

The main general concern is corrosion to the metal parts, particularly to key and stop action guide and pivot pins. It is difficult to see how far corrosion has gone without dismantling, but since the key and stop action has considerable play and looseness around the pivots, one might assume that a number of the pins will have to be replaced, and the holes filled and re-drilled. The wire can be replaced with stainless steel.

## PIPEWORK

## **GENERAL CONDITION**

The pipework is generally in good condition. Some of the metal pipes are crumpling at the mouth. They have all been cut down for tuning slides. One or two of the larger wooden pipes, and therefore possibly also the pedal pipes, have had loose joints which have obvious repairs. In other words, there is a certain amount of the usual kind of repair work to the pipework required in old organs.

To what extent this deterioration has occurred since 1978 it would be difficult to say, but it may well be that the repairs in 1978 were not carried out by an experienced pipe restorer. It would help if some of the larger pipes on the chest were stayed, especially when there are GG - BB pipes as well. It would help if the organ were better protected against dirt, which tends to affect the voicing and tuning and therefore invites more interference by the organ tuner. It would also help if the pipes were extended and cut to length rather than tuned at the slide, for the same reason.

## ALTERATIONS

Some of the Great pipework may have been transposed, that is Principal c<sup>1</sup> is marked {b}, but it is not impossible that this was an original afterthought(?). The Principal is made by two different pipe makers, though of the same date and style. These variations may reflect Elliot's workshop management. There are later pipes in the Great Fifteenth and both mixtures.

One rank of the Mixture is almost entirely a later addition. Both mixtures have in their time been re-arranged, and were in 1978 put back, though not entirely correctly by the looks of it. The Sesquialtera is now C 17.19 c#<sup>0</sup> 15.17 c#<sup>1</sup> 12.17 a#<sup>1</sup> 8.12. The Mixture is C 22.29 c#<sup>0</sup> 19.22 (1978) c#<sup>1</sup> 15 (1978).19 a#<sup>1</sup> 15 (always one rank). This may be close to the original arrangement. The pipe marks indicate the original positions of the pipes, and original Elliot mixtures survive at Scone and elsewhere.

The Swell Piccolo 2ft and 1ft stand in the place of the Trumpet (1896?), and the tierce in the place of the Oboe (1978). The Oboe and the Choir Cremona (both  $g^0 - f^3$ ) are now mostly in a box under the organ. They have been flattened and broken, and some have lost bits, but there seems to be some of almost all of the pipes, except for the 4ft octave of the Oboe. The Great Trumpet is present from  $c^0$  to  $d\#^3$ , and would in any case have to be extended down to GG. So all the reeds need new pipes, though all have models from which to start.

# **PITCH AND TUNING**

The pitch would have been slightly lower than today's pitch, perhaps A432 instead of today's standard A440. The tuning would have been a version of meantone, probably somewhat modified to make all keys more or less usable. The pipe lengths were probably altered in 1896 if not earlier to accommodate something like modern pitch and equal temperament. The tuning slides are rusty, and must pre-date 1978.

#### MECHANISM

## **KEY ACTION**

The GG - BB keys date from 1978, presumably because they had been removed in the later 19th century, perhaps 1896. The sharp coverings are old, but the natural coverings were replaced in 1978. They ought to be replaced as they have not been cut or applied well.

The keys do not bed comfortably. There is a great deal of loose play in pivot and guide pins of the keys.

The Swell thumper rail has been cut at  $B/c^0$  and  $e^0/f^0$ . GG - B keys have shorter keys and the pivot points have been moved forward.  $c^0 - e^0$  also have the pivot points moved forward but with long keys, presumably when the Swell compass was extended.

The Choir Bass C - B (originally GG - B) does not work well. The keys rub together and make each other move.

The pedalboard is 1978, with aluminium squares and tracker wires.

The couplers are late 19th century (1896?). The pedal couplers were re-mounted in 1978.

