The Bath & Wells Diocesan Association of Change Ringers

President: THE RIGHT REVEREND THE LORD BISHOP OF BATH AND WELLS

The BELL FUND of the Association is Registered Charity No. 273962
The Tower Adviser is John Hallett MSc CEng MIMechE MIET
The Assistant Tower Adviser is Bernard North BSc. CEng. MIMechE.

Mrs Sue Thomas,
Churchwarden
Woodview,
The Triangle,
Kingston Seymour
North Somerset, BS21 6XD

9th February 2024

Dear Mrs Thomas,

Kingston Seymour, All Saints, Initial Tower Inspection

The B&WDACR Bell Fund Administrator, Margaret Lee, requested a Tower Advisory Service site visit and a report to be produced for the PCC. I visited and carried out this inspection on 22nd January and was assisted by John Pilkington, a local ringer from Kingston Seymour tower. The inspection was requested as a general review of the bell installation and to consider a proposal for the installation of rope guides to improve the handling of the bells.

All Saints, Kingston Seymour, North Somerset

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Introduction

All Saints, Kingston Seymour currently has a peal of 6 bells, Tenor 17-0-7 in E, of mixed founders and age (see table below).

George Massey's book, 'The Church Bells of Somerset', gives a detailed account of the origins of the bells in Kingston Seymour church together with some history regarding later work on the bells. From his account, there were originally five bells in the tower until 1930 when a new treble bell was added by Mears & Stainbank to augment to a peal of six bells.

The bells are hung in a substantial two tier, cast iron frame installed in 1908 by Llewellins and James of Bristol.

The bells were retuned and rehung on modern fittings by Mears & Stainbank in 1952. There was a further minor overhaul carried out by Whites of Appleton in 2007.

The tower is listed in Dove's Guide as follows: -

Kingston Seymour, Som, All Saints, **6**, 17-0-7 in E.

The bells are a ground floor ring with a long draught, approximately 30ft to the ceiling. This can make the bells difficult to ring well, particularly for an inexperienced ringer or for teaching learners. The treble and 2nd bell of the peal are particularly problematic.

There is a proposal to fit rope guides at a suitable location to improve the handling of the bells. At the time of the inspection, no quotations or proposals had been obtained. There is no other work proposed on the bells at this stage.

Inspection Observations

1. The Tower

The tower is 14th Century, relatively low in construction and has a pieced parapet with a recessed spire. There is a northeast turret staircase to the roof accessed from inside the church.

The bells are rung from the ground floor with a long rope draught leading to the bells. The bells are hung in a two-tier frame just below the spire and adjacent to the sound louvers. There is a small intermediate chamber above the ringing chamber ceiling.

Entrance to the Ringing Chamber is from a door in a screen at the rear of the nave. There is also an external door to the ringing chamber at the base of the tower.

The sound louvers are sealed with wooden boarding to prevent ingress of birds and debris, but this provides only limited sound control.

The church is situated in the centre of the village with a church yard and some adjacent housing The church is very much part of the village community and is well supported.

There is a clock installed in the tower striking the hour on the tenor bell.

2. The Installation

The details of the bells are listed in Dove's Guide as follows: -

All Saints, Kingston Seymour, Somerset							
Bell	**Weight**	**Nominal**	**Note**	**Diameter**	**Dated**	**Founder**	**Canons**
1	5-0-20	1098.5	C#	30.5"	1930	Mears & Stainbank	F
2	6-0-3	982.0	B	32.0"	1632	Roger I Purdue	R
3	6-2-0	877.5	A	34.5"	1632	Roger I Purdue	R
4	8-0-4	819.5	G#	36.0"	1632	Roger I Purdue	R
5	10-1-12	740.5	F#	41.00"	1714	Edward Bilbie	R
6	17-0-7	656.5	E	47"	1684	Roger and Richard Purdue	R

The tenor bell is of listed status as possibly are also the 2nd, 3rd and 4th bells due to their age.

The bells are hung in a cast iron frame supplied by Llewellins and James in 1908.

3. Ringing Chamber

The bells are rung from a ground floor ringing chamber. When not in use, the ropes are kept high on a spider with access via a locked cupboard. Access to the Ringing Chamber is from an unlocked door in a screen at the back of the nave.

