



STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

Department of Administration
DIVISION OF CAPITAL PROJECTS AND PROPERTY MANAGEMENT
BUILDING CODE COMMISSION

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TO: ALL CARNIVAL AND PARK RIDES OWNERS/OPERATORS

March 3, 2015

Dear Sir/Madam:

The State wishes you a safe and prosperous 2015 season.

Please read this Announcement carefully since it addresses several important documentation and safety issues. Owners may download and print out all the forms they need to apply for registration of their rides by visiting the Amusement Rides page of the RI Building Code Commission website: www.ribcc.ri.gov/amusement.

Important Notes on Annual Inspections:

1. The Annual Inspection affidavit was updated for the 2015 season. Please open the link below and print the latest revision of Annual Inspector Affidavit form.

<http://www.ribcc.ri.gov/documents/amusement/AnnInspAffidRev5.pdf>

2. Please make extra copies for your records, and e-mail the link to your Annual Inspector.

3. Please instruct your Annual Inspector to always use the latest revision of the Annual Inspector Affidavit form, since any Annual Inspection Affidavit executed on an expired form will not be accepted by the State. As you know, a Ride may **not** be registered, or operated in the State of RI in any season, unless the State has on file an acceptable Annual Inspection Affidavit.

4. The new Annual Inspector Affidavit instructs that any Inspection required to be performed **annually** either by the Ride Manual or by a Supplementary bulletin, must be performed by the **Annual Inspector**. In addition, the Annual Inspector must confirm that he performed the special Annual Inspection required by the Manual or Bulletin in the Comment Section. If the ride does not pass the special Annual Inspection, the Annual Inspector must not sign the Affidavit until the Owner performs all necessary corrective action, and the Annual Inspector confirms that the ride **subject to a special Annual Inspection**, required by the Manual or by a Supplementary Bulletin, passed his Annual Inspection.

Rides impacted by 2014 Bulletins or by other state requirements:

Following are state requirements related to the rides for which Manufacturer Bulletins were issued during 2014, along with a brief over-view of those Bulletins:

1. The state requires all Pinfari Zyclone Coasters' Owners to please open the link below and print the subject recent NAFLIC Bulletin on the Pinfari Z 40 Coaster.

http://www.caresofficials.org/sites/default/files/technical_info/pinfari-coaster-1573.pdf

The State Inspector will schedule a joint inspection (in light of this bulletin), with the Pinfari Zyclone Coaster Owners, each at a time of his/her choosing, at the location where the ride is parked.

The purpose of this joint inspection is to examine the actual ride components impacted by the bulletin, and to discuss relevant issues. The goal is to agree on a plan laying out how to periodically inspect, maintain, and test both the anti-roll-back system components, and the chain pawl and other lift components, to ensure that both the lift and anti-rollback systems would function per design, without a problem, under operating conditions.

After completion of this joint inspection, each Pinfari Zyclone Owner must submit a filled out Bulletin Compliance Documentation (BCD), signed by his/her Maintenance Mechanic (see a BCD link under item 4a.).

Furthermore, any Owner who may have recently acquired a Pinfari Coaster during this past off-season, please inform the State Inspector to schedule a joint inspection at the location where the ride is parked, in order to inspect the ride and discuss the above mentioned periodic maintenance plan, in light of the above mentioned bulletin.

2. All owners of the Hrubetz Round-Up rides, please open the link below, and print the subject recent NAFLIC Round-Up Bulletin. Please inspect your Round-Up ride in the vicinity of the Trailer Chassis girder cut-out welds, to make sure no cracks are present in the areas highlighted in the bulletin by photos. In case of any indications, please implement corrective action as instructed by the bulletin to restore the ride to a "like-New" condition. All welds must be installed by appropriately licensed RI certified welders, and the welder certification information must be filed with the Bulletin Compliance Documentation (BCD) in the Ride File Jacket (see BCD link under 4a. below). Thank you.

http://www.caresofficials.org/sites/default/files/technical_info/round-1571.pdf

Please submit a completed and signed Bulletin Compliance Documentation (BCD), to document compliance with this bulletin with your annual application submittal (see BCD link under item 4a below).

3. The State of RI requires that any RI Owner who may have acquired a Huss Frisbee in the past off season to print the NAFLIC Huss bulletin from the link below, inspect the ride for potential defects as highlighted in the bulletin, and implement corrective action as instructed by the bulletin to restore the ride to a "like-New" condition.

http://www.caresofficials.org/sites/default/files/technical_info/huss-rides-frisbee-s-184-1572.pdf

For the Bulletin Compliance Documentation (BCD), please click the link below under item 4a.

4. All Owners of the Chance Zipper rides must inspect the seat support K frames according to the requirements of the Chance Zipper Bulletin B106CRM192-0, dated Nov 21, 14. By December 30 2014, the owners should have concluded the inspection and completed the corrective action spelled out in this bulletin.

Thereafter, this inspection must be performed annually by the Annual Inspector, and documented under the "comment" section of the Affidavit.