## **STOP ACTION**

The stop action is loose, with worn pivots, particularly on the Great. The holes should be bushed and re-drilled, though it may also be found that the pins are corroded. The Great stop jamb holes are a bit too big, with some springs to push the stop shanks against one side of the holes.

The Swell stop action also has some problems, chiefly because the weight of the vertical rods needs to be supported with springs. A more elegant solution than the current one could be found. There are alterations to the Piccolo stop action at the chest.

## SWELL BOX AND ACTION

The front of the box looks as if it once accommodated a sliding shutter. It now has an unusual version of a Venetian swell, though without altering the action. The swell shutter action has been adjusted, so that the shutters now do not open enough.

## WIND CHESTS

The chests were restored in 1978, effectively, but not in the style of the original. The pallets have thick felt and thin leather instead of the original double layer of thick leather. In the Great, the pallet springs have been replaced, half of them have been moved backwards, and the spring rail altered.

The Great rackboards, replaced with blockboard, are now supported with blockboard top hats.

There is a 1978 Pedal chest for the G# -  $f^1$  pipes, also made with blockboard. The GG -  $c^0$  pipes are on an old (if not original) chest, with a rollerboard from the same period. They are difficult to see behind the reservoir, but superficially they look like the manual chests and rollerboards.

There are no obvious defects in the chests, which were very well made originally.

#### WIND SYSTEM

In 1978 the reservoir was re-leathered. The work was well done, but the gusset leather looks a bit thin. There are leaks in the system, mostly from the trunk seals.

The feeders were removed in 1978, the holes covered with blockboard patches. There are one or two traces of the original blowing system, which seems to have operated most recently from the treble side, but has also been operated from the bass side. The blower is older than 1978, and is showing its age.

## CASEWORK

There would have been a roof, at least over the central tower, which had the royal arms mounted on it. The brackets to the side towers have been reduced, presumably to ease passage, perhaps when the organ came to Crick.

The front pipe toes have settled a little, but not seriously. The pipes have been covered with gold paint, over the original gilding. The side tower dummies are still gilded, and would have to be matched. It may be that the paint can be removed without removing the gilding underneath, in which case it would need repairs. A clear varnish would not be inauthentic and would protect the surface against bat splashing.

The case needs hardly any repair work, though the finish does.

# CONSOLE

The keybed and the support rail under the keys have been chopped away, presumably when the first full pedalboard was introduced. The pedal recess and kneeboard are now stained plywood.

The console now looks tatty, with switches, lights, disused hardware and worn and faded varnish. The blower switch could be re-sited and more discreet lighting provided. The rails above the keys have been battered by finger nails, particularly the name plate, all of which could be repaired. The bench is later and looks anachronistic.

Some of the stop knob labels are either new or have been re-engraved. This work is well done. Some of the labels are now worn and have become indistinct. They can also be re-engraved, or perhaps replaced with copies.

#### RECOMMENDATIONS

We approve of the idea of returning the organ more or less to the condition it had when it came to Crick. This would, as Nicholas Thistlethwaite suggests, make it more adaptable for modern usage, but it also accords with alterations made to the layout. There is something appealing about returning the organ to its earliest condition at Crick. It would be very close to the state in which Elliot left it.

The stop list would be as was originally. The Great Fifteenth and mixtures would be filled out with new pipework in the original style. The Great Trumpet would be completed. The Choir Cremona and Swell Trumpet and Hautboy would be restored and or reconstructed. The GG - BB pipes would be made new. Their positions on the Great and Choir chests are still vacant. All these pipes would be made so that they are as close as possible to the originals. The rest of the pipework would be cleaned and repaired.

If the 1841 option is to be followed, the Pedal organ would be GG -  $c^0$  (16 notes) with open wood pedal pipes. If there is to be a compromise, it would concern the pedal, and it may be decided that it would be appropriate to restore the 1896? pedal, with C - f<sup>1</sup> (30 notes) and a sub-octave Bourdon. That would be a subject for negotiation with the funding bodies. It would be possible to insert the 1896? pedalboard, action, chest and pipes, without prejudicing a future return to the 1841 option. The estimate is for the 1896? option.

