



National Bus Trader

The Magazine of Bus Equipment for the United States and Canada

Volume XLV, No. 9

August, 2022

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National Bus Trader

The Magazine of Bus Equipment for the United States and Canada

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Volume XLV

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Features



NFI Forward (by Larry Plachno)18
We take a look at NFI Group and what this innovative company has done to mitigate the impacts of the pandemic and to continue leading the evolution to zero-emission transportation.



Carrington Events (by Larry Plachno)22
Here is some basic information on solar storms called Carrington Events and how they could impact our power lines, the Internet and electronics of all types.



Flagship Trailways' Vintage Buses on the Silver Screen (by Pat Plodzeen)26
In addition to regular commercial bus operations, Tom McCaughey of Flagship Trailways also has a fleet of vintage buses that are used in movies and filming.



Unclaimed Baggage Celebrates 50 Years and Thanks Trailways28
Unclaimed baggage was founded 50 years ago when a man with an idea purchased a pile of unclaimed baggage from Trailways in Washington, D.C.



My Great Aunt Gertrude Always Cheated (by Dave Millhouser)30
While it is nice to have a granny who cheats in games to let you win, there are examples of several laws that did more harm than good.

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Cover Photo

Here are examples of buses from members of the NFI Group. An Alexander-Dennis Enviro EV CHARGE, a New Flyer CHARGE NG, an MCI J4500 CHARGE and a low-floor CHARGE model from ARBOC. All four models are zero-emission, battery-electric buses. NFI GROUP.

Departments

Equipment News	4
Bus Equipment People	16
Survival and Prosperity	32
Curious Coachowner	36
Photographs	38
Back Issues	40
Classifieds	42

Advertiser's Index appears on page 42

Equipment News

Hawkeye Stages Gets Four MCI J4500 Coaches

Motor Coach Industries (MCI), a subsidiary of NFI Group Inc. (NFI), a leading independent bus and coach manufacturer and a leader in electric mass mobility solutions, on July 12 announced its delivery of four luxury J4500 clean-diesel 45-foot motorcoaches to Hawkeye Stages.

Hawkeye Stages, an industry leader in group transportation for more than 60 years, provides transportation services across the United States and Canada, operating a fleet of luxury motorcoaches and charter buses.

The new J4500 coaches are tailored to the Hawkeye Stages' requirements, featuring Amaya Sigma seating with custom fabric and defender coating, an REI safety video system, an enhanced sound system, rear window and custom graphics. By adding these customized luxury coaches to its existing fleet, Hawkeye Stages will provide customers with an unparalleled passenger experience, while delivering comfortable, safe and reliable transportation.

"NFI continues to provide beautiful and reliable coaches to Hawkeye Stages, having delivered at least 10 vehicles to Hawkeye Stages since 1996. Through this order, MCI has once again demonstrated flexibility in

meeting unique customer requirements to deliver fully customized vehicles," said Brent Maitland, vice president, private sector sales and marketing, MCI. "Hawkeye Stages' passengers will benefit from these state-of-the-art, spacious coaches with the best-in-class legroom available in the market."

The J4500 motorcoach features clean-diesel technology and an advanced Cummins engine, which reduces particulate emissions, fuel consumption and total cost of ownership, ultimately providing a safe and economical choice for long-distance travel. MCI's J4500 coaches also conform to 2021 Environmental Protection Agency greenhouse gas emissions standards for heavy-duty passenger vehicles.

Built on MCI's best-selling J-Series model, the J4500 motorcoach comes with comprehensive aftermarket support, including in-field service expertise, technical call center and 24/7 roadside assistance. Visit mccoach.com/j-series for more information.

Today, NFI supports growing North American cities with scalable, clean and sustainable mobility solutions through a four-pillar approach that includes buses and coaches, technology, infrastructure and workforce development. NFI also operates the Vehicle

Innovation Center (VIC), the first and only innovation lab of its kind dedicated to advancing bus and coach technology and providing workforce development. Since opening in late 2017, the VIC has hosted more than 300 interactive events, welcoming 5,000 industry professionals for EV and infrastructure training.

Leveraging 450 years of combined experience, NFI is leading the electrification of mass mobility around the world. With zero-emission buses and coaches, infrastructure and technology, NFI meets today's urban demands for scalable smart mobility solutions. Together, NFI is enabling more livable cities through connected, clean and sustainable transportation.

With 7,500 team members in nine countries, NFI is a leading global bus manufacturer of mass mobility solutions under the brands New Flyer® (heavy-duty transit buses), MCI® (motorcoaches), Alexander Dennis Limited (single- and double-deck buses), Plaxton (motorcoaches), ARBOC® (low-floor cutaway and medium-duty buses) and NFI Parts™. NFI currently offers the widest range of sustainable drive systems available, including zero-emission electric (trolley, battery and fuel cell), natural gas, electric hybrid and clean diesel. In total NFI supports its installed base of more than 105,000 buses and coaches around the world.

MCI is North America's public and private market motorcoach leader. Products include the luxury J-Series (an industry best-seller for more than a decade), the workhorse D-Series and the brand new zero-emission luxury and commuter coaches: the battery-electric J4500 CHARGE™ and MCI D45 CRT LE CHARGE™. MCI also provides maintenance, repair, 24-hour roadside assistance, parts and technician training through the industry's only Automotive Service Excellence (ASE) accredited and award-winning MCI Academy.

NFI Named One of Best 50 Corporate Citizens in Canada

NFI Group Inc., a leading independent bus and coach manufacturer and a leader in electric mass mobility solutions, on June 29 announced that it has been ranked among Corporate Knights' 2022 Best 50 Corporate Citizens in Canada.

The Best 50 Corporate Citizens represent a rising standard and ambition for corporate sustainability leadership in Canada. To deter-

MCI recently delivered four new J4500 coaches to Hawkeye Stages. These new coaches feature Amaya Sigma seating, an REI safety video system, an enhanced sound system, a rear window and custom graphics. MCI has delivered at least 10 vehicles to Hawkeye Stages since 1996.



mine the ranking, Corporate Knights analyzed 332 large Canadian organizations against domestic and global industry peers against a suite of 24 quantitative environmental, social and governance (ESG) key performance indicators. NFI received top quartile scores on water and nitrogen oxides (NO_x) productivity, clean revenue (earned from the production of zero-emission buses), clean investment and above-average performance on board gender diversity.

“It is an honor for NFI Group to be named among the Best 50 Corporate Citizens in Canada, and we are grateful to Corporate Knights for recognizing our initiatives and accomplishments,” said Janice Harper, executive vice president, People and Culture, NFI. “Our team has worked exceptionally hard to build our ESG program, and in nurturing deeper diversity across our global team which better positions us for future innovation and growth. As leaders in mass mobility solutions, we play a critical role in driving tangible environmental and social impact. Our products help lower emissions, create economic opportunities and build healthier communities. In addition, through our workplace initiatives, we are generating positive impact for our employees, surrounding communities and other stakeholders.”

Details on NFI’s workplace initiatives, environmental results and ESG priorities can be found at nfigroup.com/ESG. As part of the ranking, Corporate Knights published a

case study on NFI’s leadership in electric mobility, located at corporateknights.com/earth-index/#nfi.

NFI is a leader in zero-emission mobility, with electric vehicles operating (or on order) in more than 80 cities in six countries. NFI offers the widest range of zero-emission battery and fuel cell-electric buses and coaches, and its vehicles have completed more than 65 million EV service miles, which equates to the prevention of 182,000 imperial tons of greenhouse gas emissions from entering the environment.

NFI continues to lead the evolution to zero-emission transportation, or ZEvolution™. NFI’s Sustainability Pledge – “Better Product. Better Workplace. Better World” – first adopted in 2006, guides the company’s daily actions and long-term planning. More information, including NFI’s latest ESG Report, can be found at nfigroup.com/ESG.

NFI supports growing North American cities and scalable, clean and sustainable mobility solutions through a four-pillar approach that includes buses and coaches, technology, infrastructure and workforce development. NFI also operates the Vehicle Innovation Center (VIC), the first and only innovation lab of its kind dedicated to advancing bus and coach technology and providing workforce development. Since opening in late 2017, the VIC has hosted more than 300 interactive events, welcoming 5,000 industry professionals for EV and infrastructure training.

Coach Atlantic Maritime Takes Delivery of 10 Prevost H3-45 Coaches

During a recent visit to the Prevost headquarters in Sainte-Claire, Prevost customer Coach Atlantic Maritime Bus, a family-owned and operated business and leading provider of passenger transportation in Eastern Canada, took delivery of 10 Prevost H3-45 coaches, the first of 50 contracted for completion over the next five years. While on-site, the Coach Atlantic Maritime Bus team toured the Prevost manufacturing facilities and met with employees to share the story of how they got into the motorcoach industry, their plans for the future and why they chose Prevost.

“Prevost is well-regarded in the industry,” said Matthew Cassidy, Coach Atlantic Maritime Bus president, “a company with a reliable product and a tremendous support team to keep our buses on the road.” The 10 new coaches were put into service Tuesday, June 7, Cassidy reported. “We had everything lined up,” Cassidy said. “We wanted those coaches on the road this Tuesday. Not in three weeks. Tuesday.”

During the meeting, Coach Atlantic Maritime Bus Owner Mike Cassidy remarked on the personal and business COVID-19 stress all the stakeholders in the motorcoach industry have endured. He recounted a visit to the company’s Moncton location where he stopped to thank employees for their support and commitment through the pandemic. When Cassidy offered thanks to the head mechanic, he responded with a counter-thanks, “Thanks for buying Prevost.”

The Prevost service network is the largest in the motorcoach industry with coverage from coast to coast in both the U.S. and Canada. Prevost provides end-to-end support through its team of customer support managers, OEM-owned service center locations and mobile service vehicles strategically placed throughout North America. Emergency response is available 24/7/365 by phone with PASS – Prevost Action Services System.

Prevost President Francois Tremblay concluded the meeting by acknowledging the Cassidys as valued members of the Prevost family. “We are very fortunate to be part of your family,” Mike Cassidy responded. “Our customers, ourselves, Prevost, Volvo. We should all feel very good with this relationship. Our industry is looking forward to rebounding this year, and into 2023.”

Prevost has provided coach solutions for nearly a century with an uncompromising commitment to quality, a drive for constant innovation and improvement, and dedication to safety and sustainability in every business aspect. Today, Prevost is one of North Amer-

Coach Atlantic Maritime recently took delivery of 10 new Prevost H3-45 coaches. These are the first of 50 coaches contracted for completion over the next five years. Started in 2005, Coach Atlantic Maritime has a staff of 515 and operates 275 pieces of equipment in cruise ship, tour, charter, transit and school bus service.



ica's largest producers of premium intercity touring coaches and is the world leader in the production of high-end motor home and specialty conversion coaches. Customer support is secured via the largest service network in the motorcoach industry with OEM-owned and operated service centers across North America, a specialized customer support team with more than 260 years of industry experience, and 60+ mobile service vans. Prevost manufacturing facilities are located in Sainte-Claire, Quebec, Canada.

Prevost is part of the Volvo Group, one of the world's leading manufacturers of buses, trucks, construction equipment, power solutions for marine and industrial applications, financing and services that increase customer uptime and productivity. For more information, visit www.volvogroup.com.

Pennsylvania Bus Association Election

The Pennsylvania Bus Association (PBA) elections held their board of director elections on June 20 during the general member meeting in State College, Pennsylvania. The membership voted to accept the slate of candidates as presented by the nominating committee. Below is a list of elected directors, some new and some who renewed for another two-year term. The other board members, whose terms were not up, will remain.

Of special note, Tammy Wolf-Baker became the first woman chair in the almost 100-year history. Congratulations.

Also, we would like to extend our thanks to the nominating committee members: Sandy Borosky (chair) of Starr Bus Charter & Tours, John Bailey of Bailey Coach, Tom Brynan of Werner Bus Lines and Jay Newswanger of R & J Transportation.

Officer Positions – Term Through June 2024:

- Tammy Wolf-Baker, Wolf's Bus Lines – chair
- Brian Kurtz, Elite Coach – vice chair

New Directors Elected – Term Through June 2024:

- Douglas Rydbom, Premier #1 Limousine
- Tracy Showman, Quest Coach
- Gary Hahn, National Comedy Center (travel supplier representative)

Operator Members Renewed – Term Through June 2024:

- John Bailey, Bailey Coach
- Sandy Borosky, Starr Bus Charter & Tours
- Amy Brooks, Susquehanna Trailways
- Todd Campbell, Campbell Bus Lines
- Jonathan Berzas, Fullington Trailways



Yankee Line recently operated an MCI battery-electric CHARGE coach in shuttle service at the 2022 US Open. The 52-seat coach operated a full 15-hour shift with a single charge each day. It shuttled attendees between the MBTA Forest Hills station and the Country Club in Brookline, Massachusetts.

- Nelson Floyd, Perkiomen Tours
- Jim JeBran, Trans-Bridge Lines
- Alison Sherman, Klein Transportation
- Gary Shimshock, Budget Charter

To view the full PBA Leadership Team, visit the Webpage at <http://pabus.org/About/Leadership>

The Pennsylvania Bus Association (PBA) will celebrate its 100th Anniversary in 2023. Incorporated in 1923 as a nonprofit organization dedicated to representing the business and governmental interests of private bus companies operating in Pennsylvania, it is the mission of PBA to promote travel by motorcoach, and tour and charter service provided by operator members in cooperation with and support for its travel industry supplier members.

The Association is committed to a code of ethics in which its members strive to offer the highest level of safety in their operations, quality in their services and consumer protection for their customers.

For inquiries, contact Executive Director Patricia Cowley by e-mail or telephone at director@pabus.org or (717) 236-9042.

Yankee Line Runs MCI Electric Shuttle for U.S. Open

Yankee Line, a luxury bus and motorcoach operator based in Boston and ground transportation provider for the 2022 US Open, announced its partnership with the 2022 US Open and Motor Coach Industries (MCI) to operate the first zero-

emission electric motorcoach for attendee shuttle service.

The zero-emission motorcoach provided shuttle service between Forest Hills MBTA Station and The Country Club from June 16-19, assisting with transportation for nearly 30,000 attendees per day. The 52-seat luxury electric motorcoach operated a full 15-hour shift shuttle with a single charge each day of the US Open.