The registration papers for the Chance Zipper must include all the following:

a. A filled out Bulletin Compliance Documentation Form signed by the Maintenance Mechanics, attesting to the implementation of the action required by the bulletin. To print a BCD form, please click the link below:

<http://www.ribcc.ri.gov/documents/amusement/Ride%20Bulletin%20Compliance%20Documentation.pdf>

b. An Annual Inspector Affidavit, in which the Annual Inspector testifies under the "comments" section that he has verified the proper compliance with the bulletin (specified by author, number, and date), and reviewed the Bulletin Compliance Documentation filed in the Ride File Jacket.

5. All Owners of the Chance Giant Gondola Wheel rides must inspect the ride main Axle according to the requirements of the Chance Giant Gondola Wheel Bulletin B400CRM193-0, dated Nov 21, 14. By December 30 2014, the owners should have concluded the inspection and completed the corrective action spelled out in this bulletin.

Thereafter, this inspection must be performed annually by the Annual Inspector, and documented under the "comment" section of the Affidavit.

The registration papers for the Chance Giant Gondola Wheel must include all the following:

a. A filled out Bulletin Compliance Documentation Form signed by the Maintenance Mechanics who testifies to implementing the action required by the bulletin. To print a BCD form, please click the link under item 4a. above.

b. An Annual Inspector Affidavit, in which the Annual Inspector Testifies under the "comments" section that he has verified the proper compliance with the bulletin (specified by author, number, and date), and reviewed the Bulletin Compliance Documentation filed in the Ride File Jacket.

6. All Owners of Zamperla "Crazy" series (Crazy Bus, Crazy Sub, Crazy Plane, and Fire Chief) rides must install a Redundancy Kit provided by Zamperla prior to operation in the new 2015 season, according to the requirements of the Zamperla Bulletin No: 2014CB01, dated October 1, 2014. After compliance, Owners must complete a Bulletin Compliance Documentation (see link under item 4a. above) signed by the maintenance mechanic, to document compliance. The completed Bulletin compliance documentation form must be submitted with the annual registration papers as a condition to be granted a permit in the 2015 season.

7. All ARM Vertigo Owners must comply with the ARM Bulletin Number SB090710, which requires adding 6 fence sections to the perimeter fencing of this ride, to cover the full foot print of the ride during operation. After compliance, please submit a bulletin Compliance Documentation (see link under item 4a. above) on

Rides Newly Introduced into the State of RI:

In order to meet the requirements of Section 23-34.1-5 (a) (3) and 23-34.1-7 (a) of the Amusement Ride Safety Act, any Owner who intends to introduce a ride in the state Rhode of Island for the first time, be it in a park location, or at any carnival location during the season, he/she must provide the state with a two week advance notification in writing, attach a copy of the ride's Operation & Maintenance/Inspection Manual(s), along with: all the Supplemental Manufacturer's Bulletins issued for the ride(s) to date, the ride's Annual Inspection Affidavit, None Destructive Testing Report (NDT), where applicable, and Bulletin(s) Compliance Documentation(s), where applicable, before the newly introduced ride is scheduled to be operated for the first time in the state.

Rides that cross the RI border for the first time, to be set-up in any Carnival or Park location, without a two weeks notification and submission of the aforementioned manuals and other documentation, will be denied a permit according to the Act, and will not be allowed to operate, until the aforementioned documentation is received and approved. No exceptions will be made under any circumstances. Please note that Act Section 23-34.1-7 (b) which allows a ride or device to operate until it can be inspected by the State of RI applies only to rides that were already "permitted" in the state of RI in the current season, that is, rides that are already in the State of RI database (and hence already have a tag affixed to them), whose annual inspection affidavits, NDT, etc. were already received and approved by the state, and already have the RI Annual Permit Sticker for the current season affixed on their Tags. Newly introduced rides must first satisfy registration requirements, be added to the RI database, acquire a RI database "SBC" number, get a RI Tag affixed to their frames, and get a RI Annual Permit Sticker for the current season affixed thereto, before the above Act Section may be applicable to them.

Annual Application for Ride Registration and Permit; Required Documentation:

This year, the Annual Inspection Affidavit has been revised. Please use ONLY the latest revision of each form.

Once the Annual Inspections, None Destructive Testing (if applicable), and whatever Bulletin Compliance actions (if applicable), are performed, Owners who wish to operate in the State of Rhode Island during the upcoming 2014 season must immediately submit to the State the following documents:

