

2020 TSSA Amusement Ride Safety Training Forum

March 3 – March 6, 2020

Agenda



Address: 6039 Fallsview Blvd, Niagara Falls ON
Location: DoubleTree Hotel Niagara Falls
Duration: Tuesday March 3th 2020

Time	Item	Lead
5:00 – 6:00 p.m.	Registration	Atrium
6:00 – 9:00 p.m.	IAAPA Networking Event / Reception Separate Ticketed Event	IAAPA Venue

Duration: Wednesday March 4th 2020
Location: Grand Hall

Time	Item	Lead
6:45 – 7:45 a.m.	Breakfast	Buchanan's Restaurant
7:15 – 7:45 a.m.	Registration	Atrium
7:55 a.m.	Kick Off	Grand Hall Les Simonffy
8:00 – 8:15 a.m.	Safety Moment Video -	Rene Karavas
8:15 – 10:00 a.m.	Waterslide Commissioning	Franceen Gonzalas
10:00 – 10:15 a.m.	Break	
10:15 – 11:15 p.m.	ASTM -CAD Update and Training / 2783	Sonny Silva Joelle Javier
11:15 - 12:15 p.m.	Risk Assessment	Ronny Angel Løvstad
12:15 – 1:00p.m.	Lunch	Buchanan's Restaurant
1:00- 1:15 pm	Hands On Set up	Hands on set up

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1:30-3:00 p.m		Hands On Part 1 (To be Detailed)	
3:10 – 3:30 p.m.		Afternoon Break	
3:30-5:15 p.m.		Hands On Part 2 (To be Detailed)	
6:30 – 10:00 p.m.	50/50 draw	Dinner Reception	

Hands on Training 1:30 - 5:00pm

Part one

PART 1 House of Frankenstein Clifton Hill	Presenter	Company
Wisdom Coaster Risk Assessment exercise	Ronny Angel Løvstad	Norwegian Railway Authority
Track and Coaster Inspection Scenario	Bill Kirk / Denis Lapierre	TSSA
Fasteners	Gilbert Timmons/ Gus Garcia	TSSA

Shuttle service between sections with break at 3:00-3:30pm

Part two

PART 2	Presenter	Company
Cliff-Hanger Ride or Another Ride	Albert Frieden / Will Gilmet	Battech
Seat Belts	Charma Wilderson	Safe Strap
ESA electrical	Mike Horst	ESA

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Duration: Thursday March 5th 2020
Location: Grand Hall

Time	Item	Lead
6:45 – 7:45 a.m.	Breakfast	Buchanan's Restaurant
8:00 a.m.	Safety Moment	Rene Karavas Grand Ballroom
8:15 – 9:45 a.m.	ASTM 770 Creating your procedures to fully comply with 770	John Riggelman
9:45 – 10:30a.m.	Electrical	Mike Horst ESA
10:30 – 10:45 a.m.	Break	
10:45- 11:15 a.m.	Inspection process AHJ Best Practices	Dean McKernon
11:15- 12:00 p.m.	Inspections, exceptions and certifications in a digital world	Robert Kemp
12:00 – 1:00 p.m.	LUNCH	Buchanan's Restaurant
1:00– 2:30 p.m.	BATTECH	Albert Frieden
2:30 – 3:45 p.m.	Rider Eligibility and Accessibility	John Riggelman / Kathryn Woodcock
3:45- 4:00 p.m.	Break	
4:00 – 4:45 p.m.	Ride Information & Bulletin Review	Sonny Silva
4:45 – 5:00 p.m.	Panel Questions	
5:00 – 5:15 p.m.	Wrap Up	Les Simonffy / Sonny Silva

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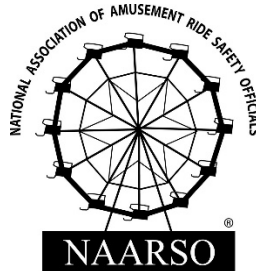
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Duration: Friday March 6th 2020
Location: Grand Hall

Time	Item	Lead
8:00 a.m. – 12:00 p.m.	NAARSO Examinations Note: Examinations will begin following the completion of the orientation and a brief break.	NAARSO Representatives Sonny Silva / Joe Pandolfo



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Addendum: Listing of Presenters

Presenter	Company
Albert J Frieden	BATTECH Enterprises, LLC
Charma Wilderson	General Manager – Division Director - Amusements
Dean McKernon	VP Operations AEDARSA
Franceen Gonzalas	EVP Business Development
Joelle Javier	Engineer, Elevating and Amusement Devices Safety Program
John Riggelman	Director of Global Standards and Procedures Universal Parks & Resorts
Joseph Pandolfo	Consultant, NAARSO – Level 3
Kathryn Woodcock	PhD, CCPE, ICAE, PEng Fellow, Association of Canadian Ergonomists
Les Simonffy	Amusement Device Inspector, TSSA, NAARSO – Level 2
Mike Horst	Senior Electrical Inspector, Electrical Safety Authority
Michael Viechweg	Armis Engineering
Rene Karavas	Amusement Device Inspection/Supervisor, TSSA, NAARSO – Level 3
Robert Kemp	VP Development WildPlay Element Parks
Ronny Angel Løvstad	Senior Engineer Norwegian Railway Authority
Sonny Silva	Amusement Device Inspection/Supervisor, TSSA, NAARSO – Level 3



Day 1: Safety Moment

1.1 Waterslide Commissioning and Waterslide Maintenance

What are the safety critical components on a waterslide? How are acceptance criteria created for commissioning a brand-new waterslide? How is a waterslide properly maintained? Is the flow rate really important? Should a waterslide have the same flow rate in commissioning and then 20 years later? Can I bring and ride my own tube/floaties on a waterslide?