"Yankee Line is excited to have partnered with the USGA and MCI to operate the fully-electric motorcoach which assisted in transporting thousands of attendees during this year's US Open," stated Mike Costa from Yankee Line. "We believe this partnership helps to pave a greener and more sustainable future within the transportation industry. We're excited to work with the USGA and our other valued clients to continue to explore options to expand usage of this new zero-emission technology"

"MCI was proud to partner with Yankee Line to showcase the luxury J4500 CHARGE™ at such a large public event," said Patricia Ziska, vice president Private Sector Sales. "The battery-electric CHARGE eliminates emissions while delivering high-capacity luxury coach transportation, a natural choice to support the USGA's recent announcement that this US Open was the most sustainable in championship history."

FMCA Cancellations

It is with sadness that FMCA must announce the cancellations of the Northeast

Equipment News

Area Rally slated for August 4-6, 2022, in Fryeburg, Maine, and the South Central Area Rally slated for September 14-17, 2022 in Shawnee, Oklahoma.

The low number of registrations would not allow us to give you the kind of Rally you deserve. All who have registered will receive a full refund. Refunds will be going out within the next four weeks.

FMCA is sorry for any inconvenience this may have caused. If you have any questions about the cancellation or refund, direct them to:

- Northeast Area President John Traphagen at jtraphagen@fmca.com
- South Central Area President Herman Mullins at hmullins@fmca.com

If you have not done so already, you are encouraged to register for FMCA's 105th International Convention & RV Expo presented by Blue Ox on August 24-27, 2022 in Lincoln, Nebraska.

Pacific Bus Museum Annual Open House

The Pacific Bus Museum has announced its annual Open House for 2022. Contact the museum staff at info@pacbus.org for more information.

On August 21, 2022 from 11 a.m. to 3 p.m., the Pacific Bus Museum will have its annual Open House at 37974 Shinn Street

in Fremont, California. Almost all of the museum's fleet of 23 vehicles will be on display. These include intercity buses, school

The Pacific Bus Museum will hold its annual Open House in Fremont, California on Sunday, August 21. All of the museum's 23 vehicles will be on display from a vintage 1932 Twin Coach Model 15 to a 1992 Gillig Phantom. Admission is free to the buses and flea market while food will be available.



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buses and transit buses. The museum's oldest bus is a 1932 Twin Coach Model 15 and the newest bus is a 1992 Gillig Phantom. All of the museum's buses are operable. There will be some visiting buses that are owned by members and guests as well.

This year's Open House will be the first for the newest acquisition, a 1966 Crown Highway Post Office/Mobile Post Office that now has an RV interior.

As technological advances continue to alter how and what we do, the Pacific Bus Museum proudly dedicates itself to the preservation, restoration and display of buses as part of transportation history in America. Those with an interest in buses, whether a casual or dedicated fan, can enjoy a fun day in the company of others who share the same interest. What began in 2009 as a day when the museum opened to the public, has grown each year to become the largest gathering of buses in the western United States.

Admission is free.

The day's activities include a flea market of bus memorabilia and collectibles, an available BBQ lunch, a raffle and an afternoon bus caravan with a photo stop.

For those who are planning to bring a bus or bus conversion to the Open House, the museum asks that you contact the museum in advance.

More information is available at www.pacbus.org or contact info@pacbus.org.

Seven New MCI D4520 Coaches for Jefferson Lines

Minnesota's Jefferson Lines, one of America's largest motorcoach carriers, has ordered seven additional MCI® D4520 clean-diesel motorcoaches.

The new D4520 coaches feature custom seating, interior and exterior safety cameras, upgraded air filtration and automatic snow chains, and they also conform to 2021 Environmental Protection Agency greenhouse gas emission standards for heavy-duty passenger vehicles.

Built with legendary MCI quality, the fuel-efficient D4520 coaches deliver dependability, exceptional passenger comfort and high-quality performance for intercity travel.

Three NFI Battery-Electric Buses for Porterville

NFI Group Inc. (NFI), a leading independent bus and coach manufacturer and a leader in electric mass mobility solutions,

Jefferson Lines in Minnesota has ordered seven more MCI D4520 coaches. The coaches feature custom seating, interior and exterior safety cameras, upgraded air filtration and automatic snow chains. They also conform to 2021 Environmental Protection Agency greenhouse gas emission standards for heavy-duty passenger vehicles.



on June 16 announced that its subsidiary New Flyer of America Inc. (New Flyer) has received a contract from Porterville Transit, operated by the City of Porterville, for three battery-electric Xcelsior CHARGE NG™ 35-foot, heavy-duty transit buses, supported by a combination of Federal Transit Administration (FTA) grants and local funds. The agency becomes the twelfth in California to purchase zero-emission buses (ZEBS) from NFI.

Porterville Transit provides transportation services in the City of Porterville in Tulare County, California, delivering nearly 700,000 annual rides on fixed-route bus lines. The order expands the agency's fleet of alternative fuel vehicles to reduce emissions, outlined in its Transit Plan, while delivering on the California Air Resources Board's Innovative Clean Transit regulation, requiring agencies to switch to 100 percent zero-emission bus fleets by 2040.

"Built on NFI's proven Xcelsior platform with over 16,000 buses delivered across North America, the Xcelsior CHARGE NG™ is our most advanced battery-electric bus," said Chris Stoddart, president, North American Bus and Coach NFI. "Providing up to 440kWh of energy and 220 miles of range on a single charge, our extended range buses will deliver clean, safe and quiet sustainable transportation to the Porterville community."

Introduced in 2021, the Xcelsior CHARGE NG incorporates three distinct technology advancements, including high-energy batteries that extend range up to 13 percent, advanced protective battery packaging for easy install and simpler serviceability and a new lightweight electric traction drive system with up to 90 percent energy recovery. For more information visit newflyer.com/ng.

NFI is a leader in zero-emission mobility, with electric vehicles operating or on order) in more than 80 cities in six countries. NFI offers the widest range of zero-emission battery and fuel cell-electric buses and coaches, and its vehicles have completed more than 65 million EV service miles.

NFI supports growing North American cities and scalable, clean and sustainable mobility solutions through a four-pillar approach that includes buses and coaches, technology, infrastructure and workforce development. NFI also operates the Vehicle Innovation Center (VIC), the first and only innovation lab of its kind dedicated to advancing bus and coach technology and providing workforce development. Since opening in late 2017, the VIC has hosted more than 300 interactive events, welcoming 5,000 industry professionals for EV and infrastructure training.

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And the new ZF CeTrax central drive system for your electric driveline. The electric driveline is here to stay. That's why ZF offers a range of solutions including the AxTrax AVE electric drive axle so bus manufacturers and end customers can choose the best possible system for the specific applications. **Visit zf.com**

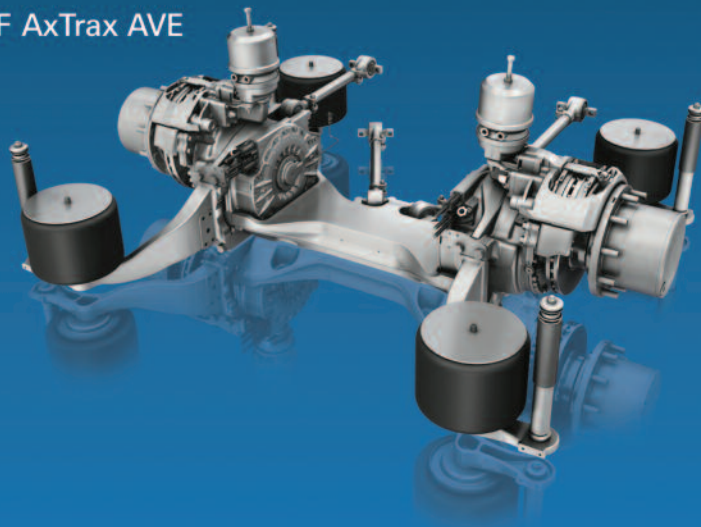
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Equipment News

installed base of more than 105,000 buses and coaches around the world.

New Flyer is North America's heavy-duty transit bus leader and offers the most advanced product line under the Xcelsior® and Xcelsior CHARGE® brands. It also offers infrastructure development through NFI Infrastructure Solutions™, a service dedicated to providing safe, sustainable and reliable charging and mobility solutions. New Flyer actively supports more than 35,000 heavy-duty transit buses (New Flyer, NABI and Orion) currently in service, of which 8,600 are powered by electric motors and battery propulsion and 1,900 are zero-emission. Further information is available at www.newflyer.com.

ABC Companies Zero Emissions Tour

ABC Companies, a leading provider of motorcoach, transit and specialty passenger transport vehicles in the U.S. and Canada, is conducting a North American demo tour of its industry leading, 100 percent battery-electric Van Hool motorcoach models, along

with several zero-emission, cutaway shuttle vehicles. These electric vehicles showcase the potential for transporting 12 to 69 passengers completely emissions free. The tour industry-leading Van Hool TDX25E double-deck 69-passenger motorcoach and the CX45E 52-passenger coach utilize Proterra battery systems and are capable of ranges more than 250 miles per charge. In addition, the tour also includes 100 percent battery-electric cutaway shuttles based on popular chassis options including the Ford E450. Since early May, the company has sponsored tours and test drives with customers in key regions around the country to showcase the EV models, while creating awareness and educating commercial users, their communities, stakeholders and lawmakers about the many benefits of zero-emissions ground transportation.

With tour stops across the U.S. and Canada, it has also highlighted the flexibility of these vehicles to travel utilizing publicly available chargers. With the growing number of available fast chargers through networks such as Electrify America, the tour

has also included a number of long-distance connections between tour stops. Most recently, the Van Hool TDX25E double-deck motorcoach travelled more than 2,500 miles from Florida to California exclusively on public chargers. This follows a number of other trips completed by other tour vehicles showcasing their flexibility across various temperatures, travel speeds, elevations, grades and more. All vehicles are monitored in real time with telematics systems capturing precise locations, vehicle performance, energy usage, projected ranges and more, providing ongoing learning and real-world data.

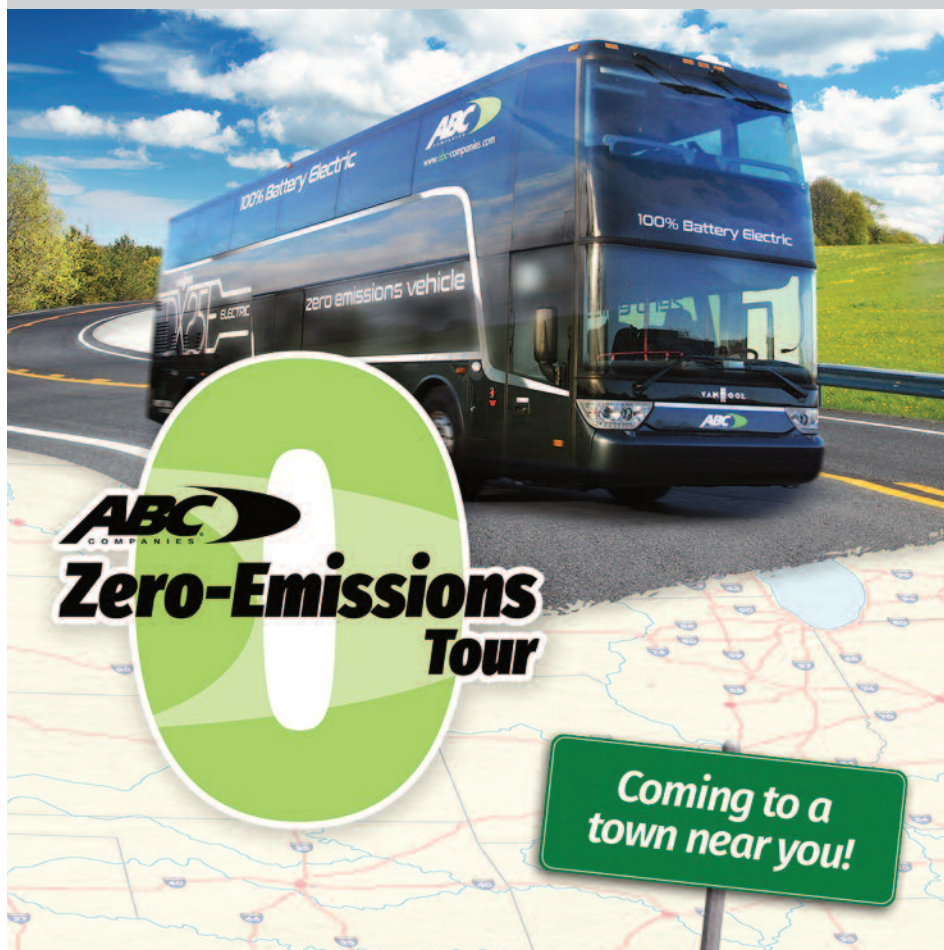
The tour has already gained traction with ABC customers utilizing stops to promote EV awareness in their districts with many having success creating local press events. The tour provides opportunities to demonstrate with customers and riders what is possible now, which has reverberated with elected officials as they seek to funnel infrastructure bill monies into the communities they represent. During a recent stop, Tom McCaughey, president and CEO, Flagship Trailways, hosted Senator Jack Reed to discuss infrastructure investments.

"The goal of the ABC Companies Zero Emission Tour is simple; we want customers and communities to understand that zero emissions coach and shuttle travel is a reality now, even as technology and infrastructure is still growing. There are a lot of misconceptions and confusion about what is reality versus what is still in development. Bringing these vehicles directly to our customers demonstrates our confidence in their potential to transform travel now. This is a rare moment in time for the motorcoach and passenger transportation industry to lead a transformation that is top of mind with the public and our government," said Roman Cornell, president and CCO, ABC Companies.

Through the Zero Emissions Tour initiative, ABC Companies is committed to supporting the net-zero sustainability goals of communities, municipalities and regional operations throughout North America. The company's diverse portfolio of clean-diesel and EV commercial ground transportation vehicles and programs is designed to integrate world-class technology, technical expertise and aftermarket support that focus on a cleaner future.

