

BY DARREN TRACY







## Lowering the Lights

A few years ago, our construction firm was doing emergency work on the roof of the New York State Capitol to repair a bad leak. At the same time, a renovation was underway in the assembly chambers below that required one of the large chandeliers to be lowered and removed (1). The antique chandelier (circa 1913) was ornate and very heavy (estimated weight of one to two tons with its translucent alabaster and brass construction). Because we have rigging experience and specialize in unique projects, and because we happened to be in the right place at the right time, the field engineer at the capitol building offered us the task of lowering the chandelier approximately 60 feet from the chamber ceiling to the floor below. We jumped at the chance.

The chandelier was one of nine hanging from the ceiling. The job wasn't as difficult as we had initially thought. When we went into the attic space, we found that the chandelier was attached to a permanent heavy-duty, gear-reduction winch assembly (2). We just needed to disconnect the wiring and carefully hand-crank the fixture to the floor. It took more than 20 rotations to lower the chandelier 1 inch, so the 60-foot drop required more than 14,000 rotations—some arduous cranking!

Even with the controlled descent, it was a bit nerve-racking to lower the huge fixture, and became even more so when one of the brass links broke just as the unit touched the floor (3). Of course, that created quite a stir. We used penetrating dye to check for cracks in the remaining links and found others that were cracked.

Water dripping on politicians' heads is one thing; a two-ton chandelier falling would be quite another. With concern about the other eight fixtures, we lowered and inspected them as well. We installed safety cables on each fixture to supplement the original brass chain. We now return annually to lower the chandeliers for inspection and cleaning and to replace the lamps. We're usually able to complete the project in two very long days.

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