



Progressive Training Program

Course 2: Blue

Carousel

Standard Operating Procedures

Revised: March 2007

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Section 1: Introduction to the Carousel

1.1 Carousel Fact Sheet

HISTORY

1. The Zoo's original carousel opened in 1988 and was located in a space now occupied by Kōmbo Family Coaster and the Simulator.
2. At the end of the season in 2000, the original carousel was dismantled and returned to its original owner to make way for Kōmbo Family Coaster.
3. For the 2001 Kroger Christmas at the Zoo, a carousel was rented and operated in the Kroger Party Tent area just for the Christmas festivities.
4. The "Christmas Carousel" proved to be so popular that it was decided to keep the carousel as a permanent attraction.
5. In the early summer of 2002, the current and permanent home for the carousel was completed.
6. In 2005, the old carousel was once again replaced with a brand-new, animal-themed carousel.

STATISTICS

1. Manufacturer: San Antonio Roller Works (Carousels USA)
2. Serial #: MC005302C101
3. Number of animals: 30
4. Number of chariots: 2 (2 benches each)
5. Total Number of Guests per Ride: 38
6. Ride Time: 2 minutes 15 seconds
7. Rotations Per Minute: 3.5
8. Maximum Hourly Capacity: 456
9. Grand Opening: March 24, 2005

1.2 Guest Convenience Items

1. Closest restrooms: Between Dog 'n Suds and the Performance Amphitheatre
2. Closest drinking fountain: Restrooms between Dog 'n Suds and the Performance Amphitheatre
3. Closest pay telephone: Outside Zoo Exit
4. Closest food and beverage facility: Edy's Ice Cream (open seasonally), Dog 'n Suds (open seasonally), Café on the Commons (open daily)
5. Stroller and Wheelchair Rental: Rental counter just inside Zoo Main Entrance (regular season only), Zoo Admissions (off season)
6. First Aid: Inside Zoo Main Entrance, or call 5111 from any park phone
7. Lost and Found Inquires: Security/First Aid or Zoo Admissions (Main Entrance)

1.3 Glossary of Terms

Center Pole – The stationary central column that supports the entire carousel.

Chariot – Riding benches on the carousel provided for those who do not want to ride on an animal.

Eccentrics – Above the jumping animals, a steel shaft (eccentric) with offsets goes back to the center pole where a gear on the shaft rides in a stationary ring gear on the center pole. As the carousel turns, the gears turn the shaft and the jumping animals, suspended from the offsets, move up and down.

Inverter Drive – The computerized control box located in the center of the carousel that controls the speed and length of the carousel ride.

Jumper – An animal figure that moves up and down as the carousel turns.

Operators Control Console – The main control box which contains the various functions needed to operate the carousel.

Platform – The ring-shaped floor of the carousel.

Pony Hanger – This is the pole or pipe that each jumping animal is mounted on and in turn, hangs from the eccentric, allowing it to move up and down.

Mud Sills – The large beams forming a cross under the center pole. These beams, along with large diagonal braces, support the center pole and bare the entire weight of the carousel.

Stander – An animal figure that has two or more legs on the carousel floor and does not move up and down.

Rounding Boards – The outermost, curved panels at the top of the carousel, located directly above the outside edge of the floor.

Sweeps – Radial beams that come outward from the center pole above the animals. These beams are supported by rods to the upper part of the center pole. The floor, animals, and rounding boards are all supported from these beams.