The ABC Zero Emissions Tour offers an unprecedented hands-on EV fleet operation experience, while being supported by ABC technical and training expertise. Customers participating in the program not only have access to one of the electric vehicles offered by ABC Companies, they also receive many of the support elements that make up the

ABC Companies has been running a Zero Emissions Tour across North America. Several zero-emission buses are involved including Van Hool coaches as well as many cutaway shuttle vehicles. They will make several tour stops across the United States while stopping to recharge at publicly available chargers.



Equipment News

ABC Fleet Electrification Services program including:

- Driver Orientation: vehicle controls, regenerative braking, energy management, etc.
- Technician Orientation: charging procedures, high-voltage procedures
- Access to real-time telematics monitoring featuring
 - Program reporting (vehicle performance, energy consumption, actual and projected range)
 - Charging status
 - Current vehicle status
- 24/7 ABC Technical Support

“We’ve shaped this program to give our operators the unique ability to experience electric vehicles in their fleets firsthand which in turn allows them to promote and directly demonstrate to customers and communities their commitment to green transportation and a zero emissions future,” said Thom Peebles, vice president marketing ABC Companies.

As EV auto and commercial vehicle registrations grow exponentially, ABC sees endless possibilities and applications for EVs in fleets of all sizes and compositions. “Depending upon the application, EVs can help operators take advantage of new and growing niche markets that demand zero-emissions vehicles such as private employee shuttle operations, line runs, university campus loops or any situation that requires large or small group moves,” said Peebles. Environmentally-committed consumers, and most notably younger generations of riders are amplifying the call for net-zero carbon goals, and operators must answer with green transportation options. Economic growth of EVs is also driving the expansion of public charging stations and local and state leaders nationwide are actively vying for funds as a large portion of that money is allocated towards the current administration’s goal of installing EV charging stations every 50 miles along the country’s major highways.

With the irrefutable future of zero emissions woven firmly into the North American social and environmental landscape, ABC Companies is prepared to help owners understand and create a roadmap to EV integration through its turnkey fleet electrification services. “We bring much more to the table than just the EV units. Our fleet electrification services program is helping operators assess and create a roadmap to sustainability by crystallizing a vision for their fleet operations today and guiding them to the right-fit EV options that can dovetail with existing operations. North American roads will look quite different in the coming decades and ABC Companies is prepared to help public and private operators transi-

tion to a sustainable, zero emissions business model designed to optimize current and future operations,” said Cornell.

ABC continues to lead the charge to next generation mobility in North America and supports its products through a national network of dealerships, strategic service and maintenance locations, the industry’s largest privately owned independent parts inventory and decades of technical, customer service and warranty expertise. For more information about the new Van Hool TDX25E and CX45E, ABC’s Zero Emission Tour and all ABC products and services, visit www.abc-companies.com/abc-companies-zero-emissions-tour/.

Busworld Turkey 2022. The Best Edition Ever

The ninth edition of Busworld Turkey, organized by Busworld and its Turkish partner, HKF Trade Fairs, was held for three days from May 26-28, 2022 in the Istanbul Expo Center. It was Busworld’s first post-covid edition.

The “new normal” turned out to be a very successful new start for exhibitions in general and Busworld Turkey specifically. In comparison to the previous edition in March 2020, right before the pandemic hit the fan, the 2022 show was both bigger in size as well as in exhibitor and visitor numbers. Also from a visual perspective the show performed outstandingly, being a sight for the eye with all these beautiful vehicles and ditto booths. The show welcomed 11,043 visitors,

with 10,252 Turkish visitors and 791 coming from abroad.

In total the exhibition counted 183 exhibitors, a growth of 43 percent versus 2020. The two halls (12.5 square meters) were packed with vehicles presented by the Turkish bus and coach builders Anadolu Isuzu, Karsan, Otokar, BMC, Gürsözler and Harputlu. For the very first time, busworld Turkey also welcomed IVECO BUS for the relaunch of their brand in Turkey after 15 years.

Although some diesel buses could still be seen in the booths, the shift towards electric buses was very obvious. Turkey itself might not be ready yet for the electric vehicles era due a lack of infrastructure, but that does not stop Turkish manufacturers from producing and exporting electric buses to the rest of the world.

IVECO Bus showcased three vehicles in their booth. The Streetway CNG was launched for the Turkish market and was accompanied by the Crossway and the E-Way.

Otokar brought not less than five vehicles to the show. The articulated e-Kent of 18.75 meters with Voith motor and Webasto batteries had its world premier at Busworld Turkey.

Anadolu Isuzu exhibited the alternative CNG-fueled, 100 percent biogas compatible Kendo, the full electric NovoCITI Volt, the

Held from May 26-28, the ninth Busworld Turkey was Busworld’s first post-covid edition. It was the best edition to date with more than 11,000 visitors and 183 exhibitors. The shift to electric buses was obvious as can be seen by this electric bus shown during the event.





The new premium coach for the Kuwait Fire Force is built in an Irizar 12.2-meter i6S model. This is similar to the popular i6 model sold in the United States but comes with only two axles.



In addition to other special features including a lavatory and USB ports, the rear of the Kuwait Fire Force coach has this attractive meeting room with a central table as well as seven seats.

Grand Toro coach (winner of the BigSEE product design award 2021) and the Novolux and Citiport 12 models.

Karsan presented its complete three-vehicle range with five models: e-JEST (six meters), e-ATAK (eight meters) and e-ATA (10, 12 and 18 meters). With their e-Vision strategy it aims to position Karsan in the Top 5 players of electric buses in Europe.

Mapar, who sells, resells and refurbishes buses and coaches of MAN and Temsa, showed its Temsa range this time.

Güteryüz presented its electric bus, the Ecoline electric and of course its typical open-top sightseeing coach, the Panorama Open Top.

Bodybuilders Erener, Erduman and Bur-Can showed their newest creations built on IVECO and Mercedes-Benz Sprinter chassis.

Last but not least the typical Turkish luxurious minibuses caught the eye. Let your mind wander off in those starred ceiling lounges on wheels.

All subsectors were represented. Global loyal Busworld customers such as Allison Transmission, ZF, Voith, Webasto, Fogmaker and many more were eager to present their developments. Also Turkish companies like Aselsan, FarHym, Belka, Eltesan – too many to all be mentioned here, but do check the exhibitor list – confirmed the importance of the manufacturing industry in Turkey.

Everyone was very enthusiastic to finally meet up face-to-face with old and new customers again.

The first Busworld Speakers' Corner at Busworld Turkey had the opportunity to welcome speakers from both global companies such as EVECOCO BUS, ZF and Optibus, as well as smaller local companies like HydroBorPEM who are all looking to spread a message. The diversity in the 11 short sessions that were held was great. Safety topics, smart buses and commercial vehicle intelligence, the shift towards electric and hydrogen buses and even winter tire legislation were being discussed during the first two days of the exhibition.

IVECO BUS kicked off with its strategy on new sustainable electric buses, which immediately filled up the booth completely. The overall market analysis from Frost & Sullivan of Turkey and its greater region remained a popular and insightful classic in the program that gives you a feel about what is happening today and where we are going to tomorrow.

The open concept of the Speakers' Corner ensured all visitors were free to stop by and take a seat at any time during the talks. A format that will be implemented in future Busworld exhibitions as well in order to bring the no nonsense knowledge as close as possible to the show's attendees. The small (24 seats) open area brings the audience closer to the speaker and creates an open-to-interact atmosphere.

Vincent Dewaele, general manager of Busworld International, reacted very enthusiastically: "After two long years, we are finally back in the field, right where we belong. It was extremely rewarding to experience the reactions of all participants and see how delighted they were to be able to meet in person again. Big smiles everywhere. Clearly trade shows are

coming back stronger than ever before. Because people need to meet people in person to do business. And Busworld can help them in doing this in the best circumstances."

An Irizar i6S Premium for the Kuwait Fire Force

The Kuwait Fire Force will have a completely personalized Irizar i6S for their Ministry of the Interior and high-ranking officials, who will use the vehicle on special occasions like national and international events.

The 12.2-meter coach with a Mercedes chassis has been specially designed with unique decoration and seat layout that is adapted to the needs of the Kuwait Fire Force and provides maximum comfort for users.

Among other unique features, the vehicle has wood furniture with Corian countertops, a galley with an additional refrigerator and coffee maker, a recessed lavatory and USB ports for all the seats. It also has several 220-volt universal outlets, footrests on some seats, extra-tinted windows and a maximum capacity Hispacold air conditioning system for temperatures above 50° C, in addition to an eCo3 air purification system for eliminating virus and bacteria.

Furthermore, the configuration of the back of the vehicle is designed as a meeting room with a space that has seven seats and a central table to meet all the client's special needs.

The capacity for personalization without limits has resulted in this Irizar i6S Premium adapted to the requirements of the Kuwait Fire Force. It was made possible thanks to the collaboration of the general

distributor for Mercedes-Benz in Kuwait, AL Mulla Automobiles for Buying & Selling Cars Co. and Mohamed Abdul Mohsin Kharafi & Sons Co with which Irizar keeps broadening their market in Arab countries.

Euro Bus Expo Launches Innovation Challenge 2022

The Innovation Challenge will make its Euro Bus Expo debut at the NEC Birmingham on November 1-3. Bringing together the most notable product and service developments from across the industry, it gives visitors the opportunity to quickly and easily discover what is new and next in a sector rife with innovation.

The Challenge will highlight the most significant new initiatives from hundreds of leading and emerging brands exhibiting at Euro Bus Expo. Among these, visitors will discover innovations that could be the key to cutting costs, driving productivity and unlocking future growth for their businesses.

Euro Bus Expo is a proven platform to find out about the latest products available. It attracts thousands of bus, coach and mini-vehicle operators, local authorities and stakeholders to find out about new initiatives, from energy-efficient vehicles, through technology, equipment, accessories and business services.

After the last event, Robert Williams, chief executive officer of Reading Buses, said: "I always enjoy attending the show to see the latest innovations and developments, gather new ideas and meet suppliers. There's nothing like having all the options under one roof to help shape our buying decisions.

Exhibiting suppliers are invited to enter their product or service launching at Euro Bus Expo, or in the 12 months prior, which they feel deserves recognition for innovation.

Says event director Helen Conway: "Following its successful launch at Coach & Bus UK in 2019, the Innovation Challenge celebrates new products and services from across the industry. "As well as giving visitors a convenient way to discover all the latest initiatives, the Challenge is an extra opportunity for exhibitors to showcase the very best of their work and highlight the importance it has on shaping the future of our sector."

Entries will be displayed in the Innovation Challenge Gallery, where visitors will vote for their favorites on the first and second days of the show. Suppliers of innovations with the most votes will deliver a 90-second pitch of their product or service to a panel of industry judges and visitors in the Masterclass Theatre.



Euro Bus Expo is scheduled in Birmingham, England on November 1-3. The Innovation Challenge will make its debut at this event by bringing together the most notable product and service developments from across the industry. Here is a Volvo 9900 coach that was displayed at a recent Euro Bus Expo.

The judges will award bronze, silver or gold award certificates, and winners can relish the moment of having one of the most innovative products or services at Euro Bus Expo 2022. Judges include Phil Hitchen, MD of Belle Vue Coaches; Chloe Leach-O'Connell, MD of Leach-O'Connell Consultancy; Jon Eardley, MD at Abellio London; Tom Morgan, group commercial director at trentbarton; and Josh Miles, director CPT Cymru at Confederation of Passenger Transport UK.

Says John Clarfelt, former CEO at Ticketer: "I highly recommend entering if you are looking to launch a new product or service. We were excited to be involved in the Innovation Challenge at Coach & Bus UK 2019. "It was a chance to get in front of the whole exhibition audience and showcase something we are proud of, which could really benefit the industry. Reaching the finals and winning the gold award was naturally a bonus."

For further information and to register to attend, visit eurobusexpo.com

The Innovation Challenge is one of many exclusive benefits for Euro Bus Expo exhibitors. The show is the largest UK-based exhibition dedicated to the bus and coach industry, attracting decision makers from the largest operators through to owners and managing directors at the smallest family-run businesses.

For exhibition inquiries, contact Martin Laverton at mlaverton@divcom.co.uk.

Pennsylvania Bus Association Honors Members' Employees

The Pennsylvania Bus Association (PBA) recognized seven PBA members' employees as the recipients of the 2021 Drivers and Employees of Distinction. The recipients were honored at the June 21 luncheon during the Annual Conference at Wyndam Garden, State College, Pennsylvania. The Ohio Star Theatre sponsored the luncheon. PBA gave each recipient engraved plaques, pins and watches with engraving. All honorees are congratulated.

They are:

- Brenda Shue, Bailey Coach – Employee of Distinction Award
- Chris Yeckley, Anderson Coach – Driver of Distinction Award
- Clay Knepp, The Fullington Auto Bus Company – Employee of Distinction Award
- George Snedeker, The Fullington Auto Bus Company – Driver of Distinction Award
- Kelly Hay, Mlaker Transportation – Employee of Distinction Award
- Kristen Miller, Wolf's Bus Lines – Employee of Distinction Award
- Larry Fink, Susquehanna Trailways – Driver of Distinction Award
- Nichole Baer, Anderson Coach – Employee of Distinction Award
- Pablo Barrioneuvo, Martz Trailways – Driver of Distinction Award

The Drivers and Employees of Distinction is an annual program that enables bus company members to recognize outstanding employees for contributions to the company they are employed by, their passengers, the



Alexander Dennis is creating a new brand identity by launching new logo designs for Alexander Dennis and Plaxton brands. Development of the new design was led by Group Marketing Executive Marina Matošević. Note the new logo on the upper level of this Enviro400 from Alexander Dennis.

motorcoach industry in general and the community in which they serve.

The Pennsylvania Bus Association, incorporated in 1923, is a non-profit organization dedicated to representing the business and governmental interests of private bus companies operating in Pennsylvania. It is also the mission of PBA to promote travel by motorcoach, and tour and charter service provided by operator members in cooperation with and support for its travel industry supplier members. For more information visit www.pabus.org or contact Executive Director Patricia Cowley at (717) 236-9042 or director@pagbus.org.

