**Tower and Bells Risk Assessment**

After an Extended Period of being Out of Use

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| **Name of Tower** |  |
| **Date of Assessment** |  |
| Risk Assessment carried out by: |  |
| * Ringer |  |
| * Church Authority |  |
| * Church Authority/Ringer |  |

| Part 1 - Points to Consider  **Prior to conducting a risk assessment on the condition of a tower and bell installation after a period of their non-use** | **Issue & Mitigation**: by Whom, by When | **Completed**: by Whom, Date  **Further Actions**: by Whom, When |
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| 1.1 Risk Assessment Considerations |  |  |
| Who will be conducting the pre-return inspection and risk assessment? |  |  |
| Tower and bell inspections should be conducted by at least two people, one of whom should normally be the person responsible for health and safety at the church and is therefore familiar with the environment and the likely hazards.  One should be an experienced ringer and therefore be able to advise on ringing related matters.  Where such people are unavailable, then suitably experienced person in such environments and likely hazards, and who is acceptable to the church, should complete the risk assessment.  They should be accustomed to and capable of moving around the tower and bell chamber. |  |  |
| The person responsible for the church health and safety will not necessarily be the person best qualified to carry out the risk assessment of the tower and bell installation.  They should work together either in the tower or afterwards to report and record the findings. |  |  |
| If in any doubt about the knowledge required, contact your local ringers’ guild or association, or a professional bell hanger or contact the Stewardship and Management Workgroup at smInf@cccbr.org.uk for advice |  |  |
| 1.2 Access to the Tower |  |  |
| Permission must be granted by the incumbent and/or church wardens prior to the checks |  |  |
| Can the church be entered safely? |  |  |
| Has the building been checked and cleaned in accordance with current Covid-19 cleaning procedures, as applicable? |  |  |
| Will other users be in the building while the checks of tower and bells are carried out? |  |  |
| Who will unlock the church and how will social distance and hygiene be maintained? |  |  |
| Can the tower be inspected safely? |  |  |
| Are ladders, trapdoors and walkways in good condition and safe to use?  (NB Working at height regulations) |  |  |
| Have the lights and emergency lighting been checked recently? |  |  |
| Two people should normally be present when working in a tower or bell chamber. Can social distance and hygiene be maintained, if required? |  |  |
| If a lone person is to carry out the inspection, how will their safety be assured?  e.g. by a second person remaining as close as possible and within hearing distance |  |  |
| Who and how would anyone be alerted if there is an accident? |  |  |
| What would the rescue plan be? |  |  |
| Consider having an assistant on the phone throughout the inspection, they can take notes of the findings and respond if there is an accident |  |  |
| What general hazards may be present? |  |  |
| Could an unauthorised person have been into the tower and moved things, done damage or used anything (e.g. Ellacombe chiming apparatus)? |  |  |
| Have bees, wasps, birds, rodents or other animals got in and caused a hazard  (physical or biological)? |  |  |
| Is there any sign of water ingress, which may have caused floors to become slippery, caused an electrical hazard or even have caused structural damage? |  |  |
| 1.3 The Ringing Room |  |  |
| How were the bells left? |  |  |
| Is there ANY possibility that any of the bells are up?  If so, consider how you can check if it is safe to lower them. (See *1.4 Bell Chamber*) |  |  |
| Was there any necessary maintenance or repair work pending when the bells were last used, which has not yet been done? |  |  |
| Are the ropes on a spider, on hooks or hanging loose? |  |  |
| What other hazards may be present? |  |  |
| Are there any trip hazards? e.g. ringing boxes or loose ropes, carpet edges, etc. |  |  |
| 1.4 Bell Chamber |  |  |
| Is it safe to enter the bell chamber to carry out a complete inspection? |  |  |
| Are ALL the bells down? |  |  |
| If not, can a visual inspection be carried out to ascertain that it is safe to lower them? |  |  |
| Are the clock chimes pulled off? |  |  |
| Could animal activity have created a hazard?  e.g. sticks pushed through netting and causing a trip hazard on the frame or obstruction to a moving bell |  |  |
| How accessible are the bells? |  |  |
| Are ladders and platforms in good condition? Consider working at height regulations |  |  |
| 1.5 Intermediate Room(s) |  |  |
| Are there any intermediate room(s) that the ropes pass through? |  |  |
| Is there any evidence of bird, insect, rodent or water ingress? |  |  |
| Are there any items obstructing the path of the ropes? |  |  |

