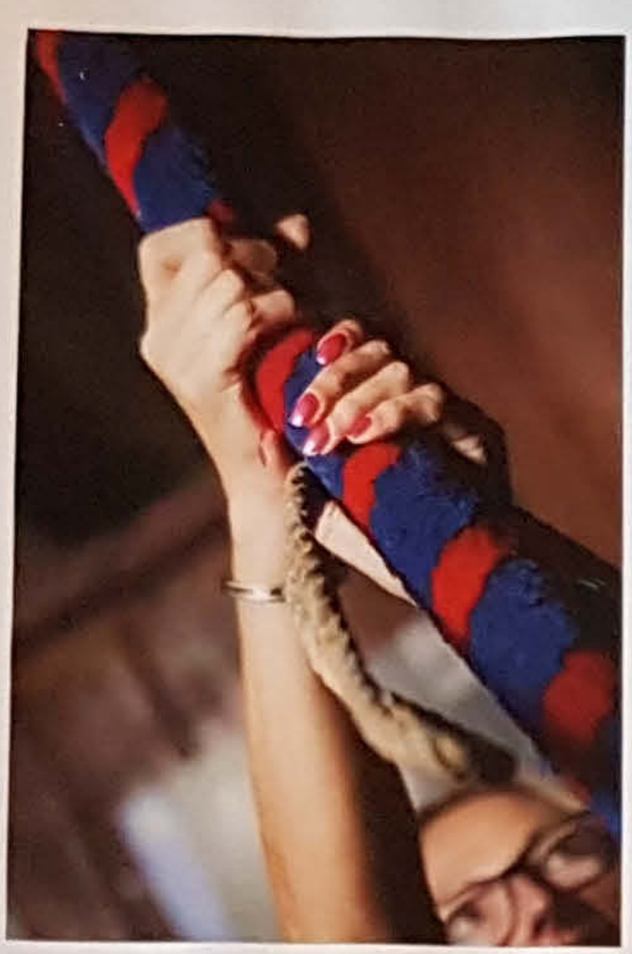
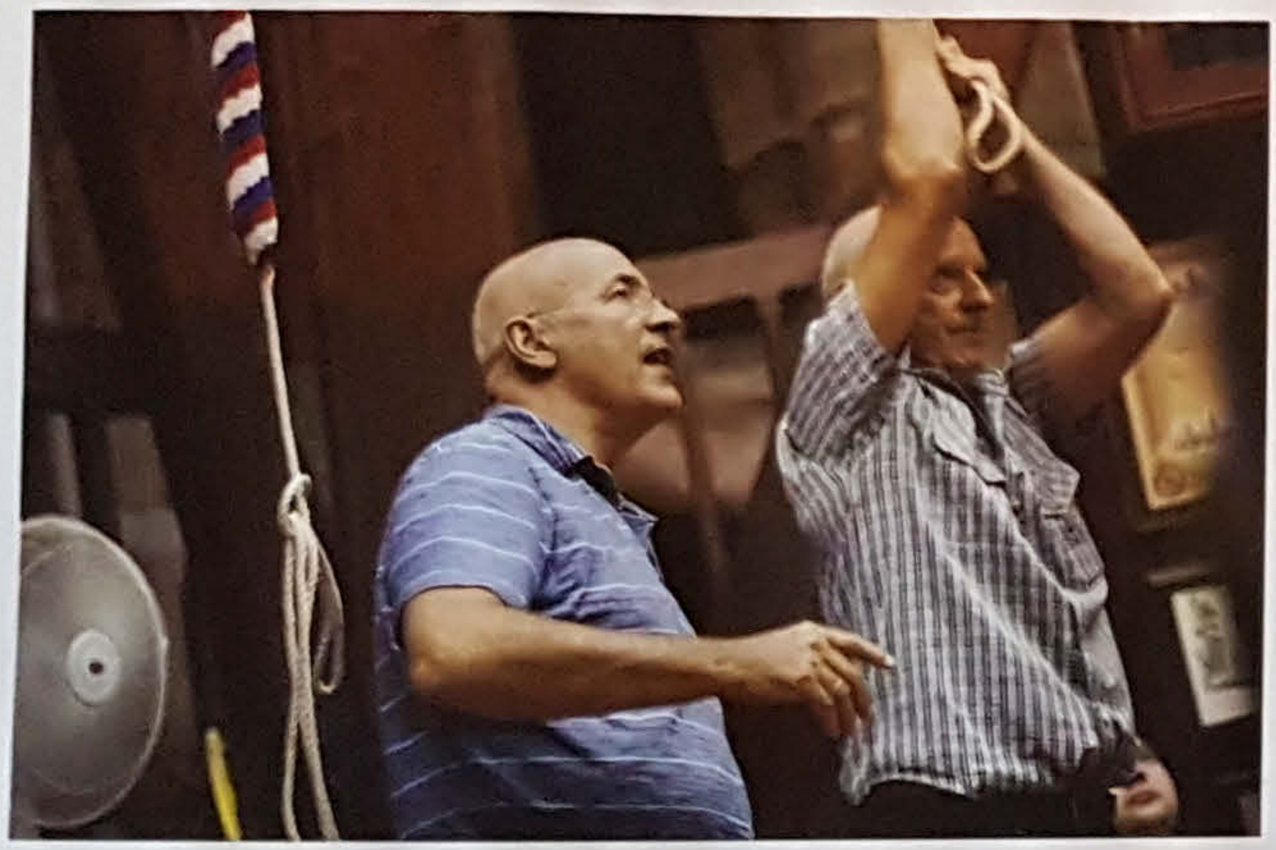