1. Completed Annual Permit Application Forms, SBC-34.1-1 & 2.
2. Completed Annual Inspection Affidavits (form SBC-34.1-10). Please note that the Annual Inspector must have unobstructed access to visually inspect all the ride components without exception. Therefore all non-essential ride accessories such as light panels, facades, scenery, as well as all decorative panels must be removed before the arrival of the annual inspector. Fiber-glass in which steel frames are embedded (e.g. in the case of the Wisdom Gravitron/Starship panels), must be removed to allow for the visual inspection of the steel frames. If fiber-glass in which steel frames are embedded cannot be removed, a manufacturer-approved NDT must be utilized in lieu of direct visual inspection. Fiber-glass mounted on steel frames and hiding them, such as in cases of seats of the Wisdom Sizzler and other rides, must be removed to allow for the un-obstructed visual inspection of all ride components.
3. Completed NDT reports (form SBC-34.1-12), if applicable.
4. Completed Bulletin Compliance Documentation (form SBC-34.1-15), for each ride/device whose manufacturer has issued a Safety Alert or a Service Bulletin during the off-season. The Bulletin Compliance Documentation shall specify the action taken, the individual(s) who performed the work, and shall include all supporting documentation, such as bills of sales of replacement parts and new

- kits, welding procedures and processes required or approved by the manufacturer, as well of all procured professional services such as welding services from certified welding professionals.
5. An Operator training Affidavit (form SBC-34.1-13) for each Operator.
 6. A Current liability Insurance Certificate in the amount specified by the Amusement Ride Safety Act.
 7. A check for the total amount of the annual rides' registration fee. Please note that the ride registration fee is \$ 50 per mechanical ride, including slides 20' and higher, as well as Fun Houses that have mechanical parts such as the Wisdom Dark Ride and the Funny-Frite Wacky Shack.
 8. The latest update of the Lock-Out/Tag-Out Plan/Program.
 9. Bills of sale of new bolts and nuts to replace old bolts and nuts in Chance carnival model rides' connections subject to repeated assembly/disassembly at each set-up (see the Chance Field Inspection and Test Guide Manual).
 10. Bills of sale of new 7/8" Diameter, 8" long Under-Wing Alignment Fasteners (Table Bolts and Nuts) for the Wisdom Gravitron/Star-Ship, required to be replaced annually by the Wisdom Bulletin dated June 1, 2004 (P 2, item 7).
 11. Bills of Sale all other frequently assembled fasteners for which the manufacturer requires annual replacement.
 12. Bills of sale of all "Rarely Disassembled" bolts and nuts, required to be replaced every five years in Chance Carnival and Park ride models, according to the Chance rides' Field Inspection and Test Guide Manuals. Please note that in this case, the bills of sale of the previous set(s) of bolts and nuts must be kept on file to prove compliance with the correct replacement frequency spelled out in the Manuals.
 13. Please contact ride manufacturers to obtain all necessary welding specifications (processes and procedures) for the rides you intend to register and operate. No weld or base metal repairs may be done without approved specifications from the manufacturer. Therefore it is in Owners' interest to obtain such information ahead of time to avoid permit and operation delays. Please follow due diligence by obtaining the information based on experience with past problems. Following are the minimum specifications required:
 - a) Welding Process, b) Electrode specifications, and c) Welding procedure, including any required preparation as well as any required ND testing.
 14. The season's itinerary based on signed contracts or prior agreements.

Routine Maintenance Inspection, NDT, and Annual Inspection:

1. Cracks, corrosion and wear (beyond tolerances specified in the manual or determined by an engineer) are prime concerns that must be sought, detected and properly addressed in all rides, at all times, particularly during the Off-Season. Cracks and corrosion, either in parent metal or in weld metal, must be sought through visual inspection, using tools such as a magnified glass and a wire brush, as well as through tell-tale evidence. Wear must be detected using precision measurement tools such as calipers, micrometers, etc. Once discovered, cracks, corrosion and wear must be properly and promptly addressed, either through brushing to shiny metal and painting with a manufacturer approved painting system (in case of superficial corrosion that did not reduce the material thickness beyond acceptable wear tolerances), welding repair (in case of cracking of weld and/or parent metal), or part replacement (in case of mechanical or chemical wear beyond Manual specified tolerances). The last chance to address metal wear cracks, and corrosion before the season starts, is during the annual Ride-Down inspection. Please work with the Annual Inspector to identify and properly address all defects in parent metal and welded connections as needed. All replacement parts must be purchased from the Manufacturer or from a Manufacturer-approved supplier, and all bills of sale must be kept in the Ride File Jacket.
2. The State of RI requires all ride components to undergo thorough visual inspection at least once a year by the Annual Inspector. Particularly during Annual Inspection, No part of the ride is allowed to remain hidden or covered in any way that would make thorough visual inspection by the Annual Inspector difficult or impossible. In the cases of rides having hidden components (e.g. steel components wrapped in fiberglass, such as in the case of the Wisdom Gravitron), the Owner is obligated to satisfy the requirement of thorough visual inspection either by removal of elements that cover the hidden components, or by an appropriate Manufacturer approved NDT procedure. If an NDT inspection of hidden parts is conducted, the NDT report documenting the soundness of the hidden parts must be available for inspection by the Annual Inspector (i.e. must be kept in the Ride File Jacket).
3. Needless to state that all None-Destructive Testing (NDT) must always be scheduled ahead of the Annual Inspection. When the Annual Inspector does his/her inspection, he/she must be able to check all NDT in the ride file, including NDT required by Bulletins, as well as NDT to ensure the soundness of permanently hidden steel.