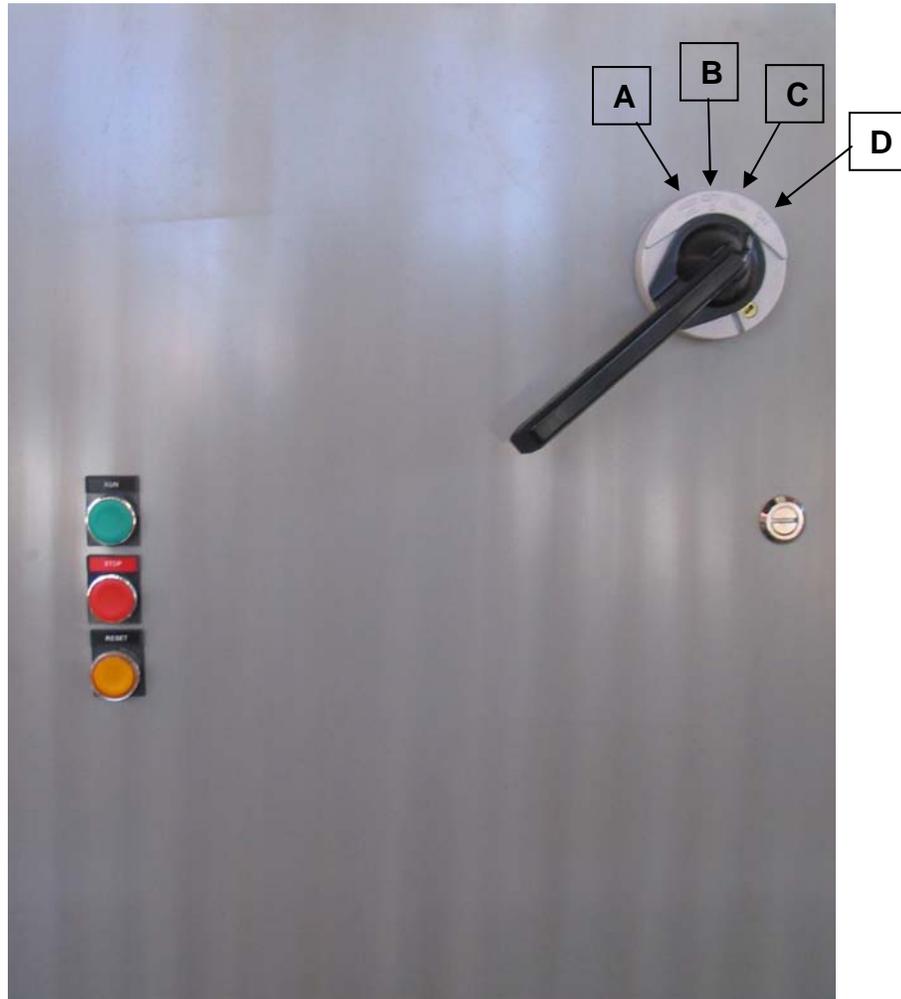
Section 2: Opening Procedures

2.1 Key & Radio Checkout

A key ring containing all keys necessary to access all areas of the carousel ride are located at Security and should be checked out by the opening Operator. A radio should also be checked out from Security by the Operator.

2.2 Powering Up the Ride

The main power switch and inverter drive are located in the center compartment of the carousel.



The main power switch has four positions. Corresponding to the diagram above, these positions are as follows:

- A. Reset
- B. Off
- C. Trip
- D. On

Additionally, the main power box has a green “RUN” button, a red “STOP” button, and a yellow “RESET” button.

To turn on the main power, simply turn the main power switch to the “ON” position. This turns on all the power for the carousel, and will automatically start the computerized sound system. You will then need to engage the computer system that maintains the carousel speed and ride duration. To engage the ride computer, press the green “RUN” button on the main power panel. The carousel is now powered up and ready for normal operation.

2.3 Daily Inspection

A daily inspection must be completed by the opening Operator. This completed inspection sheet must be signed and posted before the attraction can open to the public. Be sure to also check the Maintenance Log for any notes from the mechanics or operators from the previous day.



Carousel

Daily Inspection & Checklist

MAINTENANCE PRE-OPENING CHECKS

- Inspect all electrical wiring
- Inspect belts
- Inspect upper crank and gear assembly
- Inspect upper framework
- Lubricate as needed
- Visually inspect pole assembly
- Start & stop ride
- Equipment is cleared for operation

Comments noted on the back of this sheet →

- Check all safety pins are in place and secure
- Check for broken or loose parts on each animal and nuts and bolts
- Check fencing and entry gates are in good repair; check all perimeter fencing to ensure there are no gaps and gates latch correctly
- Inspect area under carousel platform for any items lodged underneath the platform

