

## Chapter 5

# Kansas City Hyatt Regency Walkways

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*The collapse of the walkways in the Kansas City Hyatt Regency Hotel remains the deadliest structural collapse in US history if terrorist attacks are excluded. After providing the relevant background, this chapter describes the site investigation and structural testing that determined that the collapse occurred for two reasons: 1) the design of the hanger rod-to-box beam connection was severely deficient, and 2) the hanger rod arrangement was changed such that the connection forces acting at the fourth level were doubled. The outcome of legal actions is described and lessons learnt are summarized.*

### 5.1 Introduction

During a tea dance on 17 July 1981, the suspended walkways through the lobby of the Kansas City Hyatt Regency hotel collapsed (Figure 5.1), killing 114 people and injuring 216 others. First responders worked feverishly to rescue people who were trapped and injured, and to recover the bodies of the deceased. The US government, as well as engineers representing the owners and other parties, carried out intensive investigations into the cause of the collapse.

This chapter is written from the perspective of the author who led the investigation on behalf of the hotel owner, the Crown Center Redevelopment Corporation.

### 5.2 The Investigation Process

On 20 July 1981, Senator Thomas F. Eagleton's office contacted the National Bureau of Standards (NBS) and requested that technical assistance be provided to the city of Kansas City. This was followed later that day by a request to NBS from Mayor Richard L. Berkley for technical advice regarding the tragedy and its cause. On 22 July, Mayor Berkley formally requested that the NBS independently ascertain the most probable cause of the collapse of the Hyatt Regency walkways.