

# Hopeman Memorial Carillon

Rochester's bells are a gift of the Hopeman family in memory of Arendt Hopeman, the founder of the company that oversaw construction of the River Campus. Installed as a chime in 1930, the bells in Rush Rhee Library are now one of just seven carillons in New York. Carillons evolved in the Netherlands, Belgium, and northern France, beginning in the mid 17th century. A resurgence of interest came in the late 19th and early 20th centuries, and planners of the River Campus set their sights on bells at Rochester. Today, thanks to resurgent student interest, carillon music is an increasingly familiar sound on campus.



## Rush Rhee Library

The lantern atop the library's signature dome was built to house the bells of the Hopeman Memorial Chime. The carillon's bells, installed in 1973, now fill the same space.



### Largest bell

- Diameter: 40 <sup>7</sup>/<sub>8</sub> inches
- Weight: 1,411 pounds

### Smallest bell

- Diameter: 7 <sup>1</sup>/<sub>8</sub> inches
- Weight: 26 pounds



## Note Range

The bells of the carillon span more than four octaves, from G<sub>3</sub> to C<sub>8</sub>. The carillon is fully chromatic between D<sub>4</sub> and C<sub>8</sub>. The lowest pedal note, G<sub>3</sub>, is called the *sub-bourdon*. The second, A<sub>3</sub><sup>#</sup>, is the *bourdon*. It is unusual for a carillon to have two bourdons.

## Bells

The carillon has 50 bells, while the chime eventually had 19—but the carillon is much lighter. The largest single bell in the chime weighed 7,800 pounds; the carillon's bells weigh a total of 6,668 pounds. The carillon's unique selection of bells was a matter of cost, available space in the lantern, and optimizing the weight of the bells for each of the eight girders.



## Clavier

The carillonneur performs on a large keyboard—two rows of wooden batons—and a pedalboard, striking the batons with a lightly clenched fist. A carillon's unique sound is the product of "overtones"—audible pitches caused by small vibrations. Like other instruments, the carillon moves from the fundamental pitch to an octave overtone, a fifth, and a superoctave. Unlike other instruments, the carillon's overtone then moves to a minor, not a major, third. The prominent minor third makes the carillon seem "out of tune" to some—but it's also the hallmark of the instrument.



## Lantern

The bells are isolated in the dome's lantern, a boon to students seeking quiet in the library. Because the bells are sealed off from the rest of the dome, however, carillonneurs must listen to themselves play through the use of microphones. Bellmen in earlier days relied on the simpler mechanism of an open window.

*The lantern is partly cut away to show the interior and bells.*

## Transmission Wires

Carillon bells are stationary; only their clappers move. Wires run from the keyboard and pedalboard to the clappers.

## Cabin

The keyboard for the chime was in a small room at the outer edge of the dome, but the cabin that contains the carillon's clavier is suspended from the dome's ceiling, in the interior. That's why carillonneurs, unlike bellmen, require a microphone to hear themselves—there are no windows.