New Alexander Dennis Brand Identity

Alexander Dennis (Alexander Dennis Limited, "ADL") a subsidiary of NFI Group Inc (NFI), one of the world's leading independent global bus manufacturers, on June 15 launched a vibrant new brand identity that emphasizes the company's agility and innovation as it continues to lead the transition to zero-emission mobility.

New Logos reinvigorate the established and well-loved Alexander Dennis and Plaxton brands, supported by a cohesive and crisp visual identity across all brand touch-points. AD24 becomes the name for all the manufacturer's best-in-class aftermarket support, including spare parts, field service, call centers, workshops and training, as well as the online platform providing access to them.

The new Alexander Dennis brand identity characterizes an automotive company that is at the forefront of its industry and firmly looking ahead. The lively color gradient of the monogram symbolizes Alexander Dennis's unique ability to respond to customers' individual requirements, while the wordmark acknowledges the heritage of the company name and recasts it in contemporary style befitting of the British bus industry's innovation leader.

Alexander Dennis President and Managing Director Paul Davies said, "This is a defining moment for Alexander Dennis as we position ourselves even more clearly to our customers, suppliers and stakeholders.

"Our new brand identity sets out the values by which we measure ourselves. We exist to move people by designing, manufacturing and supporting the most reliable buses and coaches in the market. We use technology to be cleaner, greener, quieter and the choice for transport companies around the world. Our strong heritage proves that we will continue to deliver, time and time again."

Development of the new brand identity was led by Group Marketing Executive Marina Matošević: "Over the past year, we've had a very collaborative process involving team members across the entire business in which we analyzed and determined who we will be as a company in the next 10 to 20 years. This forward-looking spirit is distilled in our new identify.



ALEXANDER DENNIS

The new and modernized Alexander Dennis logo will identify the brand on buses, documents and other company materials.

"We have assembled a brilliant team of brand ambassadors in every business function who will support colleagues in the rollout, and if their excitement is anything to go by, this new brand identity will be the start of a brand new chapter for Alexander Dennis as we continue to insure that investment in cleaner transport benefits our communities as much as the environment."

The refreshed Alexander Dennis, Plaxton and AD24 logos will be rolled out gradually over the coming months, replacing the existing identity that had been in place since Alexander Dennis was established in 2004.

Keolis Wins Contract in French Catalonia

On May 30, 2022, Perpignan Méditerranée Métropole awarded Keolis the operations and maintenance of its transport and mobility services, Sankéo, from September 1, 2022 for an eight-year period with cumulative revenue of €295 million. Keolis' mission includes growing the mobility offer, modernizing information and distribution tools and launching four high-performance 100 percent electric bus lines. By 2030, Keolis is committed to increasing sales revenues by 30.2 percent.

To achieve a seamless transition, Keolis will take on the entire workforce from the previous operator and in line with the existing labor agreements. Working hand-in-hand with a new executive team, Keolis will insure that the transfer of all personnel currently assigned to the subcontracted Sankéo services runs smoothly for its subcontractors.

From the first year of the contract, Keolis intends to significantly improve the customer experience, with enhanced passenger information, a new e-shop and a new single application integrating information on mobility and payment methods using the M'ticket solution.

Innovation is at the heart of this new contract. From 2023, two new services will be deployed: post-payment allowing unlimited

non-subscription travel at preferential prices for 10 trips or more, and open-payment enabling purchase of a single-trip ticket by swiping a credit card on the on-board ticket reader.

From 2023, the new “Pulséo” performance bus lines will be launched with the deployment of 20 100-percent electric vehicles by the end of the contract.

Capitalizing on its successfully restructured network in 2018, Perpignan Méditerranée Métropole aims to continue this momentum by implementing a new mobility offer that is connected, reinforced and integrated, notably based on: Four high-performance “Pulséo” bus lines featuring extended service hours and new on-board services including Wi-Fi, USB ports and a heritage discovery application; four main lines, serving the town of the first outer suburbs and the dense districts of Perpignan, with faster routes to the city center; 20 daily express round trips to and from Perpignan city center, ensuring up to 20 minutes of commute time savings for 20 towns and extended and modernized transport on-demand (TOD) services, covering all suburban areas and adapted to the specific needs of employees in large employment areas. Services will be available on reservation up to one hour or 30 minutes prior to the desired departure time, depending on the service.

Irizar Ultra-Fast Charges in the Swiss City of Schaffhausen

Since the fast charging infrastructure pantographs in Bahnhofstrasse Street were installed a year ago, the zero-emission Irizar ie tram buses have been commercially operating all around the streets of Schaffhausen on a daily basis. They have already performed more than 750,000 kilometers and more than 60,000 ultra-fast charging procedures.

As Iñigo Etxebarria, export commercial director of Irizar e-mobility, explained during the project closure event, “We would like to thank VBSH and the city of Schaffhausen for the trust they have placed in us. We are very proud to be able to bring our turnkey electromobility solutions to this city. The key for the success of this project has undoubtedly been the close cooperation between VBSH, Irizar Group and all the Stakeholders involved.”

It is a lighthouse project not only in Switzerland but in Europe. This is the first opportunity charging electric bus system fully zero emission on its entire value chain. As the 12 600 kW ultra-fast charging stations draw the energy to charge the vehicles from the Rhein River hydroelectric plant (run by the local company SH Power).



Keolis is taking over the Sankéo service in French Catalonia. This substantial network involves 36 municipalities, 35 lines, 250 vehicles and an expected 11.6 million annual trips. Keolis will take over the entire workforce from the previous operator.

VBSH Verkehrsbetriebe Schaffhausen and Irizar e-mobility proved that public transport can be sustainable, efficient, smart, accessible, safe and connected and at the same time, meet the expectations of European citizens.

The project includes 15 Irizar ie tram model zero emission electric buses (eight 12-meter-long and seven 18-meter-long vehicles), 13 600 kW ultra-fast charger and 16 charging stations in depots. The chargers have been developed and manufactured by Jema, a company belonging to the Irizar Group. □

The Irizar ultra-fast charging system in the Swiss City of Schaffhausen was installed a year ago. Fifteen Irizar battery-electric ie tram buses have operated more than 750,000 kilometers and have completed more than 60,000 ultra-fast charging procedures. This proves that a system like this is very workable.



Bus Equipment People

Motor Coach Industries (MCI)

MCI is pleased to announce **Tom Cole** as regional parts manager, Northeast region. Having been with MCI for more than 16 years, **Cole** worked as the service manager in MCI's Blackwood Service Center before becoming a regional parts manager. In this new position, **Cole** will leverage extensive industry knowledge and experience to help private coach operators with parts procurement needs in the Northeast region. Need parts? Contact **Cole** at Tom.cole@nfi.parts or (609) 980-6824.



Tom Cole

Motor Coach Industries (MCI), a subsidiary of NFI Group Inc. (NFI), a leading independent bus and coach manufacturer and a leader in electric mass mobility solutions, on June 30 announced the promotion of **Josephine (Josie) Arrington** to service center general manager in MCI's Blackwood, New Jersey facility. The promotion makes **Arrington** the first woman service center GM across NFI's extensive service center network. **Arrington** succeeds **Tom Cole**, who recently accepted a regional parts manager position as announced earlier.

Arrington began her 15-year career with MCI in 2007 as a mechanic at the Blackwood facility while completing courses at Penco Tech, a top trade school in the region. She quickly excelled through service advisory roles before being promoted to senior service provider, earned through hard work, high performance and dedication. In her new position, **Arrington** will provide leadership to 20+ technicians, service advisors and a parts team serving customers in the Northeast region.

"We are pleased to congratulate **Josie** on this deserved promotion. Through extensive service experience and superb customer-focused skills, **Josie** has been instrumental in serving MCI customers," said Patricia Ziska, vice president of Private Sector Sales, MCI. "Leveraging this experience, she will lead the operations of MCI's Blackwood Service Center and continue to provide our customers with exceptional service in the Northeast region."

"**Josie** has exceptional qualifications, from people skills to highly specialized hands-on coach knowledge," said Steve Batho, director, Service Centers, MCI. "Time and again she has proven her dedication to our customers, always going the extra mile. Our service center managers are a critical level of management in MCI's business, and **Josie** has built important relationships in one of our busiest service centers."

Before joining MCI, **Arrington** was a certified nursing assistant and served three years in the U.S. Army, where she intended to pursue nursing and train as a medical assistant. When the Armed Services Vocational Aptitude Battery (ASVAB) test



Josephine Arrington

proved her capabilities as a mechanic, **Arrington** became an electrical systems specialist working on trucks at the Army base in Fort Leonard Wood, Missouri. "I wasn't surprised by the test results," said **Arrington**. "One of my grandfathers owned an automotive shop and my mother's father had a roofing business. I spent a good deal of time with him."

Arrington says customer service remains her highest priority. "Tom made sure I learned every part of the business, and prepared me for this position. One of the great things about MCI and New Flyer is our ability to network to get things done. Even when positions change, people stay, and the channels of communication are always there," said **Arrington**.

"We always try to get everyone in the shop to help our customers, no matter the status of our workload," **Arrington** explains. "Turnaround time on a coach isn't like that on cars. Coaches are our customers' livelihood, and our repairs have to be accurate and expeditious."

Working within customers' budgets, transparency in estimates and quotes are key to repeat business, **Arrington** says. "It's more than maintenance. We have known our customers for years and understand their businesses." To connect with **Arrington** e-mail Josephine.Arrington@mcicoach.com.

The New Flyer and MCI Service Center at 14 Harmon Drive in Blackwood, New Jersey, is one of the company's busiest service locations. Other New Flyer and MCI Service Centers are located in Ottawa, Montreal, Chicago, Dallas, Los Angeles and the San Francisco Bay area. For more information on the service centers, visit mcicoach.com/service-centers.

ABC Companies

ABC Companies has continued growth into new markets providing both private and public customers a greater range of vehicle options, while leveraging its strength in after sales support and customer up-time. The entry into vans, cutaway shuttles and low-floor transit vehicles sales was led by Roman Cornell, president and chief commercial officer at ABC Companies, resulting in the launch of SVT (specialty vehicles and technologies) within ABC Companies. This group was formed to address the growing trends in micro transit, mobility as a service and right-sizing of fleets. "As ABC was already involved in servicing and supplying parts and support for many of these vehicle segments, adding these vehicles into the product portfolio was the next logical step," stated Cornell. ABC Companies is rapidly growing sales in cutaway shuttle, van and transit low-floor products as it has added a number of distribution agreements with well-known manufacturers including Turtle Top, Vicinity Motor Corp., Coach & Equipment and many others.

"Now that we have brought onboard a number of manufacturers, along with a dedicated



George Altevogt

sales team, our next step was to create a position that oversees this group's growth," stated Cornell. "We are very excited to have **George Altevogt** join ABC and lead the efforts of this new team, which includes many seasoned veterans of these markets. "**Altevogt** will report directly to Cornell in his role as vice president ABC Companies, SVT Group. **Altevogt** will oversee the distributor agreements, sales activities and ongoing customer support for these product lines including expansion into new markets and customer bases."

Bus Equipment People

A seasoned professional in the development of new business and sales growth in the private and public sectors, **Altevo** has spent the bulk of his career in the wheelchair accessible minivan/van and cutaway shuttle bus markets. "I am excited to be joining an organization that has built its reputation on over 50 years of customer support. The resources and make-it-happen culture that ABC brings, coupled with a comprehensive product portfolio, is truly unique," stated **Altevo**. "My team and I look forward to bringing solutions for today's evolving market needs, while ensuring customer service remains at the high standards ABC Companies' customers expect and deserve.

David Warren/New Flyer

David Warren sadly passed away on June 27, 2022.

David was one of our industry's brightest, kindest, well regarded and most passionate leaders, having boldly led education and dialogue on clean technology for decades. He first joined New Flyer in 2013 (through NFI's acquisition of North American Bus Industries of NABI) and led New Flyer's sustainable technology strategy, becoming a zero-emission bus savant and courageous advocate for meaningful change.

David never shied from raising his hand and participated on numerous technical, industry and regulatory committees, while also serving on the boards of CAL-START and the Center for Transportation and the Environment. In one of his proudest accomplishments, David oversaw the development of New Flyer's Vehicle Innovation Center (VIC) in Anniston, Alabama. It opened in 2017 and has welcomed more than 5,000 industry professionals for EV and infrastructure training.

Because of David, many North American communities made the transition to cleaner, quieter and healthier communities through zero-emission transit adoption.

Prior to New Flyer, David held senior management roles with NABI, overseeing research and development, engineering, field service and warranty operations, building more than two decades of executive experience in the



David Warren

medium- and heavy-duty truck industry where he led aftermarket, service, engineering and product development teams. David earned a Mechanical Engineering degree from California State University, a Master of Business Administration (MBA) from the University of Washington and was also an accredited professional engineer.

Most importantly, David's proudest roles were that of doting husband to the love of his life, Roxanne, very proud father of three children (Jeff, Michelle and Stephen), beaming grandfather to two grandchildren (Cater and Cayson) and companion to his fur friend "Griffy." David and Roxanne established their home on Mercer Island, a coastal community just outside Seattle, which he shared at every chance and welcomed friends, family and colleagues to visit.

David's ingenuity, wit, unmatched dedication, zest for life and compassion for others will be forever missed. He leaves a profound legacy in both his personal and professional communities, and reminded us that while it is nice to be important, it is more important to be nice.

Please take a moment to celebrate and remember David Warren, and the remarkable leader he was. □

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NFI Forward

A New Industry Achievement and Dealing with the Pandemic

by Larry Plachno

As the pandemic eases, readers are starting to ask where things stand with the industry and with industry suppliers. NATIONAL BUS TRADER has been through the fuel crisis of 1979, deregulation in 1982, the recession of 1991 and the unfortunate tragedy of 9-11-01. All of these impacted the bus industry in one way or another, but the recent pandemic was by far the worst. While we see the industry returning, the experts say that it may take a long time to get back to pre-pandemic levels. Hence, there is a great deal of interest in trying to find out where things stand.

What we plan to do here is take a look at the NFI Group and what this innovative company has done to mitigate the impacts of the pandemic and to continue leading the evolution to zero-emission transportation. They are a good choice because the pandemic hit within months of completing a major acquisition to round out the company's product line achievement in the bus industry. Before they had an opportunity to merge and rationalize their expanded holdings, the unexpected pandemic arrived. This resulted in changed sales levels, material and supply chain shortages, staff shortages with a tighter labor market and extreme fuel prices. Fortunately, NFI Group has provided information to help us along with this.