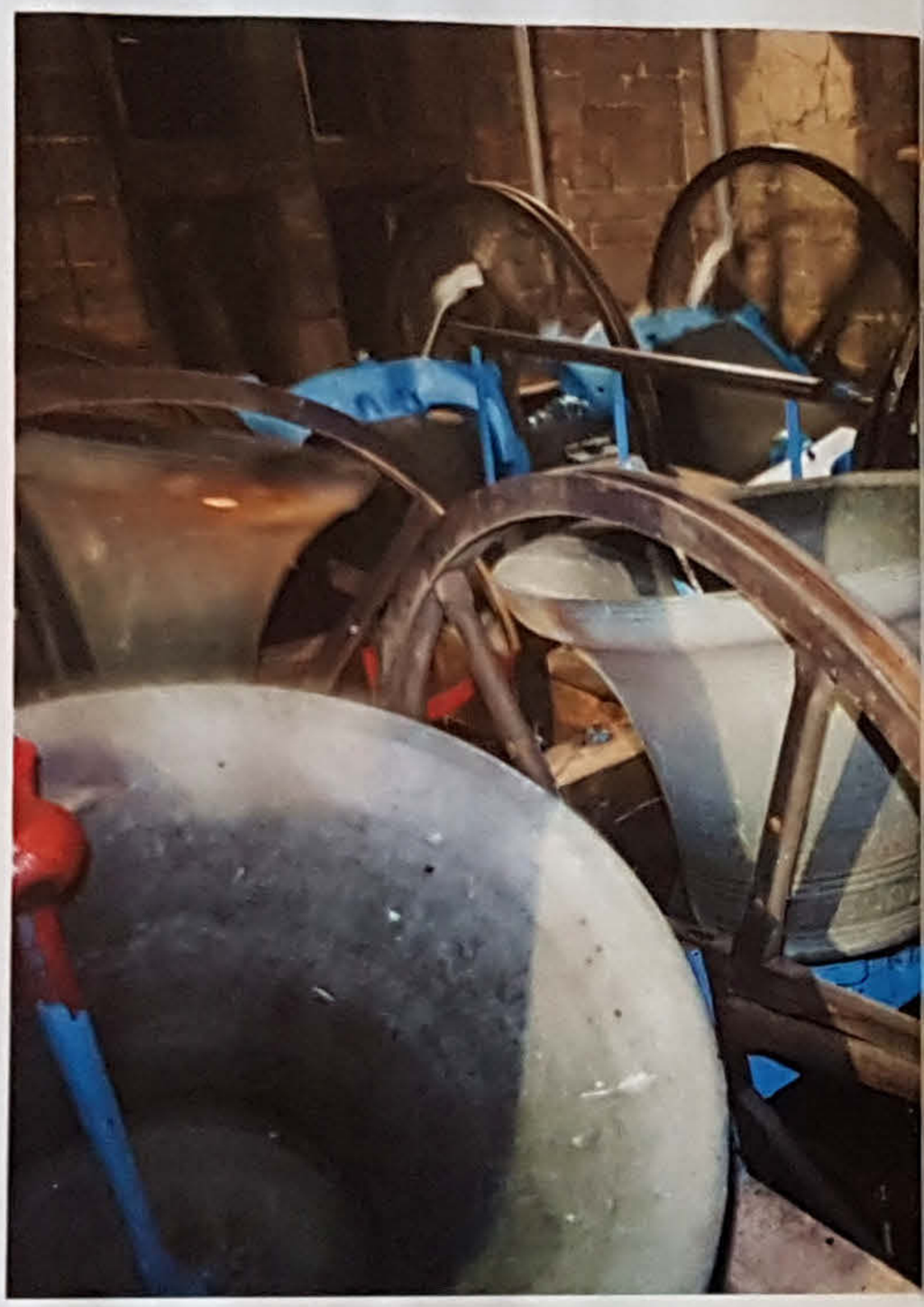