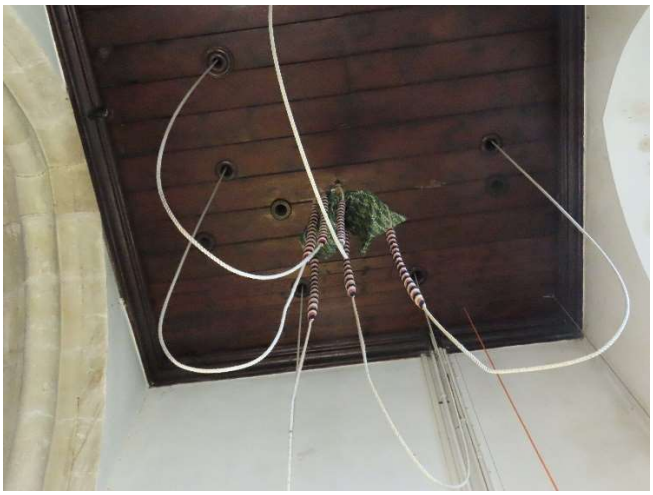
The ringing chamber has a high ceiling and there are no rope guides installed. The rope circle is satisfactory and there is sufficient space around each rope.

Access to the bells is from a locked door into a turret stairway in the corner of the ringing chamber.

The ringing chamber is open to the nave of the church above the screen and hence is well ventilated. It is well lit from a large window at the back of the tower and from appropriate artificial light.

No sound measurements were made, but from experience of ringing these bells the sound levels are satisfactory in the ringing chamber.

At some stage there appears to have been an Ellacombe apparatus installed as there are hammers on the bells and ropes leading into the intermediate chamber. There was no Ellacombe frame apparent at the time of the inspection.



4. Intermediate Chamber

The intermediate chamber is accessed by 31 steps up from the ground floor. The stair way is well lit, and the steps are in good condition. There is no handrail fitted.

The intermediate chamber has a low ceiling, approximately 8ft high. The ceiling of the intermediate chamber is part of the grillage that supports the bell frame and forms the floor of the bell pits.

The ropes of the treble and second bells are drawn sideways slightly to form the rope circle below. This possibly contributes to the challenging handling of these two bells. The ropes for the remaining bells fall straight, including the 5th rope that falls through the clock case.

Ground pulleys are fitted to the treble, second and fourth bells. There is also a ceiling pulley on the treble and 4th bells. All pulleys rotated freely and were fitted with modern plastic style rollers that appeared in good condition. The rope on the 2nd bell did not quite align properly with the centre of the pulley.

There is a clock installed in the Intermediate Chamber supplied by Dell of Bristol dating from 1869, striking the hour on the tenor bell. The clock is fully functional and in good condition. It is electric wound from a system provided by Smith of Derby.

5. Bell Chamber

Access to the bell chamber is from a further 13 steps up from the Intermediate Chamber. The spiral staircase throughout the tower is generally in good condition with no significant wear to the steps. There is no lock on the door leading into the bells.

Entry to the bell chamber is through the lower tier. A narrow wooden ladder on 20 rungs is provided, fixed in position across the end of the lower frame to access the upper tier. Access is a tight squeeze.

The general appearance of the bell chamber was satisfactory for a bell installation with no signs of water ingress or significant accumulation of debris.

The sound openings were covered with wooden boarding that provided good protection from the ingress of birds and debris, generally in good condition. It is doubtful if this provides any significant sound control.

The spire is directly open above the bells and looked in good condition with no sign if water ingress.

The bell chamber is lit by a number of bulkhead style light fittings appropriate for the conditions.

6. Bell Installation

a) Bell Frame

The bells are hung on two tiers in a cast iron frame supplied by Llewellins and James in 1908, possibly installed as a frame for six bells. The 2nd, 5th and tenor bells are on the lower tier with treble, 3rd and 4th bells on the upper tier. The upper frame sits on a concrete ring beam.

The frame was generally in good condition and had been well painted possibly in the 2007 overhaul.

The main supporting structure under the frames were RSJ beams that were well braced with no signs of corrosion. All wall sockets appeared in good condition with no evidence of decay or frame movement.

b) Headstocks

The bells are hung on cast iron headstocks supplied Llewellins and James during the 1908 rehang. They are generally in good condition some minor spots of corrosion in a few places, particularly in the upper tier. Whilst not significant at this stage, repainting the headstocks in the next two to three years would prevent this becoming more significant.

