#7: Precast Wall Piece Dropped from Crane

In early-2008 a 56,300 pound precast wall piece was dropped on the site building from a crane. The crane operator dropped the load when he felt the crane begin to tip as he was setting the precast wall into place. There were no injuries or fatalities due to the accident, and the incident was confined to the worksite. However, the total cost of the damage to the crane and building is estimated at $270,000. The crane involved in the accident was approximately 38 or 39 years old; however the crane underwent regular inspection and maintenance and was deemed certified and fit for service.

The crane operator at the time of the accident was employed with the company for 44 years, 37 of which were as a crane operator. At the time of the accident, the crane operator did not have an updated Operator's Certificate; he was relying on the company to tell him to renew it. The crane operator did not uncover any problems during the pre-check inspection of the crane; however, the operator did not make any lift calculations prior to the lift, and relies on his experience to determine the load calculations.

The investigation determined that the proper procedures were not followed to determine the weight of the load and the crane's capacity. The crane was operating outside the 75% safety factor and the crane operator was working with an expired Hoisting Machine Operator's Certificate.

Citations were issued totaling $5,000.

Recommendations:
1. Ensure that all workers adhere to the manufacturer's specifications prior to and while the crane is in operation.
2. Provide guidelines that the crane operator and lift crew should not exceed 75% capacity of the crane.
3. Implement periodic checks or audits to ensure the crane operator is following the manufacturer specifications.
4. Train workers to verify both the crane's capacity for each lift as well as the weight of the load prior to the lift.
5. Ensure all workers have their certifications current and updated before they begin work.