



# National Bus Trader

The Magazine of Bus Equipment for the United States and Canada

Volume XLI, No. 10

October, 2018

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# MCI's 2018 Reliability Rally

## A Record of New and Improved Models

While there are several reasons for attending the MCI Reliability Rally events, a major attraction this year was the opportunity to see and ride on the new 35-foot J3500 models. Effectively a shortened version of the J4500, the J3500 offers big coach features and amenities for smaller groups. Since it shares parts and features with the longer coach, the J3500 offers easy training for drivers and technicians while requiring minimal additional parts.



*Article and photos by Larry Plachno*

**N**ow an annual event in the bus industry, MCI scheduled their Reliability Rally events at six locations in the United States and one in Canada in July, August and September. These events continued to offer the same traditional benefits and advantages as they have in the past. Attendees could learn and see what is new and different at MCI and New Flyer while inspecting the latest and greatest in new models and taking test drives. It also presents an opportunity to meet with key industry suppliers to ask questions and discuss your own applications and operations. Some people come to look at the previously owned coaches that may be on display with special pricing. Many find a reason to attend to meet old friends in the industry.

This year, the MCI Rally events were particularly noteworthy from the standpoint of a wide variety of new and improved models

on display. Brent Maitland from MCI perhaps said it best when he commented that the New Flyer Group is now a family of companies covering a wide spectrum of vehicles, products and services. All of this came together at this year's Rally events in the form of a substantial number of new and improved buses that could be viewed by those attending.

As in the past, a major feature of the MCI Reliability Rally events was the exhibit area with supplier tables. This provided a great opportunity to meet with supplier staff and representatives to ask questions and discuss product developments. Detroit Diesel and Kiel Seats North America were Title Sponsors. Three Platinum Sponsors included ZF, Amaya Astron and Saucon. Stertil-Koni, Bridgestone and Allison were Gold sponsors. Silver Sponsors included Bendix, TCF Equipment Finance, Key Equipment

Finance, BraunAbility, REI and eRatings.com along with the Motorcoach Marketing Council. Several other industry suppliers also attended select regional events.

One well-attended information session covered the ongoing need for and training of mechanics and technicians. MCI has been particularly active in this area with their MCI Academy that offers both online and hands-on training. See the June 2018 NATIONAL BUS TRADER for more details. Brent Maitland, MCI vice president of Product Planning and Marketing, later went through a detailed presentation covering recent developments at MCI, New Flyer, ARBOC and the vehicles on display.

At the top of the list would be MCI's popular J4500 model that has led the industry in sales for several years. We can start by mentioning that there is a battery-elec-





An ongoing feature at MCI Reliability Rally events is the opportunity to meet with key industry suppliers to discuss specific products and support. Here, several suppliers have set up booths and are awaiting the arrival of rally attendees.



ZF is moving ahead with new technology and offers several components for electric buses. The ZF AVE 130 electric portal axle is now being used on the New Flyer electric articulated buses being built for operation in the United States.

tric version of the J4500, known as the J4500e CHARGE, which is already being tested. It is targeting a 200-mile range on one charge, which would make it suitable for commuter coach and many shuttle operations. More details will be available in the near future.

The diesel J4500 was originally introduced in 2001 as a modification of the E4500 "Renaissance" model and became the most popular coach on the market in 2004. Its major claims to fame include an attractive appearance plus traditional MCI durability and reliability. It also has a list of supporters because MCI tends to regularly update the J4500 with new technology and features.

There were several improvements on the J4500 for 2018. The most important included a redesigned engine compartment with a new air intake system. This not only allowed for a redesign of the restroom, but it also permitted adding an optional window to the rear of the coach and increasing the size of the coach interior. Coach owners now have the option of increasing capacity to 60 passengers or providing more legroom. Since they were already redesigning the seating and interior, MCI took another step and provided enhanced interior features including state-of-the-art interior lighting with different colors.

Major improvements for 2019 include the new e-fan system and swing-out radiator. Going to electronically controlled electric fans for engine cooling eliminates the constant parasitic loss of power from the engine that is a necessary evil with a mechanical fan system. In addition to being more modern, going to electric fans as needed reduces the power requirement and should increase fuel economy.

MCI is also moving towards more Advanced Driver Assistance Systems

(ADAS). A major new addition for 2019 will be the advanced Bendix® Wingman® Fusion™ system. It integrates next-generation advanced safety technologies – including radar, camera and brakes – into one comprehensive driver assistance system that is said to be more powerful than any other safety system on the market.

How the new Wingman Fusion system works is that it gathers input from radar, video and the braking system to create a highly detailed and accurate data picture on bus operations and the surroundings. Data comes in from the next-generation radar, camera and brake systems. This is constantly being gathered, shared and con-

firmed by the system to see what actions are called for.

There are several different new advances and systems with Wingman Fusion and I can share information on some of the most obvious. This new system does incorporate the Bendix® ESP® Electronic Stability program full-stability system. Plus it has the AutoVue® Lane Departure Warning System from Bendix CVS. It also has the Bendix® Wingman® Advanced™ Collision Mitigation Technology.

Included in this new system is Stationary Vehicle Braking (SVB) which uses data from both radar and a camera to watch the road ahead. When a stationary metallic object is

One of the major reasons for attending an MCI Reliability Rally is being able to hear about new developments at MCI and related companies. Shown here is an information session covering the training of mechanics and technicians with particular emphasis on the MCI Academy. Another information session covered new developments at MCI and other companies in the NFI group.



identified in the path of the bus, the driver is given a warning. If the driver does not take action, Wingman Fusion can automatically engage the brakes to assist the drivers in reducing the severity of the impact or avoiding a collision.