All gudgeon pins appeared satisfactory from limited visual inspection only.

c) Wheels

The wheels are generally in good condition throughout the installation. There were no signs of damage or decay on any of the wheels. The wheels possibly date back to the 1952 rehang by Mears and Stainbank. Treatment with a suitable timber preservative whilst not urgent, would be appropriate in the medium term of the next two to three years.

d) Bearings

The bells are all hung on modern ball bearings supplied by Mears and Stainbank during the 1952 rehang. These will have been overhauled during the work carried out by Whites in 2007.

The general condition of the bearings visually looked good with no signs of grease leakage.

e) Bells

As a peal, all of the bells have a sound ring with no evidence of any cracks or damage. They were retuned by Mears and Stainbank during the 1952 rehang and are of reasonable tone bearing in mind the age of some of the bells.

The treble is flat topped as cast during the 1930 augmentation by Mears and Stainbank. All the other bells have had their cannons removed during the 1908 rehang by Llewellins and James.

There are no signs of cast in crown staples as these were possibly removed by Mears and Stainbank during the 1952 retuning.

There was no evidence of excessive clapper marking on any of the bells.

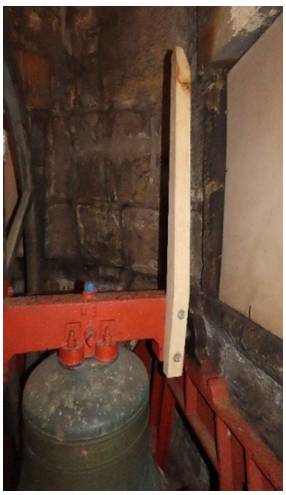
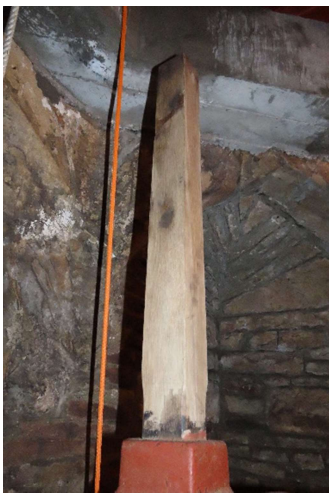
f) Clappers

The clappers are a mixture of wrought iron and SG Iron type possibly dating back to the 1952 rehang. The clappers were refurbished by Whites in 2007 and are still in good condition. There is no excessive wear or movement, and all secondary locking of crown staples was in place.

g) Stays & Sliders

The bells on the lower tier are fitted with conventional stays and sliders. The bells on the upper tier are fitted with short stubby stays and a swinging metal stop arrangement in place of a slider. This is presumably due to limited headroom caused by the proximity of the spire.

The stays and sliders throughout the peal were in generally in satisfactory condition with no signs of significant damage apart from the 5th bell (see later). However, the slider runners and the ends of the sliders are showing some wear that will need some attention in the next few years.

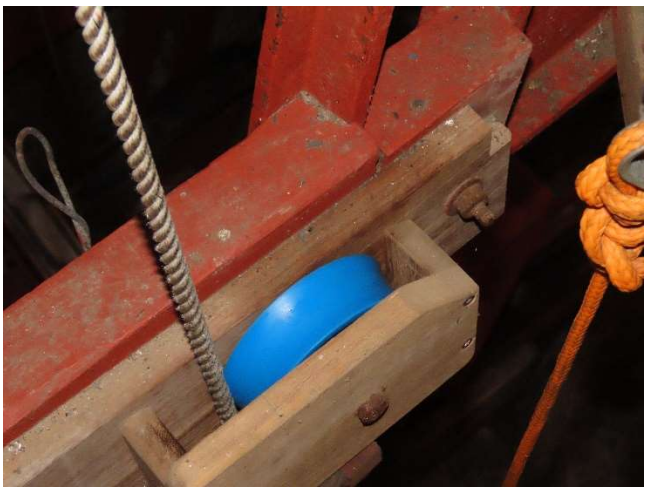

There are reports of occasional problems with the 5th slider where it occasionally jumps out of position particularly with rough handling. The hand stroke end stop of the 5th slider runner does show some damage which might be the cause of this problem. Replacement or repair of this runner should correct the problem. There is also significant wear at the slider rubbing surface and around the slider pin allowing it to rock slightly. Slider replacement would help resolve this issue.