Combining the Leaders

Due at least in part because of the pandemic and its resulting confusion, much of the industry has failed to notice that NFI Group had achieved an all-time industry record just prior to the arrival of the COVID-19 pandemic. NFI Group had recently acquired an industry leading company in the United Kingdom to expand NFI's product offering and reach. NFI Group became a global company, from its humble beginnings in Winnipeg as New Flyer Industries (New Flyer).

We can start with New Flyer. New Flyer started as a regional coachbuilder that had difficulty competing with the new General Motors PD4104 coach. Most other coachbuilders left the business, but New Flyer survived by the brilliant plan of switching to transit bus production and then expanding its product line to several propulsion options eventually including battery-electric and



The NFI Group companies have been well organized in dealing with the pandemic because of their NFI Forward program. At the same time, they have been moving ahead with product improvements and innovations. Shown here is the new MCI D4520 model, one of the New Generation models that improves the popular "D" model line with new technology similar to the rest of the product line. MCI.



Based in the United Kingdom, Alexander Dennis is the largest bus builder in the UK as well as the world's largest builder of double-deck buses. NFI Group acquired Alexander Dennis in May of 2019. ALEXANDER DENNIS.



ARBOC Specialty Vehicles has been a leader in offering low-floor cutaway and shuttle buses that allow mobility devices to enter on a simple ramp. ARBOC was acquired by NFI Group in late 2017. ARBOC.

hydrogen fuel cell alternatives. Now obviously the leading transit bus builder in North America, NFI Group (New Flyer at the time) set about expanding its product line with other leaders.

Motor Coach Industries (MCI) was acquired by NFI Group in 2015. In common with New Flyer, the company originated in Winnipeg and survived the General Motors era under Greyhound ownership. Today it is the leading coachbuilder in North America and an appropriate addition to the NFI Group product line.

The next acquisition by NFI Group was ARBOC Specialty Vehicles in late 2017. Early on, ARBOC took over (and main-

tains today) leadership in the low-floor cutaway and shuttle bus market. It also used ramps to eliminate the need for lifts and special equipment.

Alexander Dennis (ADL) has an impressive history that goes back as far as 1898. Over the years, the company grew by acquiring or merging bus body and chassis builders. They have numerous international customers and have been building buses in North America for several years. Today, ADL is not only the largest bus builder in the United Kingdom but also the largest double-deck bus builder in the world. NFI Group acquired ADL in May of 2019.

The arrival of the pandemic a few months after the acquisition of ADL presumably obscured this accomplishment, but it is worth highlighting that NFI Group was the first in the bus industry to assemble such a diverse product line. Yes, in the past there were a couple of companies that built both transit buses and over-the-road coaches; General Motors, Flixbus, Mack and Brill come to mind. But never before in the history of the bus industry has the production of transit buses, over-the-road coaches, shuttle buses and double-deck buses been brought together under one banner. In addition to the diverse product line, the four component companies are leaders in their respective areas. Readers seeking more information on these companies can go to the article titled "NFI Group Acquires Alexander Dennis" in the August 2019 issue of NATIONAL BUS TRADER.

NFI Forward

When the COVID-19 pandemic hit, along with its resulting problems, NFI Group had only recently acquired ADL. However, in late July of 2020, as a response to the pandemic, NFI Group began an initiative called NFI Forward, with the goal of moving from a holding company to an integrated operating company. NFI Forward targeted more than \$75 million in annual cost savings (\$67 million in Adjusted EBITDA savings and an additional \$10 million in Free Cash Flow savings from 2019 levels) in two main areas: 1) the combination of New Flyer and MCI business units and facility rationalization, and 2) general efficiency projects such as rationalizing the workforce to current demands, reducing planned capital expenditures and increasing corporate financial liquidity.

Most of the savings would come from combining the New Flyer and MCI business units into one North American coach and bus business. The combined entity would retain both brands and operate under the leadership of New Flyer President Chris Stoddart. Included would be the integration

In spite of the pandemic, NFI Group companies have been working hard to improve and expand their product lines. MCI's new D45 CRT LE became a revolution in coaches because it offered both a conventional entry door as well as a low-level entry with a small ramp for mobility devices. Passengers with mobility concerns could now quickly and easily board a coach without the need of a lift. NFI.



and standardization of part fabrication operations including subsidiaries. An additional goal was the consolidation of NFI Parts with the North American parts business of ADL into one aftermarket parts company.

Additional savings would come from restructuring ADL manufacturing locations in the United Kingdom. The resulting operation would be leaner and more efficient. All of NFI Group would see administrative and back-office functions streamlined into an integrated shared services model. There was also a program to formalize company-wide strategic sourcing to leverage the purchasing volume of the entire group, as well as optimize product designs across vehicle models and supply chains.

Not unexpectedly, NFI Group would also launch a dedicated team to assess the capacity and costs of all NFI's North American facilities with a plan to commence rationalizing certain facilities in the future. The result of this study will be mentioned later.

Rationalizing North American Facilities

As mentioned earlier, NFI Group launched a dedicated team to assess the capacity and costs of all NFI's North American facilities with a plan to start rationalizing certain facilities. Not unexpectedly, the study showed that the merged NFI Group companies had excess manufacturing capacity in North America. Their decision was to close the MCI facility in Pembina, North Dakota in the fourth quarter of 2022. While the staff here at NATIONAL BUS TRADER did not hear the reasons put forward by the study, we did speak with other old-timers in the bus industry. We all agreed that this was the best decision that could have been made. The reasons we came up with include the following.

While Pembina was MCI's only facility in the United States to complete coaches to comply with Buy America provisions, NFI has three other New Flyer facilities in Crookston and St. Cloud, Minnesota as well as Anniston, Alabama that could be used for this same purpose.

Pembina is an older facility and would require updating for newer models. It was originally opened in 1965 when MCI, then controlled by Greyhound, started selling coaches in the United States. Our notes suggest that it was originally a facility to work on engines for Greyhound. Over the years, Pembina was primarily used to finish buses from shells trucked down from Winnipeg but has traditionally been geared to diesel coaches.

The tight labor market has impacted Pembina. For those of you who have never been there, this facility is located adjacent to Interstate 29 and close to the Canadian border. The area is very rural, with Pembina itself having a population of not much



Here is a production line at the facility in Pembina, North Dakota. For decades, the traditional arrangement was that the bus shells were constructed at the Winnipeg facility and then trucked to Pembina for finishing. That first coach on the left is an Inmate Security Transport Vehicle. MCI.

more than 500. In comparison, the Crookston, Minnesota facility (about 100 miles south) is within 70 miles north of Fargo. The St. Cloud facility is near the suburbs of Minneapolis while Anniston, Alabama has a population of more than 20,000 and is less than an hour from the suburbs of Birmingham.

In recent years, activities at Pembina have concentrated on finishing the Legacy "D" model MCI coaches from bodies

trucked down from Winnipeg. Many of these go to agencies using federal money and hence comply with Buy America provisions. However, the Legacy "D" models are being phased out and replaced by the newer, New Generation "D" models that are updated and compatible with the newer product line. These new models include the D45 CRT LE (low-entry vestibule) and D45 CRT (high-floor) for the transit market (CRT = Commuter Rapid Transit), while the high-floor, 45-foot D4520 and companion 40-foot D4020 are geared towards the line-haul niche. Many of these will also be available with battery-electric propulsion systems that may be manufactured or assembled at other facilities already having this capability. For details on these new models see the "D is for Durability" article in the August 2021 NATIONAL BUS TRADER that is also available as a PDF on the www.busmag.com Website under Archived Articles.

NFI Group is offering support for the 195 employees at Pembina. In addition to help through transition and placement services, NFI is offering to redeploy people to the company's facility in Crookston, Minnesota. In some cases, the reduction in workforce will be handled by retirements and normal job attrition.

Improving and Expanding the Product Line

In spite of the pandemic, the product lines at all NFI Group manufacturers have been improved and expanded. Much of the New Flyer product line is based around their popular Xcelsior® low-floor transit model.

Pembina had become MCI's facility to complete "D" model coaches in the United States so they could comply with Buy America provisions for federal funding. As a result, the Pembina facility holds a record for the most commuter and public transit agency coaches completed. Private operators also came to Pembina to pick up new "D" model coaches they had ordered. MCI.



The original model went into production in 1991 as America's first low-floor transit bus. Well proven in numerous cities, the Xcelior® is available as a single unit bus or as an articulated bus. It is also available with numerous propulsion options, including battery-electric as of 2012.

Recent advancements at New Flyer include the introduction of the Xcelior AV™ in January of 2021. This is the first

autonomous full-size transit bus in North America. Developed in partnership with Robotic Research, the bus has Level 4 capabilities and is being tested in Maryland. In March of 2021, New Flyer unveiled its new Xcelior CHARGE NG™. This new model is an improved battery-electric transit bus using new technology including high-energy batteries and a lightweight electric traction drive.

New Flyer has also been active with improving and expanding its product line. In March of 2021, New Flyer unveiled its new Xcelior CHARGE NG™. This new model is an improved battery-electric transit bus using new technology including high-energy batteries and a lightweight electric traction drive. NEW FLYER.



Alexander Dennis has continued its dominance in the double-deck market. In June of 2021, Alexander Dennis introduced its new battery-electric Enviro 500 EV CHARGE. This is the first double-deck, battery-electric bus to go into production in North America. ALEXANDER DENNIS.



New Flyer has been welcoming an increasing number of transit bus orders. The orders are supported by federal funding and are moving more and more towards zero-emission buses. Several orders are coming in for battery-electric buses, as well as for hydrogen fuel cell and hybrid electric buses. Included are both single unit and articulated transit buses.

MCI has also been busy improving models and introducing new ones. Their J4500 model, the most popular coach in North America for a decade-and-a-half, again received several improvements in 2020. This popular style is available in both 45-foot and 35-foot lengths, and both will be available with battery-electric propulsion.

A major project at MCI has been the replacement of the Legacy "D" model coaches with the New Generation "D" model coaches that offer advanced technology similar to the rest of the product line. This originally started with the D45 CRT LE model that revolutionized ADA coach compliance by offering a second entry door at curb level. This new technology was then applied to a New Generation 45-foot, high-level coach – the D4520 – and a companion 40-foot high-level coach – the D4020. Models will be available as commuter coaches and eventually as an Inmate Security Transport Vehicle. These models will also be available with battery-electric propulsion.

Unfortunately, the private coach operator end of the market is currently down because they are not getting government money for equipment like the public sector. However, MCI has been getting public sector orders for commuter coaches including the new D45 CRT LE.

Other companies in NFI Group have also been moving ahead with new developments and improvements. In February of 2021, ARBOC introduced their new battery-electric propulsion option on their low-floor cut-away and shuttle buses. This was followed in July of 2021 with the introduction of a new hybrid electric propulsion option on ARBOC buses. ADL in the United Kingdom has been building more and more battery-electric-powered buses, including traditional red double-decks that are now battery-electric. On this side of the Atlantic, ADL introduced their new Enviro 500EV CHARGE in June of 2021. This is the first battery-electric double-deck bus to go into production in North America.

An interesting final note is that NFI Group continues to hold an impressive lead in electric vehicles. As of April 2022, NFI Group vehicles completed 65 million electric service miles. In 2025, NFI Group expects that 40 percent of its annual deliveries will be zero-emission buses and coaches. □



Carrington Events

by Larry Plachno

VDL has been a leader in providing battery-electric buses in Europe. This photo shows a charging test lab in Valkenswaard, Netherlands. In addition to overnight charging with a cable, electric buses can also be charged using an overhead connection as shown here. VDL.

Most readers have probably not stopped to think that our society has moved substantially to electricity and electronics in less than 200 years. While the Victorian industrial revolution initially started with steam power, we eventually developed the more convenient electric power and electronics. This trend arguably started with Samuel Morse who perfected the telegraph in the 1840s, and picked up speed with Alexander Graham Bell who patented the telephone in 1876. From there, Marconi developed the wireless telegraph that played a big part in bringing communication to ships at sea. Developments rolled on with the radio, television, computer and now the Internet. The development of reliable power generation in the late 1800s led to central power stations and in turn fostered electric household appliances including washing machines, dishwashers and even electric can openers. Today, virtually all vehicles incorporate electronics.

There have been scientists and researchers who are quoting an old proverb from *Don Quixote* and suggesting that maybe we should be a little more circumspect about putting all of our eggs in one basket. While

electricity certainly makes it easy to obtain ready power, there are concerns about the impact on society in the event of a problem. Most people would equate a worldwide disruption of electric power and electronics as something from a science fiction movie. However, such a disruption is not only a reality but has happened a few times.

It was about a year and a half prior to the Civil War when strange things happened all over the earth in the last days of August and the first days of September in 1859. The most obvious were problems with telegraph systems. Telegraph poles threw sparks and a few were bad enough to cause fires. Some telegraph operators got shocks from the equipment while other telegraph lines simply failed to work. It was also reported that a few telegraph operators were able to receive and send messages even with their batteries disconnected from the system.

All around the globe there were reports of the aurora lights from both poles moving much closer to the equator. Some lights in the sky were a bright red, others were white and still others changed colors. In the North-

ern Hemisphere the lights were seen in the United States, China, Southern Japan, Hawaii, Cuba and Mexico. They were even seen as far south as Columbia in South America. In the Southern Hemisphere, the lights reached as far north as Australia.

In some locations the lights were so brilliant as to approach looking like daylight. In the Northeastern states, some people reported that the light was so bright they could read a newspaper. A few places reported that the bright lights made birds think it was morning and they began chirping. In some places, people got up and started making breakfast or leaving for work because they thought it was morning.

At least initially, the reason for this was a mystery. Richard Carrington, an amateur British astronomer with a personal observatory on the outskirts of London, suggested a connection with solar flares he had observed on the sun. Further work by several others confirmed the fact that the solar flares had caused a powerful geomagnetic storm. As a result, the scientists began calling this a Carrington Event.



The Carrington Event was caused by a solar flare and led to a solar coronal mass ejection that hit the earth's magnetosphere and created a geomagnetic storm.