An interesting additional feature of Wingman Fusion is that it uses the camera to read most roadside speed limit signs. At speeds above 20 miles per hour, the system compares the posted speed limit with the speed of the bus. Initially, the system will provide an audible warning to the driver if the bus exceeds the speed limit by five miles per hour. If the bus gets 10 miles per hour above the speed limit, the system will provide a one-second dethrottle of the engine to get the driver's attention.

MCI's new 35-foot J3500 put in an appearance at this event. This model is substantially a shortened version of the J4500 and hence has a great deal of parts compatibility with the longer coach. Since the driver's cockpit and mechanical features are also similar, it makes transition easy for drivers and technicians. A major difference is that the J3500 comes with the smaller L9 Cummins engine and hence will provide greater fuel economy. MCI still provides the standard B500 Allison transmission.

The J3500 on display was the second pilot model out on the road. It seated 40 passengers and provided good legroom. The coach at MCI in Des Plaines was only the second pilot model. We were told that the actual production models would have the same new features as the J4500 including e-fans, the swing-out radiator and Bendix Wingman Fusion.

Also on display was the new D45 CRT LE commuter coach. With two doors, it offers a low entry with a ramp for the handicapped and people with mobility devices. On the day of the MCI Reliability Rally in



On display was MCI's new D45 CRT LE Commuter Coach. It offers a major jump in design and serving the handicapped with a street level door easily accessed by a ramp. This photo faces forward in the coach and shows the door on the right with a position for a passenger with a mobility device and an adjacent companion.

Des Plaines, a D45 CRT LE was used in the National Council on Independent Living March in Washington, D.C. Maitland called the D 45 CRT LE MCI's largest new development since the introduction of the E Model Renaissance in 1998. It would be difficult not to agree with that.

There were several other notes and developments surrounding MCI. Setra sales have moved to another company that is now also responsible for service and support. However, MCI will continue to offer service and support on all makes and models of coaches where it can. It was noted that MCI's Emergency Road Service Assistance (ERSA) continues to be available 24/7 so that bus operators are never alone when they have a

problem. Your editor has made use of ERSA on a couple of occasions and has been very happy to have their assistance.

The parts store has been improved. Being able to combine with New Flyer in NFIParts has made parts availability easier and better. Although mentioned earlier, another major achievement is the MCI Academy. Technicians have the option of hands-on training at dedicated scheduled sessions or can take advantage of online training as time permits.

While a New Flyer vehicle was not on display at the MCI Rally in Des Plaines, their products were mentioned. It was noted that New Flyer produces transit

The Marcopolo Volare WL model is essentially a 33-foot limousine bus. It could seat 23 to 29 passengers and is very appropriate for luxury travel for smaller groups.



Marcopolo's Volare WL model is geared for higher quality travel with black leather seats, a restroom, a small galley area ahead of the restroom and a rear window.





buses in three lengths and with five different types of power: diesel, CNG, hybrid, trolley electric and battery-electric. They are offering their popular Xcelsior transit model as a battery-electric model and are producing battery-electric articulated transit buses with the ZF AVE 130 electric portal axle (see the August 2018 NATIONAL BUS TRADER).

If you are in the area, visit the New Flyer/MCI Vehicle Innovation Center (the VIC) in Anniston, Alabama. It provides a look into state-of-the-art bus technology and where the industry is going in the future.

ARBOC is the latest bus manufacturer to join the New Flyer family. This company has been a leader in designing and producing low-floor smaller buses that use ramps to make it easier for those with mobility devices to get on and off. In addition to the traditional cutaway models, ARBOC also offers models with flat fronts like small buses. They showed a cut away model built on a Ford Transit chassis.

An interesting addition to this year's rally was a pair of buses that came from Marcopolo SA in Brazil. Marcopolo has a 10 percent ownership in New Flyer and is the biggest producer of bus bodies in Brazil. They have four plants in Brazil and some in other countries. The two buses on display were built to Brazilian specifications and were on display to see if there was an interest among the attendees.

Both buses offered something different than what is currently available in the MCI and New Flyer product lines. One bus was Marcopolo's Volare Access Shuttle Bus. It had two entry doors and could use a ramp at the front door for wheelchairs and mobility devices. Capacity was about 21 passengers and two wheelchairs. It could easily be used for shuttle and shorter transit applications.

The second Marcopolo bus was their Volare WL model. It was effectively a 33-foot limousine bus. The interior was impressive with black leather seats, a galley, a restroom and a rear window. It could seat from 23 to 29 passengers. It would be very practical for providing a higher level of service for smaller groups.

MCI graciously provided lunch for the participants. The major events following lunch were a test drive on the new J3500 coach and a raffle of some various items of clothing and goodies. Several of us took advantage of the offer of a ride on the new J3500. The results were generally positive. Riding quality was good in spite of the shorter length. Many of us were brought up with 35-foot coaches and knew what to expect. Maneuverability was impressive – we did some small circles in a shopping mall



One of the newest members of the NFI group is ARBOC Specialty Vehicles. They have an excellent reputation in building cutaway and smaller low-floor vehicles designed to make travel easier for those with disabilities or who need to use mobility devices. On display was a cutaway model built on a Ford Transit chassis.

lot that showed what this coach could do. In spite of the smaller engine, the coach came across as having enough power. MCI is already taking orders.

It will be interesting to see what the 2019 MCI Reliability Rallies have to offer next year. □

From the  
October, 2018  
Issue of  
**National Bus Trader**

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