

Prepare for Impact: familiarizing passengers with aircraft emergencies through first-person simulation games

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Simulations of aircraft emergencies are routinely used in pilot training. This presentation discusses how the benefits of 3D simulations of emergencies could be brought to passenger education too. First, we examine the new challenges that arise when considering passengers as the target of simulation-based training. Such challenges involve the hardware available (e.g., the 3D simulations must run on low-cost, personal devices such as smartphones and tablets) as well as the design of the simulations (e.g., they must be able to attract and engage, otherwise users will not be motivated to try them). Then, we illustrate "Prepare for Impact", the aviation safety education app we created for Android and iOS devices. The app allows players to try first-hand right and wrong actions that a passenger can take in different types of emergencies, and see in detail the positive or negative consequences those actions have. "Prepare for Impact" received very positive reactions from the public and the media; the presentation will focus on analyzing the data we have collected so far about the ability of the app to improve users' cabin safety knowledge.