What eventually was determined is that a solar flare led to a solar coronal mass ejection that hit the earth's magnetosphere and created what has since been regarded as the largest geomagnetic storm on record. In more modern times, this has been credited with having the energy of 10 billion atomic bombs. Actually, the 1859 Carrington Event was two solar events back to back with sunspots on the Sun from August 28 through to September 2. One event on August 29 was followed by a second that became obvious on September 1 and 2.

Scientists suggest that these solar storms can come in as many as three stages. The first includes high energy sunlight consisting mainly of x-rays and ultraviolet light that can interfere with radio signals by ionizing the earth's upper atmosphere. A second stage is a radiation storm that can be dangerous to unprotected astronauts above the atmosphere but less so to the rest of us protected by the earth's atmosphere. Then, the third stage is a the actual coronal mass ejection. This moves slower than the first two



One of the more visible features of a Carrington Event is the movement of the aurora closer to the equator. Some were red, others white and some bright enough to read by. In some cases, the lights were so bright that people and birds thought that morning had arrived. CAVALOM MARINHO.

stages and could take several days to reach the earth. It brings solar particles that can interfere with the earth's magnetic field and produce strong electromagnetic fluctuations that can interfere with electric transmission lines and electronic devices.

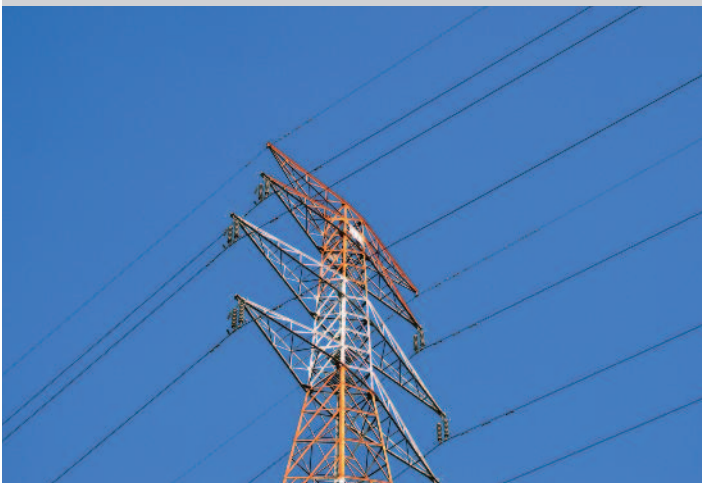
There are mitigating features for Carrington Events. Fortunately, they do not last long. Maybe two or three days at the most. However, the 1859 Carrington Event was actually two coronal mass ejections in a row and lasted as much as five days. While there is no way to stop them, we may get at least a short warning that they are coming. Scientists figured out that the second and larger 1859 event took 17.9 hours to cover the 93 million miles to earth. This is considered fast and probably speeded up because of the earlier solar storm. Under other circumstances,

we should have more time to take action particularly if the expanded aurora lights provide an early warning.

Just how much damage it could cause would depend on the strength of the event. A repeat of the 1859 event today would lead to global electrical disruptions, electrical blackouts and substantial damage because the electrical grid would cease to function. Virtually all transportation and communications would cease. There would be disruptions or failures with cell phones, GPS systems, buses, automobiles and airplanes. Even satellite communications would be disrupted. The result is that the world's communication and transportation would grind to a halt for a while.

The scientists and experts say the best way to deal with another Carrington Event

A stronger Carrington Event could disrupt power transmission lines and knock out the power grid. The solution would be to shut down the power grid prior to the arrival of the coronal mass ejection. CHARLIE YOON.



The GPS system could be disrupted so that aviation and others that depend on GPS input would be unable to operate. To a greater or lesser extent, virtually all electronics and vehicles would be impacted. THE PIXELMAN.



is to cease using systems prior to the arrival of the coronal mass ejection to prevent damage. This would require shutting down the electrical grid and most other electrical and electronic systems and devices. Expectedly, this would cause problems in itself because it would deprive people of electricity and possibly water and heat as well as make it difficult to cook. Depending on the magnitude of the event, it may become impossible to drive cars or fly airplanes. Sources suggest that the cost of doing this for even a few days might exceed one to two trillion dollars.

Scientists and researchers have suggested that it is not so much if but when the next Carrington Event will hit the earth. We have seen several but none that hit the earth have the same magnitude as the 1859 event. Minor storms hit the earth in 1921 and in 1960, but they were smaller events and only caused some radio disruption around the globe. The event in February of 2011 was the largest solar flare in four years. It did interfere with radio communications and even interfered with longer airplane flights that depended on GPS.

There was a solar storm in 2012 that was a major concern because it was of similar strength to the Carrington Event of 1859 and could have caused a great deal of damage. Fortunately for all of us, it passed through the earth's orbit but missed hitting the earth by nine days. If it were not for this timing

difference, we would have had to deal with several major problems.

Moving forward, we need to keep the possibility of a Carrington Event in mind. The sun has activity cycles so that a solar

flare is more likely to occur at some times rather than others. Not every solar flare and coronal mass ejection is the same magnitude as the Carrington Event of 1859. However, when it comes, we may only have a short time to prepare for it. □

A New Flyer XcelSior CHARGE™ bus is shown being charged from overhead. New Flyer has been building electric buses for generations and is a leader in the field. They offer both conventional size buses as well as the articulated shown here. NEW FLYER.



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Northern Kentucky Skyline with Roebling Suspension Bridge – Photo by Liz Dufour



The Beast Roller Coaster at Kings Island, Mason, Ohio – Photo by Kings Island



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Flagship Trailways' Vintage Buses on the Silver Screen



by Pat Plodzean
Photos courtesy of Flagship Trailways

Tom McCaughey, owner of Flagship Trailways, keeps several vintage buses in addition to his regular fleet so he can provide buses for movies and other productions. Here his 1975 Model 05 Eagle painted in traditional Trailways colors is getting ready for a shoot. This particular bus has appeared in several productions. *Below:* The historic fleet of Flagship Trailways includes several buses of different vintages. Shown here is a 1964 single door GM Fishbowl with sightseeing windows that is part of the Flagship historical fleet. There are several other historical buses including a classic 1953 GM TDH5106 "Old Look" transit bus.

With the prolific growth of independent film companies and a wave of nostalgia in movie scripts, Flagship Trailway's vintage buses are busier than ever. "This year has just been on fire," said Tom McCaughey, owner of Flagship based in Cranston, Rhode Island, who finished up a March shoot in Deerfield, Massachusetts, with his 40-foot, 96-inch-wide 1958 GM for *The Holdovers*.

A comedy-drama that takes place over the Christmas holidays in 1970, the movie stars Paul Giamatti as a disliked professor at a prep school, who along with the school's head cook and a 15-year-old trouble-making student are the only "holdovers" left at the school. The movie's release date is still to be announced.

McCaughey's 1975 Silver Eagle 05 was also in upstate New York this year on the set

of *Three Women*, a Showtime hour-long series based on the No. 1 Nonfiction Bestseller by Lisa Taddeo, who has adapted her book that

covers the emotional lives of three women from different backgrounds and stars Shailene Woodley.

McCaughey was also behind the wheel of his Silver Eagle in episodes of *Castle Rock* a former Hulu® show inspired by stories created by Stephen King. Flagship also owns a 1958 GM TDH5106 and a 1964 GM Fishbowl.

Other shows featuring Flagship buses include Hulu's *Only Murders in the Building* starring Steve Martin; three episodes of *Julia*, a documentary about chef Julia Child; and *Black Mass*, a Johnny Depp film based on the life of Boston mobster Whitey Bulger.

McCaughey bought Flagship, founded in 1981, from its previous owner in 2001,



after selling a waste management fleet business he founded. He got into collecting vintage buses by chance, learning of an Eagle bus for sale in Denver, and then heard of a business acquaintance in Connecticut of seven vintage buses in good condition for sale.

"I bought three of the buses and he closed on the other four," said McCaughey, who said getting into the film business was just as fortuitous. "It's a small industry, and as they say: Once you know a guy, it just grows from there."

McCaughey advises operators interested in featuring equipment in films to check if their state has an official Film Office with a film production resources department. He noted his close proximity to Massachusetts and added that the state's highly competitive package of tax breaks is the reason it is a popular place for filmmakers today.

Even with all those high-profile sets and film credits, McCaughey's showstopper moment is one closest to home. "Last year, I started going to car show cruise nights. I pull up in my 1958 GMC 5106 and it brought the house down," he laughs. "The one thing about the film business is that it pays for the upkeep of the vintage buses, and I have a lot of fun doing it."

A Trailways member since 2005, Flagship operates a modern, versatile fleet of 18 coaches and specializes in short- or long-distance charter trips, meetings and conventions, school trips and weddings. □



Easily one of the classic members of the Flagship fleet is this "Old Look" transit bus. Built by General Motors in 1958, it is a model TDH5106 and is fully operational. The interior has been maintained so filming can take place inside the bus.

Tom McCaughey purchased Flagship Trailways in 2001 and subsequently added vintage buses to the fleet for the film business. McCaughey was behind the wheel of his Eagle when filming episodes of *Castle Rock* for Hulu. This same bus was in New York early in 2022 for the filming of *Three Women* for Showtime.



Unclaimed Baggage Celebrates 50 Years and Thanks Trailways



Unclaimed Baggage marks its 50th anniversary this year with a road tour city to city to celebrate with customers and hear their stories. The company got started when their 1965 Chevy truck picked up that first load of unclaimed baggage from Trailways in Washington, D.C. Today, most of the orphaned items offered by Unclaimed Baggage come from the airlines.

For more than 85 years, Trailways has helped launch many successful bus businesses. Did you know Trailways helped start Unclaimed Baggage, the nation's only discount retailer of lost luggage items?

Unclaimed Baggage is a thrift store shopper's dream come true. It attracts more than one million tourists annually who shop the 50,000-square-foot store for the weird and wonderful contents of lost luggage. The business got its start with a truckload of luggage left behind at a Trailways depot in Washington, D.C. more than 50 years ago.

"It's amazing to see how even here, in Scottsboro, Alabama, Unclaimed Baggage could grow into an international tourist destination," said Bryan Owens, owner of Unclaimed Baggage and son of the retailer's founder, Hugo Doyle Owens. "It all started with my father's big idea, a borrowed pickup truck and a \$300 loan to go to Washington, D.C. and buy his first load of unclaimed bags from Trailways Bus Line."

Now, Unclaimed Baggage is marking its 50th anniversary with the launch of an online store and a 50-state road tour and traveling pop-up shop. Shoppers can get their picture taken with Hugo, the store's 1965 Chevy truck that picked up the first load of unclaimed bags at Trailways in 1970. The tour runs through August.

Said Sabina Dhmi, Trailways director of accounting and office management, "Great ideas can come from anywhere in travel because we're so focused on customers, and Unclaimed Baggage is proof of that. We couldn't be more pleased to help Unclaimed Baggage celebrate 50 years of making people happy."

Sonni Hood, head of public relations and community involvement for Unclaimed Baggage, said: "With just an ingenious idea and \$300, Mr. Owens made orphaned bags with anonymous possessions into a unique, sustainable business and helped millions of people stretch a dollar over the last 50 years. We are taking our tour city to city to celebrate with our customers and hear their stories. It's been great to stop at Trailways where everything started in 1970."

Learn more about Unclaimed Baggage founder Hugo Doyle Owens (1931-2016) in this tribute video (<https://www.unclaimed-baggage.com/pages/our-history>), where he explains the tremendous success of opening day, knowing a great business was born.

With the majority of bags coming from airlines, the company reports it still has product coming from bus lines and depots. More than 99.5 percent of domestic airline's checked bags are picked up at the carousel. After the airlines conduct an extensive three-month tracing process and travelers are com-

pensated, Unclaimed Baggage purchases the orphaned items from the airlines. □

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My Great Aunt Gertrude Always Cheated

by Dave Millhouser



If regulators mess up, it is often the passengers who pay. In many cases the problem is that the regulators have no experience with the operations they are regulating and hence little or no knowledge of how things work. The more real industry experience the regulators have, the more likely they are to get things right. MAN/NEOPLAN.

DeeDee (“Great Aunt Gertrude” was too much for our toddler brains) often babysat my brothers and I, entertaining us by playing board games. She constantly changed the rules – to make sure we won. She controlled the outcome and, for us, it was always happy. Everyone needs a DeeDee – someone who thinks you are perfect, and is always on your side (even when you are wrong).

Problems can arise when those who control the rules have a less pleasant agenda, and possess the power to change them any time things are not going as they wish.

We are currently in the throes of a seemingly well intended safety campaign by the federal government. They appear to either change the regulations periodically, or allow individual enforcement folk to interpret them as they see fit. Make no mistake, there is an

agenda, otherwise they would not proclaim the number of accidents prevented, or lives saved. How does one tally an accident that did not happen? Why do press releases trumpet the closing of unsafe operators –often including the same miscreants repeatedly? Is it about safety, or making the regulators relevant? (or, to be fair, both?)

It is disturbing when top administrators suggest that we sacrifice profit for more safety.

Safety costs money, and paying for equipment and driver training comes **from** profits. There already is a powerful incentive for most bus companies to operate safely. Mess up and you are out of business, mess up **big** and you may be personally bankrupt and in jail.

Toll booths are demonstrably unsafe, but government needs the revenue. I am not saying tolls are unnecessary; I am just weary of the hypocrisy.

It was a big deal when that administrator did a “ride along” in a truck. I ride airplanes a lot – and would not presume that translates into significant knowledge about how to pilot one, let alone regulate the airline industry.

When a regulator blows it, they **might** be disciplined, or even transferred to another bureaucracy. In the recent past, companies that had just received the highest rating possible were involved in serious accidents (then forced out of business when reinspected). What happened to the functionaries who gave the initial approval? Have we given serious thought to whether what they are measuring has serious impact on safety in real life?

It would be refreshing if there was a significant presence in the regulating agencies of people who have actually participated in the industry they control, who actually earned the profits necessary to operate a safe company. Having hearings and listening to operators at meetings is okay, but in the end, regulators have no stake in the industry surviving or thriving.

