

Nick Stout

CEEN 1100

Prof. Kamdar

Section 5.11

The Hyatt Regency Skywalk Collapse

Introduction: In Kansas City, Missouri on July 17, 1981, locals gathered in the foyer of the Hyatt Regency Hotel for a weekly tea dance. Crossing the lobby and suspended above them was a potentially deadly engineering mistake. As the dance reached its full potential the fourth floor walkway collapsed falling onto the second floor walkway, then onto party goers, killing 114 people and costing a few billion dollars.

Subsequently, an investigation took place on why the skywalks collapsed, finding gross negligence, incompetence and unprofessional misconduct in the practice of engineering. Eventually, charges were filed against Daniel M. Duncan, Jack D. Gillum, and G.C.E. International Inc., because they were the engineers in charge of the building. Found guilty with a jury trial, Duncan and Gillum had their licenses revoked in the state of Missouri. (Hyatt Regency Walkway-Collapse, engineering.com) In the end, the lack of communication proved to be the mistake and we must learn from mistakes, not necessarily our own.

Discussion: The skywalks of the Hyatt Regency Hotel connected the hallways of the second and fourth floor in the open lobby. Originally, the plan for the walkways used a single metal dangling rod design, which provided support from the ceiling for the second and fourth floor skywalks. However, the metal manufacturer redesigned the metal rods in order to quicken the installation of the bridge. The redesign was then sent to Jack D. Gillum at G.C.E. International Inc. and approved. The new design was two rods bolted to the support on the fourth

floor, one rod going from the ceiling bolting to the fourth floor brace and then a second rod bolted to the fourth floor to support the second floor.

The problem, as the investigation panel discovered was created by a communication breakdown. Jack D. Gillum approved the new design; however, he assumed that the metal fabricator knew to add an additional sleeve to the inside of the support braces to compensate for the stress added by the bolts. They did not. Investigators claim the change to the already weak design led to the failure. Ultimately, the group's failure to communicate didn't only cost Gillum and Duncan their licenses, it cost many lives.

On February 3, 1984 the Missouri Board of Architects, Professional Engineers, and Land Surveyors took the necessary action for legally charging Jack D. Gillum, Daniel M. Duncan, and G.C.E. International Inc. In November of the same year, the defendants in the trial were found guilty of gross negligence, professional misconduct, along with other charges toward the engineer profession. Consequently, Mr. Gillum and Mr. Duncan were no longer allowed to practice engineering in the state of Missouri, but could still practice in other states.

Conclusion: Understanding that communication failure can cause death, is a hard lesson to learn. It is important to communicate with all people involved in any project that we may oversee or be a part of. Communication is imperative for the success of the team and the project. In the case of the Hyatt Regency Hotel skywalk failure, a few things may have played a part but communication ultimately was the mistake. Sadly, this communication mistake cost 114 people their lives and an estimated 200 more injured.

Work Cited

"Hyatt Regency Walkway Collapse." *engeenering.com*. N.p., n.d. Web. 03 Oct. 2012.