Mechanic (print full name) _____

Date _____

Time _____

OPERATOR PRE-OPENING CHECKS

- Carousel area, ATM, and surrounding pathways are clear of litter and debris
- Access control system is setup and powered up with no error messages
- Fencing and entry/exit gates are in good repair
- Control station power cord is secured under rubber mats
- Check animal figures for broken, loose, or missing parts
- Check animal figures for paint chips or flakes (note major paint problems on back)
- Completely wipe down animal figures and poles using the cleaning solutions provided
- Check that animal figure poles are securely fastened at top and bottom
- Inspect the area under the carousel platform for obstructions
- Turn on main power and inverter drive
- Check functionality of audio system, including safety message
- Control station activated with operator key
- Activate ride and test the "Stop" button
- Activate ride for one complete ride cycle listening for any abnormal noises
- Call in 10-8, note official opening time at top of sheet

Comments noted on the back of this sheet →

Opening Operator (print full name) _____

Date _____

Time _____

OPERATOR CLOSING CHECKS

- Call in 10-7, note official closing time at top of sheet
- Turn off and remove key from control station
- Turn off main power and inverter drive
- Power down and pack up access control system
- Ensure entry & exit gates are closed & latched

Comments noted on the back of this sheet →

Closing Operator (print full name) _____

Date _____

Time _____

Closing Supervisor _____

Date _____

Time _____

2.4 Admission Control System

The Galaxy 3 Admission Control System is utilized at the ticket collection point of this ride. The assigned laptop computer and a ticket scanner must be checked out each day from the Attractions office and setup at the ride before it can open. This system allows us to more accurately track the number of rides given on each attraction as well as prevent holders of used and/or expired tickets from gaining access to a particular ride.

You will need to setup the scanning laptops each day prior to opening a ride. It is very important that the following components are properly plugged in prior to booting up the laptop computer:

- Laptop power cord is completely plugged into the correct port on the back of the laptop and into the wall outlet
- Network cable is completely plugged into the correct port on the back of the laptop and into the network jack on the wall
- Ticket scanner is completely plugged into the correct port on the back of the laptop

Once everything is properly plugged in, open up the laptop and power it up by pressing the power button. Allow the computer to completely boot up in-interrupted. Once the laptop is setup and turned on, it should automatically boot up to the Galaxy 3 system and display the login screen.

Once you have logged into the system, the Admission Control Point (ACP) window will open. This is the main window that will be used to validate ride tickets. Once your ACP window is open, you should be sure that it is properly connected and ready for operation by checking the following items:

1. Look in the upper-right corner and be sure that the "User" displays your name.
2. Make sure that "ACP Mode:" is set to "Entry Mode."
3. Check the bar at the bottom of the ACP window for any error messages (I.E. "TCON Offline"). Error messages will show up in the bottom-left or bottom-right corners of the window.

If any of your settings are incorrect, or if an error message is displayed at the bottom of the window, call for a Supervisor right away. If everything is clear and displaying the correct information, the system is setup and ready to receive ticket scans for validation.

2.5 Final Opening Checks

Before opening the attraction to the public, be sure the following things have been completed:

1. Post the completed inspection checklist in the designated area.
2. Check the cleanliness of the carousel area, including the ATM machine and surrounding pathways.
3. Call in a 10-8 over the radio to the Base to confirm opening.
4. Open the ride to Guests.

Section 3: Daily Operation

3.1 Working Responsibilities

Operator

The standard location for this work position is at the Operator Control Console. The Operator is primarily responsible for properly and accurately validating Guest tickets prior to boarding the carousel, the safe and efficient loading and unloading of the carousel, and for the safe and efficient operation of the carousel.

Specific Responsibilities:

1. Greet each Guest party entering the attraction.
2. Ensure that all Guests finish all food, drinks, and smoking prior to boarding the ride.
3. Courteously direct Guests to board and exit the ride when appropriate.
4. Assure that children under 3 years of age are accompanied by a responsible adult.
5. Validate each Guest's ride ticket BEFORE they pass through the entry gate.
6. Be sure that riders are spread out so that the ride remains balanced.
7. Assure that the total weight of the rider(s) on each animal figure does not exceed 200 pounds.
8. Assure all Guests are properly seated or positioned prior to starting the ride.
9. Operate the ride safely and in accordance with the stated procedures.
10. Attentively monitor Guest behavior while the ride is in motion, being prepared to stop the ride if a Guest attempts to stand up, jump off, change animals, or perform any other unacceptable behavior.
11. Check the ride on a routine basis for trash and lost articles.
12. Routinely check the ride area, as well as the entry and exit pathways for cleanliness and sweep as necessary.