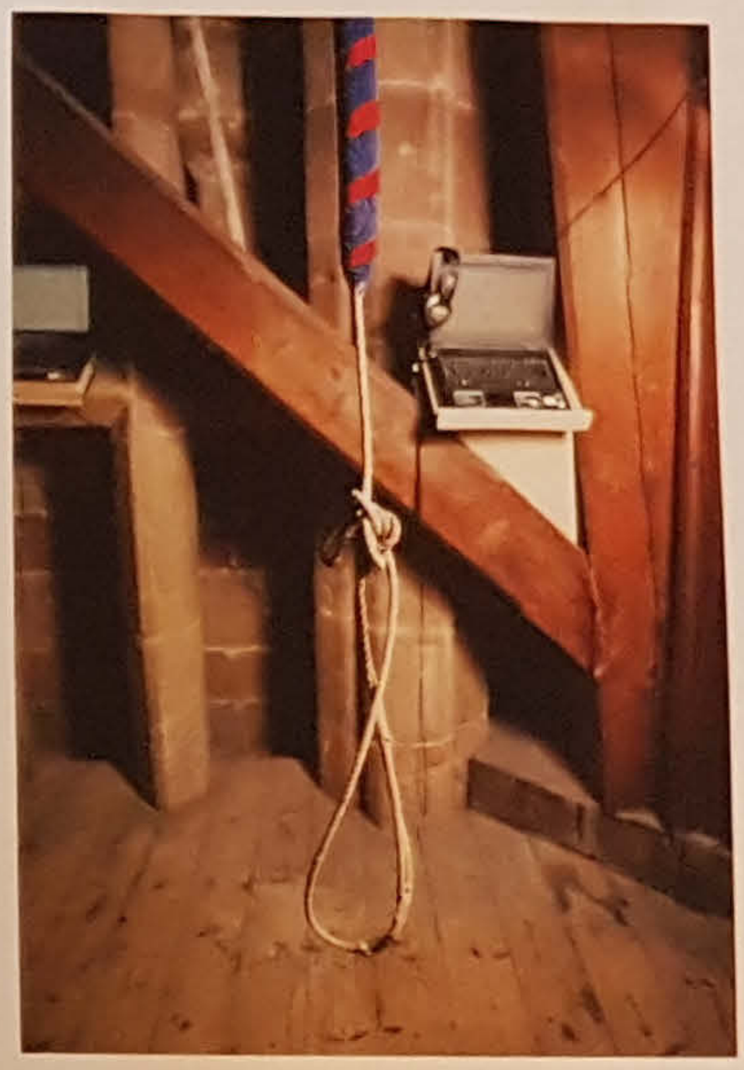


FT MASTERCLASS

BELL-RINGING

...with MARK REGAN

Playing the world's loudest instrument takes musicianship, teamwork and brute strength. Worcester Cathedral's ringing master shows *Hannah Murphy* the ropes. Photographs by *Andrew Jackson*



