



METRO'S INTERNATIONAL RAIL RODEO WINNERS – TRANSPORTATION AND MAINTENANCE



Rail Fleet Services News

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IN THIS ISSUE

Rail Fleet Services Wins First Place at International Rail Rodeo Maintenance Competition

by Arnold Huntley,
Rail Fleet Services Instruction

Last month the American Public Transportation Association (APTA) held its annual International Rail Rodeo (IRR) and Rail Conference in Denver, Colorado. The competition was hosted by Denver's Regional Transportation District (RTD). Los Angeles Metro participated in both the Operator and Maintenance Competitions at the RTD's Elati facility.

Four members of the RFS team participated in the competition, which included **Marcos Martinez** (Maintenance Specialist, Division 24), **Parker Rounds** (Maintenance Specialist, Division 24), **Jose Padilla** (Maintenance Specialist, Division 11), and the team's coach, **Jose Gonzalez** (Instructor, Division 20).

Fifteen agencies from across the United States and Japan participated in the maintenance competition, and our RFS team took first place with a total score of 1,046

points, edging second place Southeastern Pennsylvania Transportation Authority (SEPTA) who totaled 1,034 points. Both were the only teams to achieve a score at or above 1000 points.

On the Operator side of the competition, Transportation's performance contributed to Los Angeles Metro placing second overall in the Rodeo's Combined Scores Competition.

Each participating agency sends their best maintainers to the IRR and all maintenance competitors participated in thirteen separate events that significantly challenged their knowledge and skills (*for more details about the competition, see the International Rail Rodeo Highlights at the end of this newsletter*).

The IRR afforded RFS the opportunity to showcase the caliber of its maintenance technicians and affirms what we already know – Los Angeles Metro has some of the best maintainers in the business! ∞



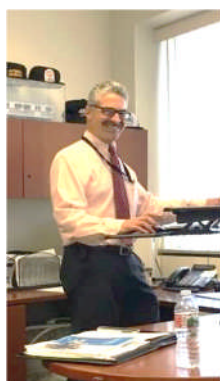
Instruction Team Constructs Training Mock-up

Page 3



Safety: Choosing the Right Hearing Protection

Page 4



Bob's Corner

Greetings, RFS Team:

For this edition on Bob's Corner, I want to give everyone a status update on the various projects that are in process:

Component Overhauls and Decommissioning of the P865 Cars

- **P2020 (15 cars)** – consists of five component overhauls: Power Axle and Traction completed; Friction Brake is at 47% complete; Coupler is 20% complete; Air Compressor Conversion in Contracts & Procurement.
- **P2000 (52 cars)** – consists of seven component overhauls: Power Axle and Motors at 88% complete; Paint & Body Work at 77% complete; Friction Brake and Air Compressors second cycle just starting; Couplers at 44% complete; Auxiliary Inverter in Contracts & Procurement.
- **P2550 (50 cars)** – consists of eleven component overhauls: Power Axle and Motor, Non-Powered Axle, Friction

Rail Fleet Services Projects Continue...

Brake, Propulsion, APS, Door and HSCB all in Contracts and Procurement; Batteries at 96% complete; Pantograph at 8% complete; Coupler just starting.

- **A650 Base Buy (30 cars)** – consists of seven component overhauls: Loop Step Ladder at 93% complete; Coupler at 73% complete; Bike/Wheel Chair Mod at 80% complete; AC Evaporator Upgrade at 87% complete; Friction Brake at 27%; Doors at 60% and DC Traction Motor Conversion at 35%.
- **A650 Option (74 cars)** – consists of nine component overhauls: Loop Step Ladder at 84% complete; Coupler at 41%; Bike/Wheel Chair Mod at 51%; AC Evaporator Upgrade at 70%; Friction Brakes and Doors (second cycle) at 19%; AC Traction Motors at 88%; Interior Renovations at 8% and Gear Box at 9%.
- **Decommissioning P865 (54 cars)** – 42 out of 54 cars have completed the decommissioning process.

Vinyl Seat Inserts – This project will cover the replacement of all the seat inserts from fabric to vinyl on the A650 fleet to be installed by the Amalgamated Transportation Union (ATU). Bid opening is scheduled for July 12, 2018. Prototype seat inserts continue to be installed.

P3010 New Cars – RFS has conditionally accepted 129 out of the 235 cars.

New Blue – As part of this project, Metro will be shutting down the Blue line in two phases in order to service the Overhead Catenary System (OCS), signals and track. RFS will be developing an action plan similar to what was used on the Green Line Tie-in because we will not have access to D11 and need to service the running fleet on the opened section of the Blue Line.

P2000 and A650 Modernization Projects – Contractors have vehicles at their facilities and are starting the modernization process.

Metro Expansion Projects:

- Division 16 Crenshaw New Line and Facilities – facility on schedule, line has some delays but moving forward.
- Division 20 Expansion – expansion underway on storage area and track work.
- Westside Purple Line Extension – 39% completed, on schedule.
- Regional Connector – design completed, contracts moving forward.

As you can see, we are in some exciting times here at Metro. Stay tuned and be safe!

