

The Bells of St Andrew's Cathedral

THE MISSION OF CHURCH BELLS

Church bells are significant to Anglican churches and their communities. Historically, the purpose of church bells was to call people to service. Traditionally, they are rung on Sundays and on Christmas Eve to welcome Christmas with a joyful noise. They also function as a call to worship at other times. Many Anglican, Catholic and Lutheran churches ring their church bells three times a day to remind the faithful to pray.

At St Andrew's Cathedral, bells are a part of the civic district and the history of Singapore.

Church bells are also rung to announce important events such as births, weddings, funerals, the New Year or significant anniversaries. By ringing church bells differently during different occasions, a community recognises the message conveyed by the bells. During celebrations, bells can be used as musical instruments. For this reason, some churches feature the music of bell choirs.

At St Andrew's Cathedral, bells are a part of the civic district and the history of Singapore.

Make a joyful noise unto the Lord, all the earth: make a loud noise and rejoice, and sing praise.

PSALM 98:4

The Revere Bell was presented to the first St Andrew's Church (1835 – 1855) by Mrs Maria Revere Balestier in 1843. Mrs Balestier was

the wife of Joseph Balestier, the first American Consul to Singapore. The bell was given on condition that it be rung for five minutes every night at eight o'clock, after the gun was fired, to sound the curfew. The curfew was imposed because early Singapore was unsafe after bell reminded The sailors to return to their ships and residents to stay vigilant after dark. While so much has changed since then, bells still remind people of the work of the Church



ANGLICAN BELLS AND CHANGE RINGING

Typically, Anglican church bells are rung by swinging them through an arc of 360 degrees or more. This is known as change ringing which refers to a method of ringing tuned bells by controlling the speed in which the bells are rung to produce variations in their striking sequences. To create a constant cascade of sound, bells are swung in sequence by making a series of changes in the order. In mathematics these are known as combinations, with the number of possible combinations being the factorial of the number of bells being rung. Hence, the more bells used in change ringing, the more complex and majestic, the sound of the ring.

To get the full sound of the bells, they must be rung by swinging the bells and not by striking them. When swung fully, the bells may well be heard as far as Marina Bay Sands on a quiet day.

EIGHT APOSTLES IN THE TOWER

In 1889, to commemorate the 70th Anniversary of the Founding of Singapore, eight bells were presented to St Andrew's Cathedral by the family of Captain J. S. H. Fraser, H.E.I.C.S.¹ Captain Fraser was the Captain of the Marquess of Huntley, a large sailing vessel of the East India Company. Captain Fraser also owned land in various parts of Singapore.

These eight bronze bells were each named after an apostle of Christ - Andrew, Peter, Thomas, Bartholomew, Paul, John, James and Matthew. They were cast at the John Taylor & Co. Foundry in Loughborough, England, the same bell foundry that cast the bells of St Paul's Cathedral in London, England.

Overview of the Finished Eight Bells in 1888

Bell Name Diameter (mm) Tone (kg) 1 Matthew (treble) 702 IX / Eb 227 2 James 727 X / D 239 3 John 797 XII / C 321 4 Paul 896 XIV / Bb 423 5 Bartholomew 996 XVI / Ab 606 6 Thomas 1056 XVII / G 688 7 Peter 1182 XIX / F 947 8 Andrew (tenor) 1337 XXI / Eb 1420						
2 James 727 X / D 239 3 John 797 XII / C 321 4 Paul 896 XIV / Bb 423 5 Bartholomew 996 XVI / Ab 606 6 Thomas 1056 XVII / G 688 7 Peter 1182 XIX / F 947		Bell Name		Tone	Weight (kg)	
3 John 797 XII / C 321 4 Paul 896 XIV / Bb 423 5 Bartholomew 996 XVI / Ab 606 6 Thomas 1056 XVII / G 688 7 Peter 1182 XIX / F 947	1	Matthew (treble)	702	IX / Eb	227	
4 Paul 896 XIV / Bb 423 5 Bartholomew 996 XVI / Ab 606 6 Thomas 1056 XVII / G 688 7 Peter 1182 XIX / F 947	2	James	727	X/D	239	
5 Bartholomew 996 XVI / Ab 606 6 Thomas 1056 XVII / G 688 7 Peter 1182 XIX / F 947	3	John	797	XII / C	321	
6 Thomas 1056 XVII / G 688 7 Peter 1182 XIX / F 947	4	Paul	896	XIV / Bb	423	
7 Peter 1182 XIX / F 947	5	Bartholomew	996	XVI / Ab	606	
	6	Thomas	1056	XVII / G	688	
8 Andrew (tenor) 1337 XXI / Eb 1420	7	Peter	1182	XIX / F	947	
	8	Andrew (tenor)	1337	XXI / Eb	1420	

Source: The Job book, 1888 (archive reference JT 6/1/4/67 pp.281-2)

The Andrew bell (tenor) is the largest at 1,420kg with a diameter of 1,337mm. It is the same note as bell number 8 of St Paul's Cathedral (St Paul's Cathedral has a peal of 12 bells). The Matthew bell (treble) is the smallest at 227kg with a diameter of 702mm. The bells are tuned to the key of Eb Major.