Bell-ringers practise on some of Worcester Cathedral's 15 cast bells. Below, part of the computerised bell-ringing simulator

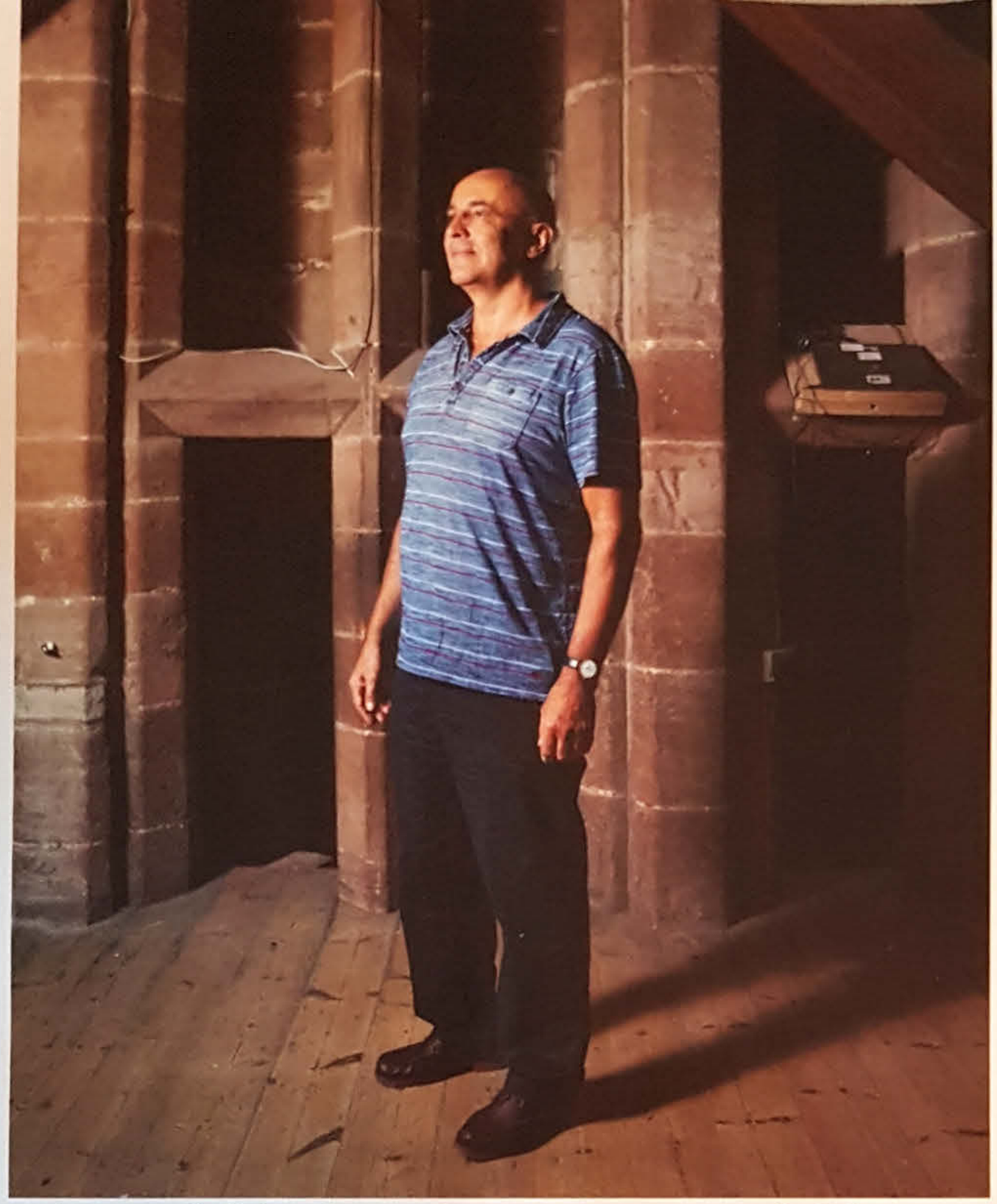
Mark Reagan spreads his palms to reveal an impressive set of red callouses and broken blisters. This, he says, is the bloody fallout of playing the world's loudest musical instrument – church bells – for four hours without respite.

