

**Reducing Risk in Paradise:
Steps the Atlantis Resort Took to Improve Guest Safety**

Geoffrey Peckham
Chair - ANSI Z535 Committee, Chair, U.S. TAG to ISO/TC 145
CEO and Director of R&D
Clarion Safety Systems, LLC
Milford, PA

Ron Smith
Executive Director, Global Risk Management
Kerzner International North America, Inc.
Fort Lauderdale, FL

Introduction

The 141-acre Atlantis resort is an incredible place for families to vacation. Not only is it one of the world's largest water parks, but it also has some of the world's most beautiful beaches, incredible underwater sea life sanctuaries and swimming pools. But as with every hospitality venue, risks for guests need to be carefully evaluated and minimized. When necessary, warnings in the form of safety signs play a role in achieving this goal. In 2012 and 2013, Kerzner International improved their sites' safety sign systems. The new sign systems use principles found in the latest ANSI Z535 and ISO safety sign standards. The process by which the new sign designs were developed will be shared in this presentation with the intention of giving safety professionals insight on how to better reduce risk and protect people in their own facilities.



Figure 1. The Atlantis resort on Paradise Island in the Bahamas and its beautiful beachfronts

Step One: Defining the Audience and the Message

The practical aspects of developing effective safety sign systems are the same for a resort like The Atlantis as they are for an industrial factory, an educational institution, a public area; literally any public or private facility or environment. It begins with the risk management and operations staff defining three things specific to the site:

- Who is your target audience (who needs to be warned)
- What are the possible hazards that need to be warned about and how should these hazards be avoided
- How/where will your target audience come in contact with each hazard

Applied to The Atlantis resort, the first question is answered as follows: The target audience falls into two groups: the site employees and the guests. The site employees are primarily Bahamians and the guests come from all over the world. Whereas the employees are of ages associated with the employed population, guests range in age from infants to the very, very old. Phase One of the project is to develop a safety sign system for the resort's guest population. Phase Two of the project is to revise the safety signs used in the employee-only areas of the resort. This presentation will focus on Phase One.

In evaluating the characteristics of your audience, you must ask several questions so you can craft the content of your safety signs correctly so they will be able to be understood by the people you are trying to protect from harm. So when we looked at the guests who come to The Atlantis, we came to the following conclusions:

- They come from all over the world and do not necessarily speak or read English
- They are coming to the resort to relax and have fun
- They may not be aware of hazards associated with beaches, pools and waterpark rides

- They are of all age ranges, including young children, which makes it necessary to provide warnings that remind parents/guardians of their responsibility to attend to the children under their care

The second thing that needed to be understood prior to beginning the process of designing new signs is obvious: what are the essential safety messages that need to be communicated to guests using the resort. A tour of the park’s entire 141 acre site was done by Clarion Safety Systems (the safety sign design company) and the site’s risk management and operation directors. Photographs were taken of every posted sign that had a safety implication. Visits to other similar major theme waterparks were made and photographs taken of their safety-related guest-oriented safety signage to determine the current “standard of care” associated with waterpark safety signs. Figure 2 shows examples of signs found in other major waterparks in the United States, Figure 3 shows some of the Atlantis’ existing signage. “What is warned about and how is it being displayed?” were the operative questions asked. Again, think of these questions with your own facilities and industry in mind. Are they communicating the right things? Are they using the state-of-the-art best practices in safety sign design to more effectively communicate safety-related information?