Post-Accident Inspections:

Subsequent to receiving the State Annual Permit Sticker, if any ride/device suffers an accidental impact or shock, such as (but not limited to), during transportation, during set-up, or during tear-down, the owner must immediately conduct a Preliminary Post-Accident Inspection of the ride and report the accident to the Building Commissioner's office. In such an event, depending on the nature and severity of the accident, the Building Commissioner may, at his own discretion, revoke the ride's Annual Inspection/Permit, notify the Owner of such revocation, and order a Post-Accident Inspection to be performed by a Rhode Island Approved Annual Inspector. Once an Owner receives a notification of the ride's Permit revocation, he/she is required to remove the current Permit sticker from the ride tag until the ride passes the Post-Accident Inspection.

The Post-Accident Inspection is identical in scope to the Annual Inspection (Structural, Mechanical, and Electrical), except in that it does not cover components that were, positively and clearly, un-impacted by the accident. Following the Post Accident Inspection, the annual Inspector shall notify the owner with the required corrective action, if any. The owner shall implement the required corrective action, if any, and file all bills of sale in the Ride File Jacket. In the completed Post-Accident Inspection Affidavit, the annual inspector must confirm that any required corrective action was satisfactorily implemented by the Owner and that any required weld repairs were made (in kind) by welders certified to conduct the original welding process and procedure, as verifiable from bill(s) of sale and welder certifications filed in the Ride File Jacket. Once the Post-Accident Inspection is received and approved by the State, the State Inspector shall re-affix a new permit sticker on the ride indicating that, once again, it has a valid permit.

ASTM Standards:

Please make sure to have on hand a copy of the current ASTM F-24 Standards' most current Edition. If you do not already have the current ASTM Amusement Rides Standards book, you may purchase it by calling ASTM at 1-610-832-9585. The State of RI requires all owners to design all their operational programs, such as their maintenance, inspections and operator training to satisfy the current requirements of the relevant ASTM F-24 Standards. All inspections must be done in conformance to the ASTM F-24 standards, as stipulated in the Act.

Midway Layout, Access/Egress and Emergency Planning:

In planning the layout of a Carnival site, or a Park site, please adhere to the following statutory requirements:

1. Please ensure that site planning complies with the requirement that a continuous and un-obstructed emergency access/egress pathway, providing access to each and every ride, and connected to the main roads, must be available for use by emergency vehicles at all times from the beginning of set-up to the end of tear-down (with regards to Carnival sites) and/or at all times (with regards to Park sites). Such un-obstructed access/egress pathway must not be used for parking or for storage of items. In particular, flammable or hazardous chemicals must not be stored in any space used by the public. Chemicals and hazardous materials must be properly stored, away from all space used by the public, and in strict adherence with all state and federal policies and/or regulations.
2. Moving parts of any two adjacent Major Rides must not come within less than twelve feet (12') from each other during operation (minimum 12 foot clearance envelope around moving parts of Major Rides, according to RIGL 23-34.1-9 (h)).
3. Moving parts of Major Rides must not come within less than twelve feet (12') from the moving parts of an adjacent Kiddie Ride during operation (a minimum 12 foot Clearance envelope around moving parts of Major Rides, according to RIGL 23-34.1-9 (h)).
4. Moving parts of any two adjacent Kiddie Rides must not come within less than six feet (6') from each other during operation (a minimum 6 foot Clearance envelope around moving parts of Kiddie Rides, according to RIGL 23-34.1-9 (h)).
5. All rides, devices and portable structures shall be maintained at least: (a) 15 feet away in any direction from an overhead conductor operating at 600 volts or less (15 ft clearance around conductor), and, (b) 15 ft measured horizontally from a vertical plane encompassing a conductor operating in excess of 600 volts (15 ft horizontal clearance from a vertical plane encompassing the conductor), according to section 525.5 (A), (B) of NEC 2011.

Integrity of Mechanical Systems:

Whenever a mechanical system component is replaced, it must be replaced in kind using parts purchased from the manufacturer or from a manufacturer-approved supplier. All mechanical components, including but not limited to hydraulic and pneumatic components, must be properly listed. All pressure vessels must have the ASME stamp. All mechanical work must be done by properly qualified mechanics.

Integrity of Electric Systems:

Temporary Power Supply Systems in carnival set-ups must comply with the currently adopted edition of Section 525 of the National Electric Code, NEC/NFPA-8. Electric Power systems of all Park rides must comply with the currently adopted edition of the NEC/NFPA-70.

Lock-Out/Tag-Out Program, Content and Function:

A Lock-Out/Tag-Out program commits the amusement company to putting in place a combination of accident prevention measures/mechanisms. The said accident prevention measures must have sufficient redundancy such that failing to comply with one measure would not be enough to compromise personnel safety.

