

EXPECTING THE UNEXPECTED

Mapping the Path to Successful Ride Evacuations



User manuals for amusement rides provide extensive instructions on how to evacuate rides based on common scenarios that are likely to occur during operation. Operator training and safety protocols are based on these predictable situations, so it is possible to train for them.

However, there are other operational circumstances to take into account that could affect the success of the evacuation on the day it occurs, because training of operators might only be focused on what happens inside the safety perimeter of the ride.

In addition, unexpected errors on rides can leave operators unprepared for the situation they are faced with. Manuals usually cover evacuations necessitated by external factors, such as a sudden loss of power, or the failure of pressure vessels, but can be a bit thin on other failures caused by the interaction of mechanics and programmable logic controllers, as well as unexpected mechanical failures caused by manufacturing defects or maintenance errors.

The most challenging evacuations occur when the ride can not easily be returned to its home position and the evacuation must take place in unfamiliar territory. Although the likelihood of these events is low, the age and complexity of the ride can increase the possibility for an extraordinary evacuation.

Preparing the Operation

The success of an evacuation largely depends on the interaction and preparedness of the team. Evacuations will draw crowds that can hamper the rescue effort. Park Managers must prepare for the behaviour of staff and patrons during an evacuation, taking the following factors into account:



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- 1. Internal Communication** – if an operator is faced with the need to evacuate guests from a ride, how is the communication organised? Operators must have easy access to communication with the rest of the team. If additional crew members must take part in the evacuation, how will they be notified? If these crew members are operating their own equipment or are engaged with other tasks, what is their protocol for leaving their station and assisting with the rescue?
- 2. External Communication** – Communication with guests being evacuated is key, they must be reassured that this situation is under control and that they have nothing to worry about. The public in the park must also be reassured and a standard message must be in place. The patrons affected by the evacuation need to be kept calm and reassured.
- 3. Crowd Control** – Other than friends and family members, can the access to the ride, or even the area leading to it be effectively controlled? How are these controls implemented and how much time does it take to put barriers in place? Operators must have a plan in place to control the ride perimeter access to avoid unnecessary crowds interfering with the evacuation and causing confusion. A huge crowd around a ride that is being evacuated can put additional pressure on the team, which could lead to nervousness and mistakes being made.
- 4. Keeping the location prepared** – The access to the ride can be obstructed by changes in equipment layout over time. Operators might have to attempt a rescue effort outside the loading station for a motor driven coaster and will require quick access to the area where the coaster train came to a stop.
- 5. Evacuation Tools** – Rescue efforts may be obstructed because evacuation tools are not ready for use. The materials for an evacuation must be kept near the ride, or the path to bring these tools to the concerned area must be unobstructed if the situation demands the use of heavier equipment such as ladders or scissor lifts. Operators should have a process in place to ensure the operational readiness of these tools and have a plan to bring them to any given area of evacuation, keeping the presence of the public in mind.

Training operators on uncommon scenarios that are not covered by standard evacuation techniques is vital for the success of the effort. The public will take note of the professionalism displayed by operations teams, and social media will be a contributing factor in the perception of the public. It is advisable to have a communication strategy in place to respond to any social media posts uploaded by the public.