3.2 Guest Screening

All Guests should be aware of the nature of an attraction before they decide to ride. Guest Screening is the procedure by which those Guests who cannot or should not ride the attraction are personally contacted by an operator and informed of the safety policies which may prohibit them from riding. All operators, no matter what their working position, should screen Guests. **Never at any time should physical contact be made with a Guest. If a problem arises, call for a Supervisor or Security.**

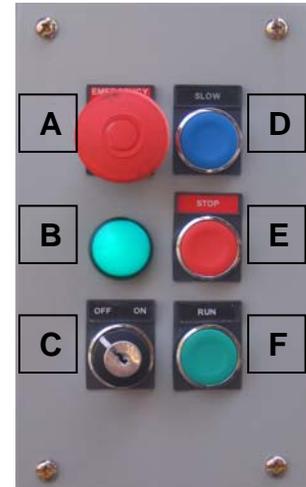
In order to board the Carousel, Guests should meet the following boarding requirements:

- Requires one ticket per person to board.
- Riders should be in good health, and free from motion sickness or any other condition that could be aggravated by the ride.
- Children under three years of age must be accompanied by a responsible adult.
- Adults accompanying children for safety reasons do not require a ticket to board.
- This attraction can accommodate one passenger in a standard size wheelchair per ride.
- Animal figures are not designed to support weights in excess of 200 pounds.
- Food and beverage items must be finished prior to boarding.

3.3 Operator Control Station

The following functions are controlled at the Operator Control Station:

- A. **Emergency Stop** – This function cuts off all power to the carousel, including the drive motors and sound system.
- B. **Power Indicator Light** – This light indicates that the power to the carousel is on.
- C. **On/Off Key Switch** – This key switch controls the functionality of the control station. Without the key, the controls will not function.
- D. **Slow** – By pressing and holding in this button, you can slowly rotate the carousel manually.
- E. **Stop** – Pressing this button will stop the ride short of the preset ride duration.
- F. **Start** – Pressing this button will sound a bell and begin the ride cycle.



3.4 Standard Ride Cycle

A standard ride cycle on the Carousel shall proceed as follows:

1. Greet waiting Guests and collect one ticket for every rider. Adults are permitted to assist in holding their child on the carousel without a ticket.
2. Ensure that all riders meet the proper boarding requirements.
3. Ensure that all riders finish all food and drink prior to boarding.
4. Validate each ticket and drop it in the collection tube.
5. Ensure that riders are seated equally around the carousel to evenly distribute the weight. Do not allow large groups of riders to only occupy one side of the carousel.
6. Walk the complete circumference of the carousel to ensure that all Guests are seated and ready for the ride.
7. Direct any non-riders to remain outside of the perimeter fence while the ride is in operation.
8. Inspect the entry and exit gates to be sure that they are closed and latched.
9. Activate the automated safety announcement to inform all riders to remain seated at all times while the ride is in motion.
10. Activate the ride by pressing the green [START] button at the control station.
11. Monitor the ride at all times to be sure that riders are remaining seated and not attempting to jump off or change animals while the ride is in motion. Be prepared to stop the ride if such activity takes place.
12. After the pre-set ride time, the ride will automatically stop. Direct riders to remain seated until the carousel has come to a complete stop.
13. Once the ride has stopped, unlatch the exit gate and thank everyone for riding.
14. Visually inspect the ride to be sure that no Guests are remaining, that no articles have been left behind, and that the area is clear of trash.



Anytime you leave the operator control station, you must remove the carousel keys and carry them with you. This applies when loading the ride, and while walking the perimeter to check that all guests are properly seated.