By signing the Electric Inspection Approval Form, the Electric Inspector, representing the Authority Having Jurisdiction (AHJ) gives the owner/operator permission to connect power to the rides, after proper notification and consent of all parties working on each ride is secured. Therefore, until the Owner receives the Electric Approval Form signed by the Local Electric Inspector, the generator, circuit breaker boxes, as well as individual rides being worked on, must remain locked and a tag attached indicating "please do not remove locks". The end of this "Power Lockdown" phase must only come by the combined knowledge and consent of the owner's representative on site, as well as of all individuals working on setup, maintenance, or inspection of the rides. Such knowledge and consent must be evidenced by removal of each individual lock, and documented by having the party sign-off or initial in the appropriate space "lock removed by ..", next to his/her previous "lock installed by .." entry on a sign-off sheet.

In the special cases where power is needed to expedite the assembly of a ride, such as in the case of a Ferris wheel, the permission to connect power to a ride may only be given by the Owner's Master Electrician who submitted the application to install the temporary wiring to the AHJ. The Master Electrician then becomes directly responsible for the safety of personnel working on the ride(s) before the local electrical inspector. In all cases, the permission to turn on power may be granted only after obtaining sign offs from all parties working on the ride(s) (as indicated by initials on a sign-off sheet). At this point, all parties may remove their locks from the equipment connecting power to the ride(s) being assembled.

Fasteners, Proper Installation Guidelines:**Pinned Connections:**

1. If circular pin holes become deformed into an egg shape or sustain any damage, please contact the manufacturer to obtain guidance on corrective action.
2. Please instruct employees responsible for set-up to refrain from hammering pins in place. Tools like crow bars, winches, as well as all other set-up equipment purchased with the ride must be used to align pins and pin holes, whereupon the pins are to be simply inserted in place.
3. All Retainers (Safety Keys, R-pins, etc) shall have the correct size, and shall be fairly new and free from corrosion, wear, deformation, and other damage.

Bolted Connections:

Bolted connections must be tightened according to the exact manufacturer provided written Torque Specifications. If the tightening/torque specifications are not in the manual, the Owner must obtain these written specifications directly from the manufacturer. The manufacturer must provide two sets of tightening specifications, one set for the frequently assembled/disassembled connections (in Carnival rides), and another for the permanently assembled connections.

Obtaining internet generic tightening specifications for the particular bolt and nut diameter and material specifications is not acceptable. This is since internet information would almost certainly be relevant only to

the more common permanently assembled connections (such as connections in Buildings, Bridges, Park rides, and permanently assembled Carnival ride connections). Therefore applying such information to frequently assembled connections in Carnival amusement rides would result in hazardous over-tightening. Tightening specifications for frequently assembled bolted connections in mobile amusement rides are significantly reduced, and hence has a larger factor of safety to reduce the wear and tear on frequently assembled fasteners. Following are some guidelines:

1. Promptly replace damaged bolts and nuts. Whenever you observe damage (e.g. deformation) or if a nut gets stuck and cannot run up easily all the way up the threads, please discard the damaged bolt, nut, or both.
Chance (CRM) requires annual replacement of Frequently Assembled set-up bolts and nuts, as well as the replacement of all bolts and nuts in permanently assembled connections every five years. Such practice is cost effective compared with other routes (e.g. NDT) and would meet the highest level of "due diligence".
2. All tightening shall be done using a recently calibrated torque wrench. All torque wrenches must be sent for calibration at the end of every season.
3. Train employees to visually examine each bolt and nut before installation. Over-tightening results in bolt elongation (increased thread pitch). In case of repetitive over-tightening, cracks could develop in the underside of the bolt head, at the interface between the bolt head and shank. Nuts could crack or shatter and loosen. If this happens, it would be easy to remove the bolt by hand and the bolt along with its nut would be utterly useless in a friction connection, which cover practically all connections (only very old rides use the now obsolete direct shear connections). Promptly discard and replace damaged or cracked bolts and nuts.
4. Repeated over-tightening would also cause compressive strain in the joined plates (a slight indent, causing a small reduction of plate thickness). With repeated over-tightening, and with the nut pressing against the reduced thickness, a slightly increasing part of the bolt would extend out of the joined plates. Ultimately the tensioned part of the bolt protruding out of the joined plates would have a partially deformed thread. In this case the torque wrench may "click", but the torque would be reached trying to move the nut up the deformed thread, without bringing the plates to press against each other as envisioned in a "No Slip" connection. If we remove the bolt and nut and try to move the nut up the threads, the nut will stop and will not be move beyond the deformed thread (at a distance slightly larger than the thickness of the joined plates). **Therefore to make sure no threads are deformed, test the fastener by running the nut to the end of the threads. If it is stuck midway through the threads, the fastener (bolt and nut) must both be discarded and replaced.**
5. As explained in item 4 above, repeated over-tightening can pose significant risks to all frequently assembled No-Slip shear connections. Therefore, the least an Owner must do is to comply with the manufacturer's requirements of annual replacement of those fasteners, if applicable (e.g. in case of Chance/CRM rides).