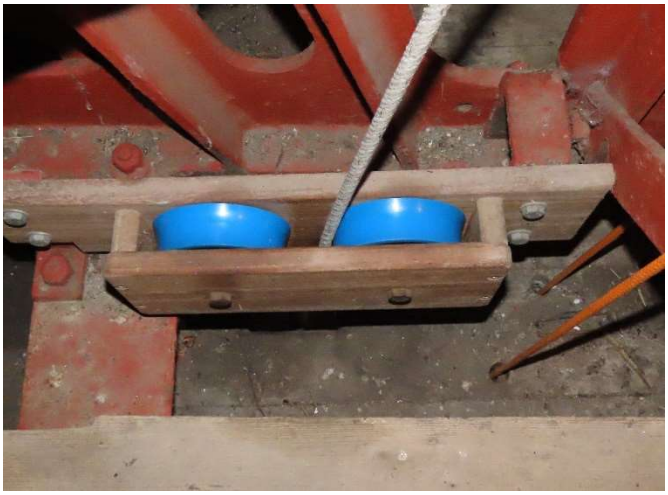

h) Ropes

The ropes throughout the peal have non-stretch terylene tops with conventional sallies and tail ends. All ropes were in good condition at the time of the inspection. All were correctly fitted and appropriately adjusted for length. Leather sleeves are fitted to some of the bells where the rope passes through the garter hole in the wheel.

i) Ground Pulleys

The ground pulleys were generally in satisfactory condition and rotated freely. All were fitted with plastic pulleys replaced possibly in the 2007 refurbishment.





7. Bell Handling

The bells are in regular use by the local band and go reasonably well. The long rope draught does make the handling of the bells challenging for learning and less experienced ringers, particularly the treble and 2nd bells of the peal.

There is a proposal to install rope guides which would significantly improve the situation. There is a large wall mounted coat of arms which is quite historic and would limit the distance the rope guides can be installed below the ceiling (approx.6ft below). However, the height of the sally of the tenor rope when set at back stroke suggests the rope guides can be installed just above the coat of arms without changing its location. Ideally, the sally should not go all of the way through the guide. It is also noted that the treble and 2nd bells are quite significantly drawn in the intermediate chamber and the installation of rope guides would improve the fall of the ropes. The installation of the rope guides is therefore fully supported.

8. Lightning Conductor

A lightning conductor is fitted to the tower and its regular inspection was in date. There was no evidence of an earthing strap fitted to the bell frame.This should perhaps be checked with the contractor who deals with the lightning conductor and a suitable strap installed if not already fitted.

Discussion and Recommendations to PCC

The general condition of the bells and installation were found to be satisfactory for the continued use of the bells at the time of the inspection. The general 'go' of the bells is satisfactory, however the long draught does make them challenging for less experienced and novice ringers. It is considered that the proposal to install rope guides would significantly improve this situation.

There are a number of minor observations that will require attention in the medium term. Particular attention is drawn to the following items that should be considered in any plans for refurbishment works. These are not in any particular order of priority.

a) Attend to minor corrosion spots on headstocks in the medium term before these become more significant. Re-paint headstocks with appropriate paint for metal structures.
b) Investigate 5th slider for cause of occasional jumping out of position. The slider runner hand stoke end stop is slightly damaged and the slider itself is quite worn. Consider replacing the slider and repairing the slider runner to correct this issue.
c) Consider replacement of the sliders and slider runners throughout the peal to correct excessive wear. Whilst not urgent, attention to this may be required in the medium term.
d) Consider applying appropriate timber treatment to the wheels, stays and sliders in the next two to three years.
e) Consider installation of rope guides to improve handling issues caused by the long draught.

Conclusions

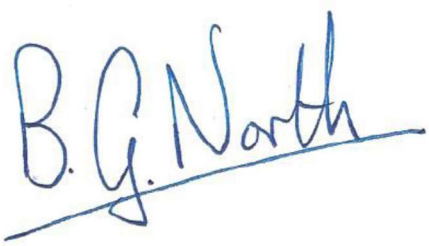
The bell installation at All Saints, Kingston Seymour, at the time of the inspection was generally in a satisfactory condition for the continued use of the bells.

The proposal to install rope guides will significantly improve the handling of the bells and is supported as an appropriate way forward to correct this problem. This is within the scope for grant application to the Bath & Wells Diocesan Association of Change Ringers Bell Fund.

Attention should be given to the points made above to keep the bells in good order for the foreseeable future.

I would be happy to discuss any points made in this report should any further help or clarification be required.

Yours sincerely,



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Bath & Wells Diocesan Association of Change Ringers

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