3.5 Accommodating Guests in Wheelchairs

The carousel may accommodate one standard, manual wheelchair per ride. The following procedures will be followed in loading and unloading wheelchair passengers:

Loading Wheelchairs

1. Direct the wheelchair rider to access the ride through the exit.
2. Load the wheelchair rider onto the ride PRIOR to allowing general riders to board.
3. Use the blue [SLOW] button on the control station to manually rotate the carousel until the wheelchair accessible chariot is in line with the ride exit.
4. Place the pegs on the wheelchair ramp into the corresponding holes in the carousel decking.
5. Lift up on the bench seat on the chariot to expose the wheelchair clamps.
6. Push the wheelchair up the ramp, and back it into the wheelchair clamps.
7. Be sure that the large wheels in the back of the wheelchair are completely pushed back into the red clamps, and that both red clamps have latched closed and are securely fastened.
8. Apply the breaks on the wheelchair.
9. Fasten the safety belt under the wheelchair arms and around the waist of the rider in the wheelchair.
10. Remove the wheelchair ramp.
11. The wheelchair is now secured. General boarding may begin.

Unloading Wheelchairs

1. Once the ride cycle has completed, allow all general riders to completely disembark from the carousel and exit the ride area.
2. Once the ride is clear of general riders, use the blue [SLOW] button to manually rotate the carousel so the wheelchair accessible chariot is positioned with the exit.
3. Place the pegs on the wheelchair ramp into the corresponding holes in the carousel decking.
4. Unbuckle the safety belt from around the wheelchair rider.
5. Disengage the brakes on the wheelchair.
6. Release the red clamps by pressing down on the lever on top of each clamp with your foot.
7. Slowly back the wheelchair down the ramp and out the exit.
8. Remove the wheelchair ramp.
9. Be sure that the exit gate is closed.
10. Boarding may now begin for the next ride.

3.6 E-Stop Reset

Should the Emergency Stop be activated, the following procedures shall be used to reset the ride once the situation has been resolved:

1. Pull out the red [EMERGENCY STOP] button on the Operator Control Station.
2. Proceed to the main power switch in the center compartment of the carousel.
3. The switch should be in the "TRIP" position.
4. Rotate the switch all the way over to the "RESET" position.
5. Rotate the switch all the way back over to the "ON" position.
6. Press the green [RUN] button on the main power box to engage the ride computer.
7. The ride is now ready to resume normal operations.

Section 4: Closing Procedures

4.1 Powering Down the Ride

At the end of the day, the carousel will need to be powered down following these two steps:

1. Turn off the power to the Operator Control Console and remove the key.
2. Turn the main power switch in the center of the carousel to the Off position. The music should automatically turn off when the main power is turned off.

The ride should now be powered down.

4.2 Final Closing Checks

After the ride has been powered down and closed to Guests, the following items must be completed daily:

1. Call in a 10-7 over the radio to Base to confirm closing.
2. Power down the carousel ACP laptop and put it away in the case.
3. Complete the closing checks on the Daily Inspection Checklist, sign and date it, and leave it posted in the designated area.
4. Visually inspect the carousel area and clean up any trash or litter.
5. Make sure that both the entry and exit gates are closed and latched.
6. Turn in the ACP laptop to the office.
7. Return the carousel keys and your radio to Security.

Section 5: Evacuation Procedures

5.1 Carousel Evacuation

The following procedures shall be followed when evacuating Guests from the carousel:

1. The carousel power should be turned off and the following announcement shall be given:

Ladies and Gentlemen, may I have your attention please. Due to circumstances beyond our control, normal operation of the carousel ride has been delayed indefinitely. We apologize for the inconvenience. At this time, we ask that any Guests on board the ride please remain where you are and we will distribute re-admission tickets for you to ride at a later time. We ask that all Guests who still have their tickets please exit the area at this time. Thank you for cooperation.

2. All guests waiting in the queue still holding tickets should be directed to exit immediately.
3. All guests on board the carousel are to remain where they are until a Supervisor arrives to issue Guest Assistance Tickets. As GAT's are issued, those Guests should be directed to exit the area immediately.
4. The Carousel Operator should proceed to block off access to the ride and explain to any approaching Guests that the attraction is closed.

5.2 Severe Weather/Animal Escape Evacuation

In the event of a severe weather or animal escape emergency where danger is imminent, the following evacuation procedures shall be followed:

1. The Carousel Operator will be responsible for evacuating all Guest on board and waiting for the carousel.
2. The E-Stop button should be pressed and the key removed from the Operator Control Console.
3. All Guests will be quickly escorted to a designated shelter area.