Figure 2. Typical safety-related signs at other waterpark resorts

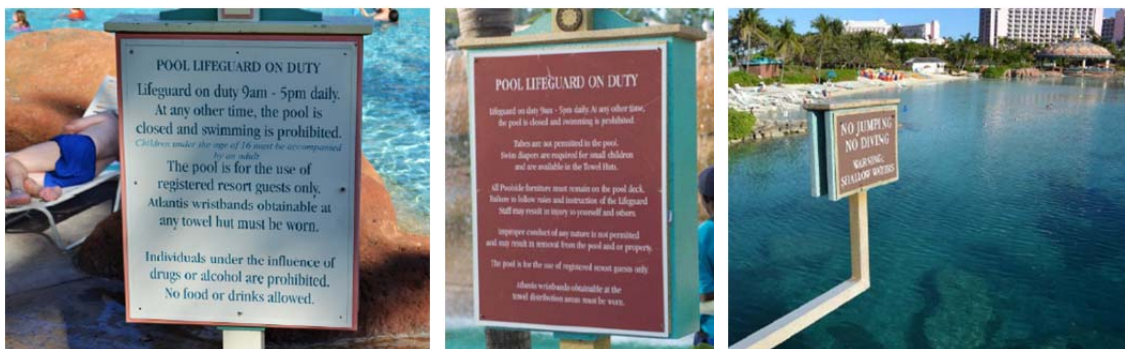


Figure 3. Existing typical safety-related signs at The Atlantis

The potential hazards that exist at The Atlantis are fascinating; ranging from pools of hammerhead sharks to the hazards associated with swimming pools and beaches (drowning, no diving because of shallow water), to giving guests proper instructions so they can remain safe while riding a ride or plummeting down a slide. Using the photographic sign inventory survey as a starting point, a list of safety messages and their intended placement locations was developed and the sign design process begun.

Step Two: Turning Best Safety Sign Design Practices into Reality

The new safety sign system for The Atlantis resort utilizes best practice safety sign design principles found in the latest ANSI Z535 and ISO safety sign standards. In addition, Clarion's experience in applying the ANSI and ISO standards to the safety communication needs of clients in hundreds of industries, including prior waterpark safety sign installations, proved beneficial to this project. Though the primary formatting and communication principles contained in the standards were adopted for the overall system, the system of signs had to be sensitive to the needs of the theme park. Choosing the locations for the new signs was an integral part of the risk reduction process as each sign was tailored in its size, formatting and message to fit into its eventual location without destroying the desired look and feel of the resort. As such, many signs innovatively combine elements that are standards-based with a look and feel that worked for the park.

The new sign designs, to be unveiled at the 2013 ASSE PDC, incorporate graphical symbols, text messages and color-coding in ways that convey hazard and hazard avoidance information, general notices, instructional messages and the location of fire and safety equipment. From the beginning we knew that we would be incorporating graphical symbols to convey many of the safety messages because of the multi-cultural traits of the guests and because noticeability was key to getting these safety messages communicated. Text would not be eliminated from the overall project because text on signs can serve to train people about the meaning of the symbol(s) on the sign. Also, signs that contain a lot of information and only use symbols run the risk of being confusing to understand. For these reasons, text was not eliminated from the vast majority of signs.

In line with the *ANSI Z535.2 Standard for Environmental and Facility Safety Signs*, the resort's new sign system follows the categories of safety signage defined by the standard:

- “Hazard alerting” signs that provide people with information about potential hazards and how to avoid those hazards
- “Notice” signs that convey general safety rules
- “Safety instruction” signs that communicate sets of procedures or rules
- “Safety/fire equipment location” signs that point to the location of emergency equipment

Use of the ANSI Z535 formatting and ISO graphical symbol design principles for most of the safety-related signage gave the park with a system of signs that conveys safety information with a global reach.

Summary

When it comes to risk reduction, the hospitality industry has a particularly difficult task. Unlike the normal workplace where the large majority of people are employees (employees who can receive safety training), resorts, hotels and theme parks must communicate safety to guests who come and go. The authors predict that the use of the ANSI/ISO best practices in safety signs that The Atlantis resort used in its new sign system will soon become the norm both in the United States and abroad. These best practices integrate current knowledge on risk communication with a legally informed understanding of what constitutes an “adequate warning.” Because safety communication in a non-employee environment is such a challenge, and because the vast majority of the safety signs used in facilities and public areas at the present time do not incorporate the ANSI/ISO best practices, there is an incredible opportunity here for safety professionals to improve their safety communication. Use of the latest ANSI/ISO safety sign best practices should help safety professionals achieve their goal of better reducing risk and protecting people.

Bibliography

American National Standards Institute. *ANSI Z535.2: American National Standard for Environmental and Facility Safety Signs*. 2011.