| Part 2 - Points to Check  **Prior to ringing bells after an extended period of non-use** | **Issue & Mitigation**: by Whom, by When | **Completed**: by Whom, Date  **Further Actions**: by Whom, When |
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| 2.1 Access to the Tower and General Considerations |  |  |
| Do the lights and emergency lighting function correctly? |  |  |
| Is the electrical installation as it should be? |  |  |
| Has the circuit breaker tripped? If so, why? |  |  |
| Are steps and ladders clean, undamaged and secure? |  |  |
| Are doors and trapdoors safe and secure? |  |  |
| Do doors and trapdoors move as easily as they should? |  |  |
| Do latches function correctly? (Especially on trapdoors) |  |  |
| Are handrails and balustrades secure and undamaged? |  |  |
| Are there any signs of unauthorised access? |  |  |
| If so double check EVERYTHING and make no assumptions |  |  |
| Are there signs of animal activity, such as bees, wasps, birds or other animals which may have got in and caused a hazard (physical or biological)? e.g. sticks pushed through louvres by birds and causing a trip hazard on the frame or obstruction to a moving bell |  |  |
| Are there signs of water ingress, which may have caused floors to become slippery, caused an electrical hazard or even have caused structural damage? |  |  |
| 2.2 The Ringing Room |  |  |
| Is there ANY possibility that any of the bells are up? |  |  |
| If so, consider how you can check if it is safe to lower them.  (See *2.4 Bell Chamber*) |  |  |
| Are the clock chimes pulled off or not? |  |  |
| Does the clock chime mechanism appear to be working correctly at this level? |  |  |
| Visually inspect ropes for rodent damage and other problems |  |  |
| Are the Ellacombe hammers released? |  |  |
| Was there any necessary maintenance or repair work pending when the lockdown began, which has not been done yet? |  |  |
| 2.3 The Clock Room |  |  |
| Has the clock been would? |  |  |
| If the clock has not been wound, it may have run down and the weights bottomed out.  Before and during the first winding, the wire ropes should be checked to ensure that they have not slipped off the pulleys |  |  |
| Is there anything in the clock room obstructing the passage of the bell ropes? Especially if ropes pass through the clock or clock case |  |  |
| Visually inspect ropes for damage |  |  |
| Does the chiming mechanism appear to be in order at this level?  i.e. no stray or broken hammer wires which could indicate a hammer not pulled clear of a bell |  |  |
| Do any guiding pulleys run freely? |  |  |
| Do rope guides and slap boards appear to be in order? |  |  |
| 2.4 Bell Chamber |  |  |
| Are ALL the bells down? |  |  |
| If not, can a visual inspection be safely carried out to ascertain that it is safe to lower them? |  |  |
| Is there anything inside any raised bell? e.g. rainwater |  |  |
| Is there anything in or near the pit or frame which might obstruct the bell in its movement? |  |  |
| Are any clock or Ellacombe hammers clear of the path of each bell and its fittings? |  |  |
| Are the ropes sufficiently sound, especially at the garter hole, and attached securely to the wheel spokes |  |  |
| If any of the bells are up, lower them with caution in all cases before proceeding to the rest of the inspection |  |  |
| Is the installation free of any debris that may impede the movement of the bells? |  |  |
| Check for fallen masonry or woodwork, fallen sound control materials and debris brought or pushed in by birds or other animals. e.g. nesting material. |  |  |
| Are any sound control mechanisms in good order and undamaged? |  |  |
| Are any sensors and associated cables, etc. secure and undamaged? |  |  |
| Is the frame bonded to the lightning conductor? Check for loose connections or damaged/missing tapes |  |  |
| Has any work been done in the tower since last ringing? |  |  |
| Check that work has not placed or fitted anything in the path of any bell, stay or rope.  e.g. phone mast cables running through the spokes of a bell wheel (yes, it has happened!) |  |  |
| 2.5 Bells |  |  |
| Are all the stays present and undamaged? |  |  |
| Are there any cracks where each stay meets the headstock (and/or U-bolt where present)? |  |  |
| Do Hastings stay dinglers move freely and will they engage along the metal quadrants? |  |  |
| Do the sliders move freely? |  |  |
| Do all ground pulleys run freely? |  |  |
| Are all component parts of every wheel intact - spokes, shrouding, soles, halving bolts, etc. |  |  |
| Are wheels and stays secure on the headstocks? During hot weather, timber components will shrink and may become loose (stays especially) |  |  |
| ***Note****: When checking tightness of bolts with a spanner always test by loosening the nut, then re-tighten if necessary.  That way you won't strip threads or over tighten anything.* |  |  |
| Are the clappers secure? Particularly on bells with timber headstocks. |  |  |
| Are the gudgeons or headstock bolts damaged or loose? |  |  |
| Are all clock hammers pulled well clear of the bell and its fittings? With the clock hammers released (and wearing ear protection) check that the hammers are just clear of the bell and not resting on it. A 6 to 12mm (1/4 to 1/2") gap is usual |  |  |
| Are there any undue creaks or scraping noises when each bell is swung gently? |  |  |
| Does each bell swing for a while after being given a push?  If swinging stops very quickly the bearings may need attention (but check again for other obstructions) |  |  |
| Check that plain bearings are well oiled.  Do not attempt to grease or oil ball race bearings |  |  |
| Are the frame tie rods tight (in wooden frames only)? Dry weather may have caused tie rods to become loose.  Check that nuts are not at the bottom of the thread before tightening them and, if they are, insert washers to act as spacers |  |  |
| Are the ropes free of wear or damage?  Check especially at the garter hole and above double ground pulleys |  |  |
| Are any garter sleeves and bobbins secure and in place? |  |  |
| Are ropes securely attached to upright spokes and ends tucked in? |  |  |
| If all seems sound, raise each bell individually |  |  |
| Check that it feels OK and that no undue noises are heard |  |  |