The question of pitch, tuning and tuning slides, is also not straightforward. There are distinct advantages to lengthening the pipes and then cutting them to length. The main one is stability of tuning. The less the organ is tuned, and the less it is disturbed, the less it needs to be tuned. That is true, probably until the pipework starts to get seriously dirty, at which point the dirt starts to effect the tuning. On the other hand, lengthening the pipes is obviously much more expensive than leaving the pipes with tuning slides. And if the pipes are to be cut to length, the pitch and tuning are more or less fixed, and a restoration would require the pitch and tuning to be as they were originally. The tuning would be usable for modern purposes, but the pitch would be too low for modern wind instruments. I have included the cost of extending all the pipes, cutting them to length and tuning them in the estimate.

The key compass would be restored to GG AA -  $f^3$  (58 notes) for Great and Choir, and  $c^0 - f^3$  42 notes) for the Swell. There was originally a pedal coupler, and perhaps an intermanual coupler (Swell-Great), but no more. This is what has been estimated for. The provision of a full set of couplers would be inappropriate if the 1841 organ is to be followed, as they do affect the key action, both for touch and reliability. An octave coupler is not likely to appeal to funding bodies willing to fund a restoration of Thomas Elliot's organ. As they are at the moment, the couplers are obviously not satisfactory.

The key and stop actions are the parts of the organ in the worst condition, and would need the most thorough-going repair. New natural key coverings would be provided, either in ivory if appropriate second hand ivory can be found, or in bone. A new pedalboard would be made, according to the early Victorian or later Victorian style, depending on the decision made about the compass. A new bench in simple classical style would be made.

The wind chests would be dismantled and repaired, with new pallet leather in the style of Elliot. The pallet springs may be replaced with brass springs in the style of Elliot, but perhaps only after comparing the touch with other Elliot organs at e.g. Ashridge and Scone.

A new electric blower would be provided. The pumping handle was operated from the treble side. At the moment the treble pipes of the Pedal Bourdon are where the lever would have been, and the blower box is where the blower would have stood. It should be possible to accommodate a blower box, a Pedal organ to f<sup>1</sup>, and feeders with mechanism.

The case and console would be restored as described above.

Dominic Gwynn November 3rd 2004

## **BREAK DOWN OF ESTIMATE**

Research and design Dismantling (incl. transport and storage)	£7,700.00 £6,200.00
Keyboards	£7,170.00
Key action Stop action	£4,400.00 £2,640.00
Wind chests	£14,320.00
Wind system	£8,280.00
Swell box and action	£880.00
Casework: repairs and finish (incl. front pipes and console)	£7,760.00
support structure	£1,130.00
Pipework: metal pipes	£5,780.00
Pipework: wood pipes	£3,670.00
Reed pipes	£8,520.00
Voicing	£5,280.00
Pitch	£1,760.00
Workshop assembly	£13,200.00
Installation (incl. packing and transport)	£10,730.00
Voicing/tuning	£5,280.00
Total	£114,700.00
VAT	£20,072.50
Total include VAT	£134,772.50

This is a fixed sum; it includes an update of 6.73% according to the RPI ('all-items') between the date of the 3rd November 2003 estimate and this estimate, and an estimated increase of 5% for the 20 months up to the anticipated start of work. There should be a contingency sum of 10% ( $\pounds$ 11,470 + VAT =  $\pounds$ 13,477.25) to allow for unforeseen rises in the cost of work, particularly any that appear when the organ is dismantled.

Exclusions: local accommodation during site work (4 people for 4 weeks x £45 a day =  $\pounds$ 3,600) preparation of the gallery for the organ, scaffolding to lift organ parts onto gallery (estimated cost £2,000) provision of electricity to the wind system and lighting within the organ (estimated cost £1,000)

At present we have work till July 2008. This project would take us about six months.

Dominic Gwynn - November 2004