Bell-ringing is part of the nation's heritage, providing sonic continuity to towns and villages for more than 400 years. Thought in medieval times to drive away storms, plagues and the devil, church bells are now heard as a call to worship, celebration or mourning. Today, Reagan, the 59-year-old ringing master at Worcester Cathedral, is going to teach me how to pull the ropes. Our venue, famous for its Norman crypt and Gothic details, is home to the fifth heaviest collection of bells in the world. Weighing a combined 16 tonnes, their torsional force will cause the bell tower to sway.

The type of bell-ringing typically practised in British churches requires a group of people to play complex patterns together, with one person assigned to each bell. "It is a test of musical intelligence, mathematical aptitude and, importantly, teamwork," explains Reagan, as we cross the cathedral's medieval cloisters. "This to me is my family," he says. "Bell-ringing is specialised, it's unusual, but there's a sense of *esprit de corps*."

An enthusiastic ringer since the age of 13, Reagan has travelled the world visiting churches and playing new bells, a pastime known as "tower grabbing". By day an executive coach, he is now responsible for leading weekly practice sessions for local campanologists. It is a job that often requires shouting over the bells' tolls to keep the group's timing on point, he says. "If the bells clash, you'll hear it," he warns me. From there, things can quickly unravel – known in bell-ringing lexicon as "firing out". "It's very fragile, it can blow up. And once it blows up, you can't get it back – it's chaos."

In addition to its 15 cast bells, Worcester Cathedral is home to one of only two computerised training centres in the world, ▶



Mark Reagan, a bell-ringer for more than 40 years, at Worcester Cathedral

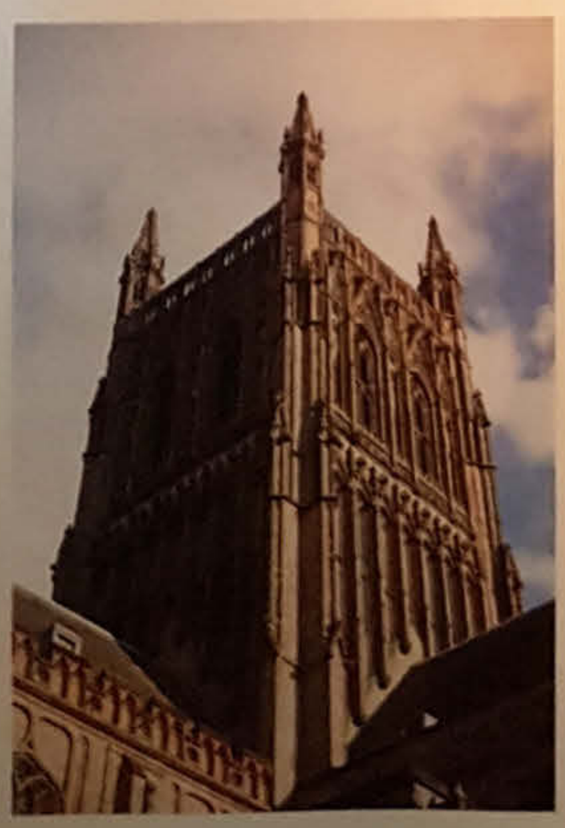
◂ where bell simulators hooked up to digital software can be played through headphones. The other such facility is on the far side of the world, at St Peter's Cathedral, Adelaide. They allow bell-ringers to practise without rousing the city. And this, thankfully, is how I will learn.