Maintenance Specialist Apprentices Complete Preparatory Course

The Joint Apprenticeship Committee (JAC) continues to select prepare candidates for the Maintenance Specialist apprenticeship program.

Last month, the 5 apprentices who were selected for the apprentice program in November 2016 completed the Los Angeles Trade Technical College (LATTC) preparatory course.

The preparatory course provides 5 months of academic training in topics such as Fundamentals of Electricity, Basic Electronics, Hydraulic Fundamentals, Heavy Duty Heating, Ventilation and Air Conditioning, Advanced Diagnostic

Equipment, Basic Shop Tools, and a host of other topics. Upon graduation, the apprentices enter the on-the-job phase of rail vehicle training. The recent graduates are:

- Dana Daniels
- Salvador Gaeta
- Carlos Rodriguez
- Jorge Castro
- Paul Flores

Congratulate these apprentices and welcome them to RFS!

Instruction Teams-up With CMF to Create a Door Mock-up

By Jesus Marquez

Recently the RFS Instruction Department, in collaboration with Sheet Metal Worker Richard Martinez from Central Maintenance Facility (CMF), created a door mock-up of the P2000 Siemens Light Rail Vehicle.

This door mock-up will be used as a training aid to provide hands-on technical training and will also be used in the 'Door Event' challenge in our Local Rail Rodeo competition for the Maintenance Specialist.



The Rail Fleet Services Department is thankful for Mr. Martinez's work that he has dedicated to this project; with the Rail Fleet Services Instruction department and Central Maintenance Facility department working together, we are continuously working in developing and enhancing the Metro agency as a whole.

The P2000 Siemens door mock-up will be an actual, real-life, physical simulated door system of the vehicle's passenger doors. The door mock-up will be equipped with a door operator assembly, push buttons, motor, and electrical wiring. ∞



Once again, we would like to thank CMF and Mr. Martinez; Mr. Martinez has done a phenomenal job in assembling a truly fine piece of craftsmanship that will invaluablely enhance the operation of the Rail Fleet Services Instruction department.



Safety



Working in a shop environment with heavy equipment and machinery often present noise hazards, which over time, can lead to partial hearing loss. Staying aware of high noise levels in the shops and using noise mitigation tools such as the ones mentioned below can help prevent hearing degradation and even hearing loss. The following information regarding hearing protection is provided by the National Institute for Occupational Safety and Health.

Choosing the Hearing Protection That's Right for You

Expandable foam plugs

These plugs are made of a formable material designed to expand and conform to the shape of each person's ear canal. Roll the expandable plugs into a thin, crease-free cylinder. Whether you roll plugs with thumb and fingers or across your palm doesn't matter. What's critical is the final result—a smooth tube thin enough so that about half the length will fit easily into your ear canal. Some individuals, especially women with small ear canals, have difficulty rolling typical plugs small enough to make them fit. A few manufacturers now offer a small size expandable plug.

Pre-molded, reusable plugs

Pre-molded plugs are made from silicone, plastic or rubber and are manufactured as either "one-size-fits-most" or are available in several sizes. Many pre-molded plugs are available in sizes for small, medium or large ear canals.

A critical tip about pre-molded plugs is that a person may need a different size plug for each ear. The plugs should seal the ear canal without being uncomfortable. This takes trial and error of the various sizes. Directions for fitting each model of pre-molded plug may differ slightly depending on how many flanges they have and how the tip is shaped. Insert this type of plug by reaching over your head with one hand to pull up on your ear. Then use your other hand to insert the plug with a gentle rocking motion until you have sealed the ear canal. Advantages of pre-molded plugs are that they are relatively inexpensive, reusable, washable, and convenient to carry, and come in a variety of sizes. Nearly everyone can find a plug that will be comfortable and effective. In dirty or dusty environments, you don't need to handle or roll the tips.

Canal caps

Canal caps often resemble earplugs on a flexible plastic or metal band. The earplug tips of a canal cap may be a formable or pre-molded material. Some have headbands that can be worn over the head, behind the neck or under the chin. Newer models have jointed bands increasing the ability to properly seal the earplug.

The main advantage canal caps offer is convenience. When it's quiet, employees can leave the band hanging around their necks. They can quickly insert the plug tips when hazardous noise starts again. Some people find the pressure from the bands uncomfortable. Not all canal caps have tips that adequately block all types of noise. Generally, the canal caps tips that resemble stand-alone earplugs seem to block the most noise.

Earmuffs

Earmuffs come in many models designed to fit most people. They work to block out noise by completely covering the outer ear. Muffs can be "low profile" with small ear cups or large to hold extra materials for use in extreme noise. Some muffs also include electronic components to help users communicate or to block impulsive noises.

Workers who have heavy beards or sideburns or who wear glasses may find it difficult to get good protection from earmuffs. The hair and the temples of the glasses break the seal that the earmuff cushions make around the ear. For these workers, earplugs are best. Other potential drawbacks of earmuffs are that some people feel they can be hot and heavy in some environments.

