

BISHOP'S CASTLE TOWN COUNCIL

HEALTH AND SAFETY POLICY FOR CLOCK WINDING

Introduction

Local Councils are, like all other employers, under a duty of care to ensure so far as reasonably practicable, the health, safety and welfare at work of all their employees. For the purpose of this policy all volunteers are included as employees. The obligation includes amongst others, the maintenance of a place of work and a working environment in a condition which is safe and without risks to health. There is also a duty on employees to behave at work so as not to put at risk other employees or members of the public.

Controlling dangers at work is no different from tackling any other task – recognising the problem, knowing enough about it, deciding what to do, putting the solution into practice. This policy sets out how the council manages health and safety in the organisation.

1. GENERAL STATEMENT OF POLICY

1.1 Our policy is to provide and maintain safe and healthy working conditions, equipment and systems of work for all our employees and to provide such information, instruction, training and supervision as they need for this purpose.

1.2 The allocation of duties for safety matters and the particular arrangements which we will make to implement the policy are set out below.

1.3 The policy will be kept up to date, particularly as the Council's activities change in nature and size. To ensure this, the policy and the way in which it has operated will be reviewed every year by the Council. Although risk assessment is a continuing process, it shall form part of the Councils annual review.

2. RESPONSIBILITIES

2.1 Overall and final responsibility for health and safety in the Council and for compliance with the Health and Safety at Work etc. Act and Regulations** made under the Act and the Occupiers Liability Act is that of the Town Council of Bishop's Castle. The Clerk is responsible for this policy being carried out at all the Council's Premises.

2.2 All employees have the responsibility to co-operate with the Council to achieve a healthy and safe workplace and to take reasonable care of themselves and others.

2.4 Whenever an employee or Councillor notices a health or safety problem which they are not able to put right, they must tell the Clerk.

2.5 Consultation between the Council and employees is provided by immediate day to day discussion with the Town Clerk.

2.6 The Accident Record Book is kept in the Town Hall.

3. FIRST AID

3.1 First Aid boxes are located in the Town Council Office.

4. BISHOPS CASTLE TOWN HALL CLOCK

The Town Hall clock is an early flatbed turret clock movement by Simmonds of Warwick dated 1860. The movement has two manually wound trains running the 'going' and the quarter striking, designed to run for 8 days.

The going train on the left of the mechanism runs the pin wheel escapement which impulses the long pendulum swinging below. The going train also turns the hands on the three clock dials and releases the striking train on each quarter.

During winding, power to the escapement is maintained by a mechanism called 'maintaining power' which keeps the escape wheel turning during winding. This prevents damage from the heavy pendulum to the vulnerable pin wheel as well as keeping the clock hands moving during winding.

The photograph shows the escape wheel or pin wheel at 'A' with the two steel pallets which connect to the pendulum between two of the pins. The maintaining power lever is shown at 'B'. It is in its lifted position, to give power to the escapement during winding.



The striking train is on the right of the clock mechanism and on the quarters strikes one, two or three 'ting-tangs' on the two bells in the cupola on the top of the clock tower. On the hour the number of hours is struck on the larger bell.

5. ACCESSING THE ROOF SPACE

- a) Only persons who are trained in accessing the clock tower safely and winding the clock may wind the clock.
- b) The clock tower may only be accessed via the door through the Town Council office. Care should be taken to climb the ladder inside the metal surrounds. The wooden handrails should be used for support when using the ladder. The metal surrounds are present to prevent falling back off the ladder and at no time should be used to support your body weight or as any other support.
- c) The door to the roof space must be kept locked when not in use.
- d) Anybody entering the roof space must keep to the wooden paths and not attempt to climb over the hand rails.

6. WINDING THE CLOCK

The clock is still manually wound (unlike many Town Hall and Church clocks which are now automatically wound by an electric motor) and significant physical effort is needed to wind up the two heavy weights which run the clock.

The clock mechanism is protected by a wooden case. Although the clock can be wound in its wooden case (dropping the flap on the front of the case), it is better to remove the front of the case and lift the lid, in order to see the mechanism while winding. When lifting the lid, check that the three wires that run up to the bells do not catch on the lid, or the bells will sound.

The clock needs winding once a week. Each winding barrel turns five times a day as the weights drop, so once a week, each barrel needs winding 35 turns to bring the weights back up. The clock is designed to run for 8 days, but a thicker line has been put on the striking weight which runs out in seven and a half days.

To wind the striking train, put the winding handle on the winding square of the striking barrel (right hand barrel) and turn anti-clockwise to wind the line round the barrel. If the clock has run for 7 days, then approximately 35 turns will be needed. The thicker line used on the striking barrel wraps round the barrel after around 30 turns and winding gets (even more) difficult.

Don't wind the striking train in the middle of striking or when just about to strike.

At around two minutes past the hour, the clock mechanism produces a loud 'bang' as the striking train changes from hour striking to quarter striking.

To wind the going train, lift the maintaining power lever ('B' on the photo) and check that it is dropping and the escape wheel is still turning. Occasionally, the maintaining power jams

the escape wheel and stops it turning. If this happens, quickly lift the maintaining power lever, hold it up for a few seconds and release it again. Wind the going barrel (left hand barrel) approximately 35 turns with the winding handle. Ensure that the maintaining power lever is dropping and escape wheel turning while winding. If the maintaining power lever finishes dropping in the middle of winding, lift it up again.

On both barrels, count the number of winds or recognise when the barrel is nearly fully wound so that the final winds can be done slowly and the weights do not hit their upper limits too strongly.

The clock will stop if either barrel becomes unwound. If the strike train becomes unwound (after seven and a half days), the strike mechanism jams the going mechanism and the clock stops. Try to avoid the clock stopping by becoming unwound as the escape wheel can be damaged. If the clock has to be stopped, it should be stopped by physically stopping the pendulum from below the clock.

7. ADJUSTING THE HANDS

The clock hands can be moved forwards but not backwards. If the clock has gained and needs the hands adjusting, stop the pendulum for the required time. To restart the pendulum, move it gently until the mechanism starts 'ticking'.

If the hands need moving forward, fit the small adjuster key on the hand adjuster square (between the two winding barrels) and very carefully turn the adjuster anti-clockwise. This will move the hands on the three dials. Let the clock finish striking on each quarter when moving the hands forward. It is not advisable to move the hands more than one hour forward on the adjuster. Better to stop the clock and restart when the correct time is reached.

It is difficult to accurately set the hands when moving them forward using the adjuster. It is best to set the hands a little fast and then stop the clock when it starts striking the hour. The clock can then be restarted accurately on the hour.

If the clock is significantly losing or gaining, there is an adjuster nut under the pendulum bob. This should not normally need to be touched. As it is easier to stop the clock than to move the hands forward, it is better if the clock gains slightly rather than loses. Then, if necessary, the clock can be set to time during the weekly wind by simply stopping the pendulum.

8. CLOCK WINDERS AND TRAINING

A team of 3 or 4 winders should be available to share the work of winding the clock. One of these should be a 'senior' winder who is responsible for training the others (in access,

winding and adjusting the clock), maintaining a winding rota, and should be the first to be called if there are problems with the clock.

9. MAINTENANCE OF THE CLOCK

The Council should have a maintenance policy for the Town Hall Clock to ensure that it is kept running accurately and that its mechanism, including the bell tower, remains in safe condition.

Chris Robinson MBHI and Diane Malley, Town Clerk
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