¹ Charles Burton Buckley, An Anecdotal History of Singapore, Volume 1, Singapore: Fraser and Neave Limited, pg 297



These bells were designed during the same period as the bells of St Paul's Cathedral. The bells were cast without suspension loops, that is, they have flat tops and are bolted to the frame. The bells were permanently fixed with their clappers tied so that they are struck to chime instead of being swung – a less expensive way of hanging bells, but one that does not allow them to produce their full, rich sound. The bells, bell frame, fittings and instructions travelled to Singapore onboard the SS Carmarthenshire, and they were installed as you see them today.

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A Brief History

1835	9	The foundation stone of the first St Andrew's Church was laid.
1843	0	Mrs Maria Revere Balestier presented the Revere Bell to St Andrew's Church on condition that it would be rung for 5 minutes, to sound the curfew at 8 o'clock, every night.
1855	0	The first St Andrew's Church was demolished and the ringing of the Revere Bell ceased.
1861	0	The Revere Bell was relocated to the new church building, the current St Andrew's Cathedral. The ringing of this Bell resumed.
1874	0	The ringing of the Revere Bell to signal the curfew, ceased. Later, it was stored in a Public Works Department facility at Kandang Kerbau.
1889	0	The family of J.S.H. Fraser presented a peal of 8 bells to St Andrew's Cathedral to commemorate the 70th Anniversary of the Founding of Singapore in 1819. These are the bells rung at the Cathedral today.
1911	0	The Revere Bell was loaned to St George's Garrison Church in Tanglin Barracks. Later, while in transit to the Royal Engineers store-yard, the bell was cracked beyond repair.
1937	0	Archdeacon Graham White donated the Revere Bell to the Raffles Museum, now known as the National Museum of Singapore.
2019	0	Commemorates Singapore's Bicentennial Anniversary and the 130-year history of the Cathedral Bells.



THE HERITAGE OF BELLS

The Cathedral has been working with bell experts and engineers to restore the bells and convert them for change ringing. An independent structural engineer from the United Kingdom who specialises in bell tower structure, recently completed an assessment of the bell tower and submitted a report on its structural integrity. The Cathedral bell tower is structurally sound to contain not 8, but 12 full swinging bells.

When restored and converted for change ringing, Singapore will have the only bell tower in this part of Asia with a working ringing peal.

Presently, the 8 bells in the tower are sounded by striking them with clappers. Plans are underway to restore and convert these bells for change ringing by next year 2019. Change-ringing bells produce a majestic sound, like those of cathedrals such as St Paul's Cathedral. London.

If funds are available, then, a further 4 new bells can be added to complete the set to the number of Apostles, recognising all of them in our tower.

There are more than 6,000 bell towers with ringing peals in the world. When restored and converted for change ringing, Singapore will have the only bell tower in this part of Asia with a working ringing peal.

A LEGACY TO FUTURE GENERATIONS

We will be commemorating the bicentennial anniversary of the founding of Singapore, next year. 2019 would also be a significant time to commemorate the 130 years that St Andrew's eight bell apostles have been Singapore's spiritual and cultural guardians. Their chimes are a reminder of God's faithfulness to our country.

Bells can last 500 years if they are regularly maintained. To restore the bells and convert them for change ringing, the existing 8 bells would need to be dismantled and shipped to the UK where they will be cleaned and tuned, and a cast iron frame manufactured to hold them. Work on the bells and preparation of the bell ringing chamber are estimated to take nine months, and cost \$600,000.

Help to breathe new life into these bell apostles so that their peals continue to bless Singapore. Leave a legacy to future generations to remember God – His mercy and His grace.

CONTRIBUTE TO THE CITY'S BELLS HERITAGE

For cheque donations — Please pay to "St Andrew's Cathedral" and mark "Cathedral Bells" on the reverse side. Please include your name and mailing address so we can issue you a receipt.

- Donations of \$50,000 and above will be acknowledged in a tangible way at the Cathedral.
- Donations of \$200,000 and above may be acknowledged by an inscription on a new bell.

Please mail cheque donations to: St Andrew's Cathedral (Cathedral Bells) 11 St Andrew's Road Singapore 178959

If you would like to find out more, please write us an email at info@cathedral.org.sg or call us at 6337 6104 ext 169.