Miscellaneous devices

Manufacturers are receptive to comments from hearing protection users. This has led to the development of new devices that are hybrids of the traditional types of hearing protectors. (Visit NIOSH searchable compendium of hearing protectors) Because many people like the comfort of foam plugs, but don't want to roll them in dirty environments, a plug is now available that is essentially a foam tip on a stem. You insert this plug much like a pre-molded plug without rolling the foam.

Scientists are developing earmuffs using high-tech materials to reduce weight and bulk, but still effectively block noise. On the horizon may be earplugs with built in two-way communication capability. Still, the best hearing protector is the one that is comfortable and convenient and that you will wear every time you are in an environment with hazardous noise.∞



Get to Know...

Arnold Huntley

Arnold Huntley is the Rail Fleet Services Instruction Manager.

Arnold is a native of Landover, Maryland. Upon graduation from high school, he enlisted in the US Air Force and served 4 years in the field of Administration. After his 4-year term, Arnold separated from the Air Force to attend college at Arizona State University (ASU), where he enrolled in ASU's Aeronautical Technology – Flight Training program.

Having served in the military during the Vietnam and Cold War era, Arnold suddenly found himself with divergent academic interests during his second year of college, where he reached the first of several career crossroads. In addition to his interest in Aviation, he also shared a strong interest in International Affairs. Midway through college, he changed his major from Aeronautical Technology to Political Science with a Soviet Union concentration, where he spent the last two years of college immersed in Russian Studies and earned his bachelor's degree.

Prior to graduation from college, Arnold was offered the opportunity to work for the Central Intelligence Agency as a Russian Analyst, something he seriously considered doing until he realized his roots for aviation ran slightly deeper. Therefore, upon graduating from college, he decided to re-enter the Air Force as an aviator, flying trainer aircraft (T-37 "Tweet" and T-43 "Gator"). Later, he earned his master's degree in Aeronautics and served in other assignments, including B-52 Bomber Electronic Warfare Systems, F-4 "Phantom" Tactical Fighter Squadron, and commander of an aircraft maintenance squadron.

Arnold again embarked upon another crossroads. He was presented by the Air Force with a professorship to teach Russian Studies at the US Air Force Academy or Aerospace Studies professorship at the Georgia Institute of Technology, both of which he shared a strong interest. He elected to teach at Georgia Tech, where he spent a few years teaching Aerospace Studies and preparing college seniors for careers as Air Force Officers.



Arnold (right) commissions a new Air Force Officer at Georgia Tech

After leaving Georgia Tech, Arnold was offered the opportunity to work for Air Force Space Command and was assigned to Vandenberg Air Force Base, where he was the director of the Air Force's one-of-a-kind training center. After a few years at Vandenberg, Arnold left the Air Force for civilian life. He spent several years as an Associate for the consulting firm Booz Allen Hamilton, supporting the firm's Space and

Naval Warfare Systems client in San Diego. In addition, he maintained his interest in Aviation and worked as a Professor, teaching courses in Aviation Operations, Airport Management, and Aviation History. Later, he served as Miramar College's Director of Aviation Operations, overseeing the student flight training program. He also was the Southern California Academic Liaison for the American Association of Airport Executives and enabled Aviation students across the region to visit major airports and commercial aircraft.



Arnold (second from left) takes college students on a tour of the new Airbus A-380

A few years ago, Arnold learned through a former colleague working at Metro about the opportunity to develop a stand-alone training department within Los Angeles Metro's Rail Fleet Services (RFS) Department. Lured by the opportunity to establish a new training department to meet the future demands of a fast-growing and diverse transportation system, he applied for and was hired as the RFS Instruction Manager. With the addition of two new rail divisions and the acquisition of a new rail vehicle, he had to find a way to make maintenance specialist training sustainable for the future. Immediately he introduced new training methodologies that included routine collaboration and partnership with division managers and an instruction program that is responsive to the dynamics of rapid growth. He restructured the Maintenance Specialist apprentice vehicle training program and established RFS' Utilization-Based Training Model to enhance hands-on, on-the-job training, which allows trainees to make a greater contribute maintenance while learning. He also established maintenance specialist development methodologies that incorporate job classification and competency reviews along with knowledge and skills validation along with utilization determination.

Arnold is a proponent of leveraging technology. He has implemented computer-based systems that incorporates online learning, virtual instruction between divisions and an e-Learning system. He is also cognizant of the demographic shift (retirement-eligible employees, newer generation learning styles, etc.) in RFS's workforce. Rail expansion has created a surge in maintenance specialist acquisition and development for years to come, and the RFS Instruction program has to be innovative in spreading a limited amount of resources across a broad training spectrum. Regarding now and the future, Arnold encourages leaders within RFS to be mindful that everyone is responsible for facilitating learning at all levels, and that being aware of multi-generational leadership styles and in the workplace makes for better development and management of the workforce. ∞



Congratulations!

Metro Maintainer International Rail Rodeo Team

**Marcos Martinez • Parker Rounds • Jose Padilla
Jose Gonzalez (coach)**

First Place – Maintainer Competition!

Perfect Score – Wheel Gauge Event. First time in competition history!

Highest performing team in ZF Gearbox Event!