These are some of the questions that will be posed and answered in this presentation by one of the Canadian Waterslide Manufacturers – Whitewater West.

1.2 ASTM Update and ASTM F2783 Training

An update on the status of the changes to ASTM F2783 Canadian Standards will be provided. An overview of the changes and work in progress with all other ASTM F24 standards for Ontario regulated Amusement devices will also be provided.

Lessons learned from the first year of enforcement of ASTM F24 standards and the New CAD in Ontario will be discussed.

1.3 Risk Assessment

The importance of conducting a risk assessment to identify hazards and mitigations for amusement device operations will be discussed. The different team players responsible for conducting a risk assessment will be identified. Global standards for risk assessment such as ASTM, EN and ISO will also be introduced.

This session will also serve as an introduction to Part 1 a. of the Hands-On portion where participants will get to do an exercise on identifying hazards on a fixed amusement device using principles described in this session.

1.4 Hands-On

- Part 1 – House of Frankenstein Clifton Hill
 - a. Wisdom Coaster Risk Assessment Exercise
 - In this session, we will practice what we learned in the morning risk assessment class. We will practice identifying operational and design hazards using a Wisdom Coaster as an example.
 - b. Track and Coaster Inspection Scenario
 - In this session, we will address maintenance and inspection of track, structure, footings, brakes, trains and restraints. Critical areas of inspection will be discussed. Any difference between maintenance and inspection of indoor vs. Outdoor tracks will also be addressed.
 - c. Fasteners
 - In this session, we will review various types of fasteners and their application. We will review the identification of metric and imperial fasteners. Common fastener failures and how to avoid them will be discussed.

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- Part 2
 - a. Cliff-Hanger Ride or Another Ride
 - We will look at critical inspection points for the Cliff-hanger ride. Any areas prone to fatigue, corrosion and wear will be discussed. Sample aging ride inspection reports for the cliff-hanger and similar rides will also be discussed.
 - b. Seatbelts (what you should know and look for)
 - This session will focus on various types of passenger restraint systems, particularly seatbelts. Proper use and care for seatbelts will be discussed. Retrofitting existing rides with seatbelts or other types of restraints will also be discussed.
 - c. ESA Electrical Inspection
 - This session will look at best practices, example inspections along with demonstrations from ESA Inspectors on, cam locks, power boxes review a field evaluation.

Day 2: Safety Moment

2.1 ASTM F770 – Creating your procedures to fully comply to ASTM F770

A breakdown of the process of writing operating and maintenance procedures to comply to ASTM F770 and other additional operations and maintenance requirements in ASTM F2783 will be discussed in this session.

2.2 Electrical

Best practices in grounding and bonding, lessons learned from last season.

2.3 Inspection process – AHJ Best Practices

Consistency is one word that always comes up when owners and operators are asked about their issues with AHJs. How are AHJs in Canada and United States deal with consistency when using the same standards? We will also discuss information transfer between regulators especially for portable rides. How can we utilize lessons learned from other provinces and states?

2.4 Inspections, exceptions and certifications in a digital world

We will look at requirements for documentation of inspections, exceptions and incidents as well as training certifications into a paperless process while maintaining jurisdictional and standards requirements. Modernizing all requirements to be done digitally has allowed WildPlay to maintain high standards for reporting and documentation throughout their parks in North America while also ensuring our corporate headquarters is able to have visibility and oversight into all processes. Wildplay will take you briefly through some of the 3rd party tools they use to do this.

2.5 Battech Enterprises

Battech Enterprises is a leading manufacturer of park and portable model amusement rides such as the Cliffhanger, Zero Gravity, Black Widow and many more. In this session, we will look at critical maintenance

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and inspection points for Battech rides. We will also review service bulletins. We will review some pointers from Day 1 hands-on for a Battech Ride.

2.6 Rider Eligibility and Accessibility

People with disabilities, including children and their parents, comprise as much as 20% of the population. Excluding this population could limit the appeal of a park or carnival to 70% of families. This session will discuss inclusive hopes and expectations, risks and obligations, technical and practical barriers and possibilities.

2.7 Ride Information and Bulletin Review

New amusement ride bulletins released in 2019 and 2020 from manufacturers such as Zamperla, Eli Bridge, Urban Air and more will be discussed in this session. Any updates on TSSA Advisories and Directors Orders will also be presented. Inspection and Enforcement strategy for the bulletin requirements will be discussed.

2.8 Panel Questions

This is an open forum for sharing and discussing lessons learned in amusement device operations, maintenance and inspection in the past years. Open discussions between amusement device mechanics, owners/operators, third party engineers, ride manufacturers and regulators help in keeping amusement rides and devices safe and having a smooth-sailing inspection season.