One of the worst maritime disasters in history occurred when the steamer *Eastland* capsized at her Chicago dock. A major contributing factor was the (heavy) lifeboats installed on her upper decks, making the ship unstable. They were retrofitted as the result of standards passed in the wake of the *Titanic* disaster three years before. It was not the only cause, but a well intended, but poorly executed, regulation helped kill more than 800 people.

Ever wonder what “denatured” alcohol is? During Prohibition, authorities were frustrated by bootleggers ability to obtain, and resell, industrial alcohol. They cleverly decided that if they forced industrial distillers to add poison to their product, that the public would take notice, and stop trying to drink it. Wanna guess what happened? A well intended (that phrase again) regulation was responsible for killing thousands of the folks it was meant to protect.

Two key points here:

Good intentions are no substitute for competence. The more real industry exposure regulators have, the more likely they are to get it right. Populating agencies with politicians who will eventually move on is not a good solution, nor is filling them with



An interesting case in point is that highway toll booths are notoriously unsafe places. Yet, we do not see a major movement on the part of regulators to remove them. Collecting money may be more important than safety. NBT.

bureaucrats whose primary goal is to justify their continued existence.

No matter how sincere, and well intended, real safety will always be a secondary goal for those folks. These bodies need to include some experienced transportation professionals, not as witnesses, but as participants.

And . . .

Enforcing arbitrary rules for the sake of appearances – looking like we are “doing something,” making sure that **every** company inspected has some measurable (and “fineable”) violation, may accomplish the opposite of what is intended.

Regulatory perfection does not equal safety.

The least safe bus is still less dangerous than the safest automobile. When regulation that has a marginal impact on real world safety drives struggling coach companies out of business, people will be forced into cars, with the congestion, pollution and traffic deaths that accompany that shift. Those deaths will be just as hard to measure as the accidents and deaths “prevented” by the current regulatory blitz.

DeeDee was truly “well intended.” I cherish her memory, but the current regulatory regime is not my Great Aunt Gertrude. □

Everyone needs an Aunt Gertrude who changes the rules during board games to make sure you win. People are always happy to have someone on your side who thinks you are perfect. Unfortunately, such a person is not easy to find. SKITTERPHOTO.



Survival and Prosperity

by Ned Einstein



Part 5: Whining, Yawning and Dying

Maybe these are the three genuine stages of life. They certainly appear to be for the U.S. motorcoach industry.

In parts 1-4 of this series, I identified the greatest opportunity for motorcoach growth in decades (see <https://transalt.com/article/survival-and-prosperity-part-1-magic-corridors/>), followed by describing the major features of the vehicle that could accomplish this feat (<https://transalt.com/article/survival-and-prosperity-part-2-the-magic-coach/>), and finally outlining some innovative operating approaches to maximize ridership and profits when deploying a few (see <https://transalt.com/article/survival-and-prosperity-part-4-service-concepts/>).

A few bus companies have been expanding into medium-distance airline corridors.

At least a handful of operators are listening – unless, of course, they saw these opportunities before I did. Recently a few bus companies have been expanding into medium-distance airline corridors – with traditional coaches not modified to compete with these services, and in my opinion, deploying them in the wrong sector (charter service) – just as Uber has begun doing, at much higher fares with much smaller and bumper vehicles, in the same sector (see <https://www.houstonchronicle.com/news/houston-texas/transportation/article/uber-charter-bus-17287243.php#:~:text=Uber%20launched%20its%20new%20charter,trips%2C%20church%20outings%20and%20more.>)

Mostly, NATIONAL BUS TRADER readers, members of the motorcoach industry and perhaps their information-sharing/lobbying groups are not listening. Unless they are just yawning. I say “perhaps” about the UMA and ABA (both of which I support aggressively). With a relative handful of constituents and a thimbleful of financial resources, they must face off against a monolith airline industry, with its tens of millions

of constituents who choose or (by their naivete) are snookered into taking hundreds of millions of trips every year. They must face down a corrupt bipartisan Congress whose members’ war chests are swollen with funding from this monolith. If the motorcoach industry’s most essential sector – the intercity/scheduled service sector – will not fall into the sea, it will be because a handful of individuals with vision are fighting for this sector’s life. Perhaps some heroic OEM – with vision and antennae – will come to the rescue. Perhaps not.

Soothsaying and Evidence

Watching out for its readers’ backs, NATIONAL BUS TRADER has regularly warned and advised its readers about trends that came to pass while the rank-and-file glazed over with passivity and impotence. In “The Price of Digital Madness” NATIONAL BUS TRADER (August 2001), (see <https://transalt.com/?s=Price+of+Digital+Madness>), I warned readers about squandering 9-1-1 rescue funds on useless technology. Not surprisingly, we did. Eight months later I followed this warning with the solution (see “Man’s Best Friend” at <https://transalt.com/article/mans-best-friend/>). Because of other shameful failures, I have yet to see even a service dog aboard a motorcoach – even while I see plenty on transit buses and subways. No one paid attention to “Reviewing Drivers’ Logs” (see <https://transalt.com/article/reviewing-drivers-logs/>) or nine articles about driver fatigue until we were recently saddled with electronic on-board recorders.

From “The Multipurpose Bus” (see <https://transalt.com/article/the-multipurpose-bus/>) to nine instalments titled, “Buying Tomorrow’s Buses Today” (see <https://transalt.com/article/buying-tomorrows-buses-today-part-1-introduction/> through <https://transalt.com/article/buying-tomorrows-buses-today-part-9-accessibility-and-securement/>), and then a year’s worth of articles titled “Making More Money” (see NATIONAL BUS TRADER, January, 2012 through December 12), I provided visions of countless opportunities for motorcoach profits.

I also authored seven articles about our nation’s interdisciplinary failure to prevent transportation network companies (TNCs) from decimating the taxi industry (see <https://transalt.com/article/bad-regula->

[tions-and-worse-responses-part-1-introduction/](https://transalt.com/article/bad-regulations-and-worse-responses-part-1-introduction/) through <https://transalt.com/article/bad-regulations-and-worse-responses-part-7-conclusions/>). It clearly did. Now, these behemoths who prosper largely by stealing and selling the personal information of their passengers and everyone in their passengers’ social media networks are operating school buses in San Francisco and Los Angeles – although this TNC (ZUM) may not (at least not yet) be engaging in these same criminal shenanigans.

I also authored nine admonitions about driverless vehicles: “Autonomous and Inevitable” (see <https://transalt.com/article/autonomous-and-inevitable-part-1-what-is-to-come-and-what-is-already-here/> through <https://transalt.com/article/autonomous-and-inevitable-part-9-conclusion-the-best-of-both-worlds/>) and another eight articles titled “Drivers v. Robots” (see <https://transalt.com/article/drivers-v-robots-part-1/> through <https://transalt.com/article/drivers-v-robots-part-8-collecting-the-fares-skimming-the-passengers/>) – which will soon eliminate most bus-driving jobs, and millions of truck-driving jobs – even while the same group of oligarchs have eliminated most stores. (Remember stores?) I even outlined useful, lucrative roles motorcoaches could have played in the Heart of Covid (see “What’s in Store for the Post-COVID Era Motorcoach Industry” at <https://transalt.com/article/whats-in-store-for-the-post-covid-era-motorcoach-industry/>).

This current article is the fifth in a series outlining how the motorcoach industry could make a killing from the decline of the airline industry – an industry whose corruption I outlined in great detail in “Expanding the Mode Split Dividing Line, Part 1: Exponential Airline Industry Corruption” (see <https://transalt.com/article/expanding-the-mode-split-dividing-line-part-1-exponential-airline-industry-corruption/>). In the March, 2022 issue of NATIONAL BUS TRADER, I even outlined the features and characteristics of a vehicle that could capture a huge share of our commercial airline business (see <https://transalt.com/article/survival-and-prosperity-part-2-the-magic-coach/>).

Chaos and Soothsaying

My crystal ball is pretty damned accurate – even while it is invisible, as have

As have NATIONAL BUS TRADER's tireless efforts to warn its readers of the multitude of safety and liability pitfalls.

NATIONAL BUS TRADER's tireless efforts to warn its readers of the multitude of safety and liability pitfalls along its vehicles' paths, as well as identifying opportunity after opportunity for survival and prosperity (the theme of this current series).

While we may be alone as predictors, we are not alone as evidence:

As noted above, a TNC (ZUM) recently landed a \$150 million contract to provide school bus service to 6,500 students in San Francisco. On July 1 this same TNC landed a \$400 million contract to provide school bus service to the students of Los Angeles. If these examples are too distant or obscure to catch your attention, the next day *The Dallas Morning News* announced that Uber would begin operating charter service between Dallas and Ft. Worth. Concurrently, an article in an obscure publication titled, Tradingpedia noted that, this last year, fully half the world's flights were cancelled (see <https://www.tradingpedia.com/2022/07/05/google-searches-for-flight-cancelled-skyrocket-in-june-2022-amid-worldwide-airport-chaos/>). Unlike my March, 2022 article and this one, Tradingpedia did not pinpoint the obvious goal behind these cancellations – much less lament about the millions of airline passengers inconvenienced or stranded to bring about this oligarch's dream: The elimination of almost every flight not packed elbow to elbow, full of maskless passengers and, more recently, maskless flight attendants – serving gourmet food (on coast-to-coast flights) like Oreos and Cheetos.

Month after month, commercial airline travel is becoming increasingly corrupt, and increasingly unbearable. Yet the motorcoach industry's opportunities to jump into the void are passing before our lazy eyes and lazy brains like the vapors from long-forgotten sugarplums. Before the next saga of my personal experience (a pair of coast-to-coast flights for which, in fairness, motorcoach service could not reasonably have competed), it would benefit NATIONAL BUS TRADER readers to get yet another broad perspective a year after its preview in the August, 2021 issue of NATIONAL BUS TRADER noted above (see <https://transalt.com/article/expanding->

[the-mode-split-dividing-line-part-1-exponential-airline-industry-corruption/](https://transalt.com/article/expanding-the-mode-split-dividing-line-part-1-exponential-airline-industry-corruption/)).

As noted, my experiences have hardly been unique. I have had the good fortune not to be among the airline industry's worst victims. Admittedly from a news source not disguising its objectives, *RedState Blog* recently ran an article (June 19, 2022) titled "Air Travel in the U.S. Descends Into Chaos" (see https://redstate.com/bobhoge/2022/06/19/un-american-air-travel-in-the-us-descends-into-chaos-n581086?utm_source=rsmorningbriefing&utm_medium=email&utm_campaign=nl&bcid=cbba3cf0c00effd74646643814aafedf). (With effort, someone with an open mind, and not snookered, can find real news at both ends of the political spectrum.) The cover photo of New York's La Guardia Airport – one of my least favorite – almost spoke for itself. Before a third completed years ago, that phase was torn down, and with scores of billions in taxpayers' money, its construction began all over again – shades of Mid-America Airport (30 miles west of St. Louis) – built nearly 50 years ago and finally opened in 1997. (This boondoggle currently has 27 "based aircraft." Last year it provided 245,028 trips – enough to fill more than two large stadiums for one day each, and enough to dwarf the daily patronage of even the world's largest single airport. Otherwise, the *RedState Blog* highlighted a few insightful trends:

More than 10,000 flights had been "cancelled" in the past week alone.

- More than 10,000 flights had been "cancelled" in the past week alone.

- As I had noted in past articles, the most common excuse was "weather" and "staffing shortages" (pilots, crew and air traffic control).

Tales for the Choiceless

These excuses are, of course, hogwash (readers must excuse my use of such soft language). The real truth is that commercial airlines are not required to operate with spares. Worse, they "cancel" all or most of their less-than-elbow-to-elbow flights with impunity. This allows them to operate an even smaller, more-crowded fleet. (Consistent with the *RedState Blog's* politics, this worldwide trend was actually blamed on the Biden Administration's requirements for airline staff to be vaccinated – never mind the bulk of the globe which The Biden Administration made no effort to vaccinate.

Seasoned traveler as I am, with a memory of half-filled flights not so long ago, and despite knowing the key to selecting a seat next to one that would least likely be occupied, I was forced onto a delayed Delta flight (about which I was notified at the last minute) only three weeks ago.

In this same news source, USDOT Secretary Buttigieg's solution to "punish the airlines" was mocked. One should expect such a response in a country where our former President coordinated a re-enactment of the War of 1812 encapsulated in our national anthem – although the more-current version led only to five crummy deaths and a few broken windows. Nonetheless, Pete Buttigieg notwithstanding, the airline industry's corruption continues unabated. Otherwise, with tactics that exponentially increase profits, it would seem that airlines could actually afford to pay their crews a tad more.

Obviously, nothing is quite this simple. Particularly this past year, we have witnessed a rebellion by low-paid employees, countered by an increased frenzy to eliminate any and all benefits, and turn America into "The 1099 Country." As the costs of supporting this nation's struggling, corrupt and grossly-inefficient transportation operations are increasingly shifted to individuals like pilots and other travel personnel (lest higher fares empty out a few more seats, and risk making the spiral more noticeable), one should understand this ruse of a personnel shortage. Personally, I suspect that many airline workers are decently paid (all things considered) and thoroughly vaccinated, if only out of legitimate personal concerns, given their work environment. They are certainly better off than the majority of the world's population, many of whom are fortunate to sleep on a mat next to their manually-pedaled sewing machines.

The personal tale of travel horrors experienced by the writer of the *RedState Blog* article is worse than most of mine. My tale is designed to focus on corruption and inconvenience that motorcoach operators can compete with – in many cases, almost effortlessly. (I would recommend the reader first skim through the overview of my first travelog last year [see <https://transalt.com/article/survival-and-prosperity-part-1-magic-corridors/>])

Oligopolies and Impunity

The sample size of my airline travel horrors cannot support any notion that Delta Airlines is any worse than those of its competitors (although my personal experiences suggest that Southwest Airlines is a dramatic exception). Of course, I can support every last detail of my recent experience on this

trip. (For readers unfamiliar with my career, I examine, organize and opine on evidence for a living.) Otherwise, while the mathematical symbol “delta” signifies “difference,” the experiences of Delta’s passengers do not appear to make the slightest difference to Delta executives:

- After 45 minutes of agony on the phone (most airline Web sites break down at some point, so I have long ago given up using them other than for orientation), and a \$25 charge for the three minutes a live reservation clerk spent assisting me, I was given an outbound flight from JFK to Seattle/Tacoma Airport scheduled to depart, on June 11, at 6:25 p.m.