Welded Connections, welding repairs, and NDT:

1. Welding Processes, such as Shielded Metal Arc Welding (SMAW), Submerged Arc Welding (SAW),... etc, shall be as provided/approved by the Designer/Manufacturer. Except for Pre-qualified Welding Processes conforming to Section 3 of the ANSI/AWS D1.1, Welding Processes for repairs may be qualified through documented WPS testing in conformance with Section 4 of ANSI/AWS D1.1, in coordination with the manufacturer.
2. Weld repairs must be made according to a Welding Process and a Welding Procedure Specifications (WPSs) provided/approved by the Designer/Manufacturer. The repair must only be made by welders certified to perform such welding process and WPS. Except for Pre-qualified WPSs, conforming to the requirements of Section 3 of the ANSI/AWS D1.1 (most recent edition), Welding Procedure Specifications for repairs may be qualified through documented WPS testing in conformance with Section 4 of the ANSI/AWS D1.1, Section 4.
3. All documentation of weld repairs must be kept in the Ride File Jacket, including the specifications of the welding procedure and the welding Process, as well as the name and contact information of the Certified Welder. Weld documentation must indicate that the welder is certified to perform the welding process and procedure specified for the connection or repair. Any welded connection or repair known to have been performed without proper license must comply with the welding process and procedure approved by the manufacturer. In addition, it must pass a None Destructive Testing (NDT) by a licensed NDT technician. All deficient welds must be grounded out and properly re-welded by a properly qualified and certified welder.

4. Please train the operators to check for hair cracks and to observe telltales of cracking, such as apparent lines of corrosion, in both weld and parent metal, particularly at weld toes and sharp corners (e.g. in square or rectangular holes).
5. Please remind your NDT company (whenever applicable) to conduct all visual NDT required to be done by a Manufacturer's bulletin. All other visual NDT not required by bulletin may be performed by the Owner or his/her representative.

Wire Ropes:

Please replace wire ropes according to the ride manufacturer specified replacement criteria, or according to the wire rope manufacturer replacement criteria, or according to an approved standard replacement criteria in the absence of more specific guidance from the ride manufacturer or the wire rope manufacturer. For instance, According to the ASME and ANSI standards governing wire ropes used in many applications, a replacement criterion based on individual wire breaks requires the wire rope to be replaced when a maximum specified number of broken wires in one strand over one lay, or in all strands over one lay, are exceeded (e.g. 3 wires in one strand over one lay or 6 wires in all strands over one lay). Other replacement criteria based on all other kinds of damage/defects (in addition to wire breaks) must also be simultaneously considered. Wire Ropes must be maintained in good condition, free from kinks, breaks, corrosion and other defects, and must be properly terminated (looped, saddled and tightened).

Routine Maintenance Documentation:

All maintenance required by Manuals must be performed in a timely manner, and must be documented. The State of Rhode Island will accept maintenance forms/logs from other states. The ride's name and serial number must be indicated on all its maintenance logs. The maintenance work (including but not limited to greasing, parts placement, installation of a manufacturer approved kit, painting system, etc), must be accurately described and specified by date, location within the ride, and signature or initial of the maintenance mechanic who performed the maintenance.

Unusual noises during operation:

An unusual sound is the first hint of a mechanical problem. Therefore, Owners must train operators to become familiar with the normal operation sound of each ride they operate (mainly the sound of the motor, along with the normal sound of all other moving parts). They must be trained to stop the ride upon hearing any unfamiliar sound, and not to operate the ride again until the source of the potential problem is spotted, identified and properly addressed. Rattling sounds, for instance, must be recognized as an indication that the ride is being subjected to potentially damaging impact stresses. Repetitive impact (or energy loading) reduces the useful life of parts, because it is normally associated with much higher than the worst normal operational service stresses. Therefore, if the ride rattles during operation, the root cause of rattling must be identified and addressed.

Painting:

1. Structural Steel must be maintained and protected from corrosion, particularly in the coastal environment of RI. Unless otherwise specified in the manual, please contact the manufacturers of your rides to get written specifications on paint system(s) recommended by the manufacturer(s) (a paint system consists of surface preparation, prime coat, and subsequent coats). Please use the off-season to follow all the manufacturers' specifications on how to prepare the surfaces to be maintained and how to install the paint system(s).
2. During the metal preparation phase, after wire brushing the component(s) to shiny metal, please replace all components impacted by either mechanical or chemical wear beyond the manufacturer specified tolerances, weld repair repairable cracks, or replace the cracked component(s) if warranted.
3. All bills of sales related to all maintenance work must be filed in the ride file jacket.

Trackless Trains:

Trackless Train Owners must follow all the Manufacturer's operation guidelines provided in the Ride Manual.