Reagan and I climb more than 100 narrow stairs to the clock room of the cathedral's tower, where the eight training bells are housed; each is connected to a laptop with headphones, and the ringer is able to hear sound when a light sensor sends a signal that equates to the clapper hitting the bell. They are designed to feel like real bells, each one weighing about 250kg. The facility itself cost £35,000, raised by the cathedral's bell-ringers.

A few learners trickle in to start their practice. Given its ageing demographic, bell-ringing is struggling to attract recruits, and many of the UK's 40,000 bell-ringers travel between churches to make up the numbers. Our group includes a doctor, a blacksmith and a former military man. I'm paired with Saskia Frisby, a 17-year-old who, like Reagan, has been ringing since she was 13.

The first thing I notice is that, unlike other musicians, ringers cannot see their instruments: you pull a rope hanging through a narrow hole and that is your lot. Frisby explains that this means the three senses used to teach bell-ringing are – in order of importance – feeling, hearing and then sight. As a novice, I will focus on the first; handling a bell and mastering its movements without being able to see or hear it.

'A small group gathers to watch and I overhear one lady comment on how the bell "misbehaves for a beginner"'



"Ringing is so kinaesthetic," she says. "The bells speak to you in their own silent language."

The Reformation saw churches introduce bells mounted on large wheels, which allowed ringers more precise timing control. The ringer has to pull on a rope attached to the wheel with the exact amount of force to swing the bell 180 degrees and then stay there, mouth upwards, until the time comes to chime again by sending the bell full circle. As the bell nears this upright position – known as the "balance point" – its momentum slows, allowing the dangling clapper to hit the inside of the bell, creating sound.

I'm instructed to stand, feet shoulder-width apart, with the rope directly in front of me. To build up enough impetus to send the bell towards the balance point, I am told to tug repeatedly the fluffy middle of the rope, known as the "sally", and gradually inch my hands down it to allow for more length as the bell gains height.

At first, my bell responds jerkily. Its weight is unfamiliar and I become unsteady as the upswing stretches my arms to the ceiling. Several times I fall into the trap of trying to pre-empt the bell's movement and give the rope too much or too little slack. A small group gathers to watch and I overhear one lady comment on how the bell "misbehaves for a beginner".

I'm told that I have shown unusual power for a first-time ringer but am not keeping my arms symmetrical; when pulling the rope, you have to bring both hands together straight down, as if you were going down a fireman's pole. "Bell-ringing is about having strength at your core," says Frisby. "And also your arms. But not just your biceps – this is about the whole length of the arm and the shoulders."

Soon, I fall into a more controlled rhythm by following the rope's resistance, and my awkward yanks become more measured strokes. When the bell finally reaches the balance point, I sense a distinct strain on the rope, akin to finding the biting point on a car's clutch.

It has taken me half an hour to get here and I am exhausted. Bell-ringing is clearly something of an endurance sport. For those at the top of their game, the ultimate showpiece is a "peal", during which ringers chime a set of bells non-stop through more than 5,000 different sequences. In my case, however, I'd need six weeks of training on the simulator bells before I would be allowed to move on to the bells proper. I suppose the cathedral has to consider the eardrums of its local residents.

After my training session, we climb another spiral staircase to watch the formal group practice. The atmosphere is more frantic. People swap in and out to man the bells as Reagan conducts. He starts bellowing, sonorous chimes ring out, brows furrow in intense concentration, and the tower begins to tremble under my feet.

The tight-knit community at Worcester Cathedral practises weekly for nearly three hours. They have been reaching out to schools to attract new recruits as part of their efforts to keep a piece of history alive. "There's a sense of timelessness in doing something that would have been understood 300 years ago," Reagan muses. "If a bell-ringer time-travelled from 1650 to now, we'd get on." FT

Hannah Murphy is a journalist on the FT's world desk