In addition, according to the RI Amusement Ride Safety Act, all amusement rides must be fenced. In the case of a Trackless Train, surrounding the ride with fence sections may not be practical. However, the intent of the Act regarding ride access control must be satisfied. Therefore Trackless trains must not be allowed to roam about and freely mingle with vehicular and pedestrian traffic. The following instructions regarding access control and other rules of operation must be followed:

1. Please delineate the area of operation by cones, caution tape, or a combination of those and any other appropriate measures. In addition, please provide as much signage as practical to inform the public about the delineated area of operation and to warn them against trespassing it.
2. Please establish a loading/disembarking area where children may line up to hand the operator a ticket and board the ride.
3. The area of operation must be practically level, free from pot holes and steep slopes.
4. Tractor speed must not exceed 4 mph.
5. Beside the operator driving the Trackless Train, another operator is required to follow the train in order to protect the public from coming in contact with it. Operators must particularly watch for children running near the area of operation.

In addition to the above specific Trackless Train instructions, please also follow all other specific instructions in the ride's manuals, as well as all relevant general instructions included in this Announcement.

Go-Kart Tracks:

In addition to all general instructions in this Announcement, please also note the following specific instructions:

1. The State of Rhode Island requires all Go-Kart Tracks to be equipped with a remote control idling system. The purpose of the system is to make it possible for the Operator to remotely set the engine of any Kart to "idle mode" if such action becomes necessary for the safety of riders.
2. Please refer to ASTM-F24 Standard F-2007 (most current edition), for all safety requirements, including but not limited to: fire safety requirements, Track containment system design and maintenance requirements as well as Kart design and maintenance requirements. Please also refer to the Manufacturer's Manual for maintenance instructions on material grades and torque values for all fasteners such as for wheel nuts and bolts, as well as on brake adjustments and service, tire inflation pressure, tire wear limits, steering linkage adjustment and service, chassis lubrication points, .. etc.
3. Before putting any Kart in service, the gas tank cover (equipped with a ball valve) must be tested for leakage. To test the gas tank cover, please perform both of the following two tests:
 - a) Shake the cover next to your ear to listen to the ball rattling inside the valve to ensure it is moving freely.
 - b) Fill a stand-by tank with water, cover it with the tank cover being tested, and turn it upside down. If leakage is observed, promptly discard the leaky tank cover and replace it with a new tank cover purchased from the manufacturer.

Euro-Bungee Jump and Rock Climbing Devices:

In addition to all general instructions in this Announcement, please also note the following specific instructions:

1. Please note that the manufacturer's requirements regarding the replacement of suspension systems shall be followed to the letter. If the manufacturer requires that cables and/or other suspension system components, including but not limited to rubber ropes and carabineers, to be replaced annually, the ride file must show that the new suspension system component(s) in question were installed within the year prior to the end of the scheduled event. If the suspension system components are required to be replaced after certain number of hours of operation, an operation log documenting the hours of operation must be in the ride file to make it possible for inspectors to verify compliance.
2. Owners of Rock climbing devices are advised of the CPSC Recall Alert (dated June 3, 2005) as well as MSA Announcement (dated April 13, 2005) regarding the recall of some MSA manufactured Redpoint and Auto-Belay Descenders. The recalled products have a faulty bearing that can cause the brakes to fail. When this occurs, climbers risk rapid descent with no braking capability. Owners are required to stop using the Descenders immediately and contact MSA to schedule a free repair/replacement of the product.

3. According to "News from CPSC" (Release #07-100) some Petzl America faulty Carabineers were subject to recall. If you have Petzl America Carabineers please contact Petzl America to verify whether the Carabineers on your Devices (as identified by their Serial Numbers), are subject to recall, and if so, immediately replace any such faulty Carabineers. If the manufacturer tells you that your carabineers' serial numbers are not subject to recall, please ask for a written documentation that your carabineers serial numbers are not subject to a recall.
4. In Oct 2010, the CPSC issued release #11-029, announcing that carabineers manufactured by Hunter Safety Systems of Danville, Alabama were subject to a voluntary recall. If you use any such carabineers on your equipment, please remove them promptly; and return them to the manufacturer for free replacements.
5. Operators of Euro-Bungee Jumps must have a scale ready for use by patrons immediately upon their entry to the ride. The Operator must be trained to assign patrons to the station having a suspension system appropriate for their weight, according to the manual.

Useful Inspection Tools:

To buy Ultrasonic tools for checking the wall thickness of enclosed members (e.g. tubular steel or pipes), visit:

http://www.landmarkprecision.com/Ultrasonic_thickness_gauges.html

To look inside enclosed space e.g. of tubular steel members or inside the fiberglass encasement of steel members, the State recommends that you buy one of the useful gadgets available in the market, generally called "bore scopes" or "spy sticks". For more information please call: 1-201-489-8989, or log onto: <http://www.provision100.com>

Conflict Resolution:

Disagreements on technical issues will be noted by the State Inspector but should not be a cause for disruption of the safety inspection; neither should any Owner expect immediate resolution in the field for all disputes. The state inspection time is very valuable and must be devoted to the physical work of Safety Inspection only. Submit your position on any disputed issue(s), as well as any proposals or questions you may have, in writing, to the office of the Building Code Commission. The State will provide Owners with a written response to settle the issues thus presented. Issues that require a consultation from the Advisory Committee or the Attorney General's Office will naturally require longer time to resolve. Please also see the Building Commissioner's letter dated July 5, 2005, regarding State Policy in this regard.

Function of the Annual Announcement as Interim Regulations:

During the 2011 season, the new members of Amusement Ride Advisory Board were approved by the RI Governor, which will help in finalizing the RI Amusement Ride Safety Regulations currently being drafted. In the interim, Owners are advised to treat the requirements set forth in an Announcement signed by the State Building Commissioner as having the same effect and authority as Regulations enacted under the law. Owners who wish to appeal for relief from any of the requirements set forth in a State Building Commissioner's announcement (including the Annual Announcement) must submit a written request for a hearing to the Building Commissioner. If the relief is granted, Owners will receive a letter, or an e-mail notification, specifying a conditional relief or a revocation of the requirement. All requirements must be followed until a letter, an e-mail, or web announcement granting a conditional relief from the requirement or revoking of the same is made available to all Owners.

Please direct any questions to the State inspector, Mag Guirguis, at 222-6330. Once again the State wishes you a safe and a rewarding season.

John P. Leyden, CBO



State Building Commissioner

Attachment

PROCEDURES AND DOCUMENTATION

1. Often time an unusual sound is the first hint of a mechanical problem. Therefore, you must train your Operators to listen to and memorize the normal sound of each ride they operate. This way they will stop the ride upon hearing a sound not associated with normal operation.
2. Submit to the state a copy of ride operator training documentation (properly executed form SBC-34.1-13) for each registered mechanical ride or device before the start of the season. Also, any time a ride or device is leased without a trained operator for either public or private use an operator training affidavit must be executed and faxed to the State, along with a copy of the lease agreement, before starting the operation of the ride or device.
3. Operators must strictly enforce the posted latest minimum height limitation specified by the manufacturer for both major rides and kiddie rides. This requirement is paramount for safety and must be strictly adhered to.
4. Regarding rides that subject passengers to severe centrifugal forces, including but not limited to the Sizzler, the Scrambler and the Octopus, a sign must be posted instructing heavier riders to occupy the outer seats. Operators are expected to request that passengers be re-seated accordingly.
5. A "No Single Rider in a Tub" policy is strongly recommended for all adult rides, particularly those that subject riders to a centrifugal force or any other type of inertia forces (sometimes called G-forces).
6. In the case of ride classes as specified in "4" and "5" above, a sign must be posted to warn passengers with significant health problems against the use of these rides. In some cases, with the approval of the owner, visibly impaired passengers may be denied access to the ride.
7. As part of each carnival set up, establish a central area for providing first aid and injury management, known to all organization personnel.
8. Daily inspection must be documented. Daily inspection documentation may be checked as part of the set up inspection and during unscheduled inspections.
9. Ride manuals must be available during set up inspection and at all times for reference.
10. Copies of daily inspection reports for any ride involved in an incident must be kept in a special incident file until closure of the incident.
11. Sweeps of the Hampton rides are required by the manufacturer to be covered by the provided fire resistant canvas. Please always install the canvas as instructed by the manufacturer, immediately after the conclusion of the state inspection.
12. Please ensure that disassembled (strip down) inspection is done during the annual inspection. Hidden steel was often found rotten, especially in areas where rain water collects due to lack of weep holes. Therefore it is required to expose all connections for annual inspection, even if disassembly or fiberglass stripping is necessary for all components and connections to be properly inspected.
13. All maintenance work required by the manual must be performed and documented.
14. Steam clean parts or use wire brush if necessary to prepare for NDT to avoid having the NDT personnel perform the cleaning at your expense.
15. Request MSDS sheets on any substance you buy (e.g. paints .. etc).
16. According to OSHA regulations, records must be kept for 5 years.
17. It is recommended to invite OSHA to inspect your operation. This is a free program, from which you will come away with useful tips that may lead to enhanced safety.
18. Equipment and documents expected to be available on site of each event
 - A Tick Tracer
 - A grounding Conductor continuity Testing Device.
 - At least one Ultrasonic device to check the thickness of enclosed members (e.g. pipes and tube steel)
 - "Bore-scopes", or "spy sticks" for inspection inside enclosed spaces.
 - A flash light
 - Hard hats (use during assembly and inspection is required by OSHA).
 - Anti-skid tape or paint to apply on steps, if warranted.
 - Camera (regular, Polaroid, video or digital).
 - Magnifying glass
 - Body harnesses (required by OSHA for work above 6 feet high).
 - Lockout/Tag-out program and associated Lock-Out devices for the generator and for circuit breaker boxes.
 - 100' tape.
 - A Carpenter's Level with bubbles for horizontal and vertical leveling.
 - A list of manufacturer's telephone numbers
 - A list of Annual Inspector's Telephone numbers
 - Complete Ride File Jackets for all rides, which must include the ride manual(s), a complete set of bulletins, latest NDT tests & daily inspections for the past 14 days of operation.