- The day of my departure, I awakened to a notice that my flight had been changed to a different 8:48 p.m. flight – which meant I was now transferred to a “red-eye” flight, not favorable for someone having a commitment early the next morning. Regardless, the robot’s message informed me that, “We apologize for the inconvenience.” If robots could laugh, they would. Delta’s executives and shareholders certainly must be, even without sodium pentothal.

- Of course my flight departed at least an hour late, and then spent at least another hour on the runway. So, facing the headwinds one naturally does flying west, I arrived at my hotel at roughly 3:15 a.m. PST – 15 hours after leaving my home two hours away from the departure airport in the time zone of my flight’s origin.

- Luckily I had purchased solid food outside the terminal beforehand – and with a sliver of time left over from the usual security check-in labyrinth and my routine pat-down, I found time to grab a real meal at a restaurant inside the terminal. Yet once in the air, I was surprised to learn that I could have obtained a reasonable meal on board – had I been willing to overpay for it.

- In fairness, to compensate me for my departure nearly five hours behind schedule, I was generously given a pair of ear buds, gratis. Hooey.

- My return flight the next day was at an inconvenient hour since the airlines, collectively, had slimmed down the choices considerably to keep their aircraft full. At least that flight took off less than an hour behind schedule. These things combined, plus my two-hour commute home from my arrival at JFK (and a 45-minute wait in a taxi-line – hardly Delta’s fault, but a routine part of the commercial airline travel experience), I arrived home at 3:15 a.m. EST. As it were, the disruptive flight time changes and other inconven-

I did get to use the free air buds.

niences got me sick for four days (starting the night of arrival at my destination).

- With its array of TV shows, movies and extensive entertainment package, I was all set to watch Game 5 of the NBA finals on the return trip. However, as this game was broadcast on ABC, I learned that all the basic TV stations (from which an airline could not derive revenue) were blocked. Instead, I was told I could access the game, on my cellphone, in “airplane mode,” through the airplane’s wifi system. Checking a source for this that did not even cite the length of time for the “package,” I found the cheapest option for doing this was \$39.95. I had no idea to what else (if anything) this fee would entitle me, if this would even work, no way to obtain a refund if it did not, no technical help on board to assist me if it failed, and no way to stop the “pilot” from blocking this station through some other methodology. My flight attendant had initially misinformed me that the pilot had “rebooted” the system twice already, and risked blocking more stations if he had tried to reboot it again. In fairness, for travelers who enjoy being entertained by fairy tales, I had a chance to watch one although I would have preferred watching the game. (I did get to use the free air buds.)

Limited Choices but Better Options

As noted, this was a story about a coast-to-coast flight. An alternative by motorcoach would have taken several more days. So too would have travel by AMTRAK, although my sleeping compartment (and likely a dining car) would have made the trip exponentially more enjoyable (especially as I would have missed the pseudo-security genital-and-buttocks pat down). Otherwise, the airlines enjoy complete impunity for anything and everything they do. As there is no recourse for losing all this time, or the other inconveniences – including the bumps and dips of turbulence. To be fair, roadways have their bumps and dips too – although a pneumatic suspension system tends to lessen their severity, and often make them unnoticeable. Lies and mythology about weather and staffing shortages notwithstanding, what transportation business of any kind is going to not operate a \$100 million vehicle with 300 passengers to shave a few dollars of pay from each of a sextet of onboard workers, a mechanic or two, a minimum-wage cleaning crew and a handful of subcontracted 1099 worker “redcaps?”

These are not the choices a traveler has for a mid-distance flight (once again, see <https://transalt.com/article/survival-and-prosperity-part-1-magic-corridors/> and <https://transalt.com/article/survival-and-prosperity-part-2-the-magic-coach/>). Or hark back to the days of Auld America, where worldwide travel was as challenging as a few hours on the couch (see “The Nature of Modern Travel” in NATIONAL BUS TRADER, September, 2019, at <https://transalt.com/article/drivers-v-robots-part-2-the-nature-of-modern-travel/>).

The only sensible conclusion one can and should draw from this synthesis of personal and institutional experiences and abuses is that an industry that cannot compete against the unfettered treachery and fraud of commercial airlines on a 250- to 750-mile trip does not deserve to exist or survive. Plain and simple: If you cannot outperform this swamp of merde at the marketing and operating levels, you do not deserve to make a living from it. As motorcoach service fades to a skeleton of its former self (see U.S. taxicab industry, and more recently the U.S. school bus industry), it will do so without a dollop of sympathy from this writer.

Instead of experiencing the horrors enumerated above, a mid-distance motorcoach passenger could involve or include:

- Travel from city center to city center, with no taxi or other feeder service, no small-city-sized parking labyrinth.

- Gourmet food from the departure city’s finest restaurants nuked to near freshness (or the fast food of your choice whose reheating could not possibly be noted by one’s tastebuds).

- The beverage of your choice, on or off the rocks.

- Fully-reclining seats, with raised leg rests (and noise-cancelling shooting range headphones sinking into your puffy pillow and a simple darkness-inducing sleep mask).

- A closet for hanging up your next day’s suit or other non-foldables.

- Two hot (or cold) showers (with unlimited towels and toiletries).

- Two restrooms considerably larger than aircraft depositories.

- Much more legroom (especially in the first-class section), with coach seats comparable to business-class airline seats.

Survival and Prosperity

- A pneumatic suspension system (in place of pockets of turbulence – though perhaps less fun for the kids).

- No endless security lines (or security lines of any type), where one can keep his or her shoes and belt on – although some passengers might miss those intimate pat-downs.

- No need for hour-long phone reservations, indecipherable (and often broken) Web sites – and where available, travel via “walk on.”

- Exponential energy savings and air quality improvements.

Of course, passengers would have this experience at a tiny fraction of the cost, and in far less time for almost every middle-distance trip. With some travelers riding in the first-class section, coach fares would likely be the same, or possibly less, than those for a conventional motorcoach trip of the same length.

As the saying should go, “You can bring a horse to water. But it should not have to travel far to vomit.” If that is all you

accomplish, you truly deserve to become a memory.

The opinions expressed in this article are that of the author and do not necessarily represent the opinions of NATIONAL BUS TRADER, Inc. or its staff and management. □

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The Curious Coachowner

Number 285 of a Series

"The Curious Coachowner" is a question and answer column that provides simple answers to simple questions that are too short to warrant a full article or inclusion in one of our regular columns. We will accept reasonably simple technical or historical questions on commercial coaches or converted coach shells by letter, fax, e-mail or phone. If our staff is unable to answer them, we will call upon our panel of experts. Names and addresses should be submitted with your questions, but we will withhold names from publication on request. We reserve the right to modify questions to make them more useful to our readers.

Q. We are hearing of concerns if we continue to move to more electric buses and cars. Can you explain?

— Several Readers

A. As the movement to electric buses and cars has gained headway, there are concerns being expressed for different reasons. We have heard of three, but there may be more concerns.

Some managers involved with the national power grid are issuing warnings that putting more stress on the national power grid may not be a good idea at this time. Coal-fired and oil power plants have been shut down because of pollution. At the same time we are being told that our grid infrastructure is ancient and needs updating.

In some places we hear warnings that there may be power shortages or brown outs this summer because we have reached the limit on the power currently available. Some countries are reopening coal and oil power plants because of the energy shortage and that may become necessary in the United States if we continue ask the national power grid to do more.

It has been suggested that the current situation should be reviewed and current power and transmission limitations and aging be taken into consideration before pushing ahead with more electric vehicles.

The second concern might be called putting all of your eggs in one basket, a quotation and admonishment that originated with Don Quixote. If all or most of our transportation requires electricity and relies on the national power grid, a serious storm could easily

bring transportation to a halt in large areas. With the current delicate condition of our national power grid, there is also a concern that an enemy or terrorist group could target it to make us helpless.

A major storm or hurricane could knock out significant portions of the national power grid. Until this was repaired, electric vehicles would be stalled and unable to move making the incident that much worse. Areas could go days or even weeks without transportation.

This is at least one of the reasons behind some bus operators moving to hydrogen fuel cell buses. In the event of a disruption of electrical power, the hydrogen fuel cell buses would be able to operate longer without the electric power grid than battery buses, particularly if a multi-day supply of hydrogen were on hand.

The third concern revolves around the next Carrington Event. For those who do not know, what has come to be called a Carrington Event is a combination of sunspots and solar flares that interfere with the earth's magnetic field and produce strong electromagnetic fluctuations that can knock out electric transmission lines and electronic devices. I will try to include an article in this issue that provides more information on Carrington Events.

Some good news is that Carrington Events do not last long – typically two or three days at the most. The Carrington Event in 1859 lasted about five days because it really was two events back to back. More good news is the Carrington Events vary in magnitude. Minor ones may do little more than cause static in radio transmissions and maybe some bright lights in the night sky.

Scientists tend to agree that the last major Carrington Event took place from August 28 to September 2 in 1859, about a year and a half prior to the Civil War. This was still the age of steam. There was very little in the way of electricity and no electronics at this time.

The most obvious problems in 1859 were with telegraph systems. Telegraph poles threw sparks and some caused fires. Some telegraph equipment failed to work while other equipment gave operators electrical shocks. All around the globe were reports of colorful aurora lights in the sky.

A similar event today would be devastating because of our use of electric power and electronics. A major Carrington Event would essentially shut down transportation and communication. The national power grid would cease to function along with computers, the Internet and GPS. This would make battery-powered vehicles useless, effectively ground airplanes and probably impact any vehicle with a computer chip. Worse yet, the lack of power would mean that many homes would be without lights, heat, water and air conditioning.

The big question is not if but when the next Carrington Event will arrive. We came close to finding out in 2012 when a major solar storm came our way. It passed through the earth's orbit but missed us by nine days. We may not be so lucky the next time. While it takes time for a solar storm to get to the earth from the sun, the experts say that we may only have a few days to prepare. It might be rewarding to ask our elected officials what plans they have to deal with the next Carrington Event.

Q. Why is there a bridge for wildlife across a highway in California?

— Western Bus Operator

A. Modern roads have effectively cut wildlife areas into smaller pieces. This not only limits breeding possibilities but also ends up killing wildlife that tries to cross the busy highways.

One obvious location with this problem is in the Santa Monica Mountains, not far from Los Angeles. Here, the 10-lane California highway 101 became a barrier between two parts of the Santa Monica Mountains.

For nearly a decade, conservation leaders have been working on a project to bridge this gap for wildlife. The resulting bridge will be 210 feet long and 165 feet wide. It will be covered with plants and trees native to the local area and have sound walls to deaden the traffic noise. As such it will allow big cats, coyotes, deer, lizards, snakes and other creatures to cross between the previously separated sections.

About 60 percent of the price tag for the bridge will be covered by private donations.

Answers not credited to other individuals are provided by Larry Plachno. □

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Photos should be sent to NATIONAL BUS TRADER, 9698 West Judson Road, Polo, Illinois 61064. Please indicate if you would like your picture returned. Picture usage is dependent on the quality of the photo and space available.



Battery-electric coaches are increasingly in the news lately. This battery-electric MCI J4500 was recently used on a pilot program on a route between Los Angeles and San Diego with FlixBus. MCI has also run a battery-electric coach across the United States using public charging stations.

Europe is also moving strongly to electric buses. Here, a new Irizar battery-electric bus was photographed in front of the historic Palace Hotel in Madrid, Spain. With their new order for 90 Irizar buses, Madrid will have a total of 175 zero-emission Irizar buses in its fleet.





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- Vol. VI, No. 7 — June, 1983
- Vol. VI, No. 9 — August, 1983
- Vol. VI, No. 10 — September, 1983
- Vol. VI, No. 11 — October, 1983
- Vol. VI, No. 12 — November, 1983
- Vol. VII, No. 5 — April, 1984
- Vol. VII, No. 9 — August, 1984
- Vol. VII, No. 10 — September, 1984
- Vol. VII, No. 11 — October, 1984
- Vol. VII, No. 12 — November, 1984
- Vol. VIII, No. 2 — January, 1985
- Vol. VIII, No. 4 — March, 1985
- Vol. VIII, No. 6 — May, 1985
- Vol. VIII, No. 7 — June, 1985
- Vol. VIII, No. 8 — July, 1985
- Vol. VIII, No. 10 — September, 1985
- Vol. VIII, No. 12 — November, 1985
- Vol. IX, No. 5 — April, 1986
- Vol. IX, No. 6 — May, 1986
- Vol. IX, No. 8 — July, 1986
- Vol. IX, No. 9 — August, 1986
- Vol. IX, No. 10 — September, 1986
- Vol. IX, No. 12 — November, 1986
- Vol. X, No. 2 — January, 1987
- Vol. X, No. 4 — March, 1987
- Vol. X, No. 5 — April, 1987
- Vol. X, No. 6 — May, 1987
- Vol. X, No. 9 — August, 1987
- Vol. X, No. 10 — September, 1987
- Vol. X, No. 11 — October, 1987
- Vol. X, No. 12 — November, 1987
- Vol. XI, No. 2 — January, 1988
- Vol. XI, No. 3 — February, 1988
- Vol. XI, No. 4 — March, 1988
- Vol. XI, No. 5 — April, 1988
- Vol. XI, No. 6 — May, 1988
- Vol. XI, No. 11 — October, 1988
- Vol. XI, No. 12 — November, 1988
- Vol. XII, No. 2 — January, 1989
- Vol. XII, No. 3 — February, 1989
- Vol. XII, No. 4 — March, 1989
- Vol. XII, No. 5 — April, 1989
- Vol. XII, No. 6 — May, 1989
- Vol. XII, No. 7 — June, 1989
- Vol. XII, No. 10 — September, 1989
- Vol. XII, No. 11 — October, 1989
- Vol. XIII, No. 2 — January, 1990
- Vol. XIII, No. 4 — March, 1990
- Vol. XIII, No. 6 — May, 1990
- Vol. XIII, No. 5 — April, 1990
- Vol. XIII, No. 7 — June, 1990
- Vol. XIII, No. 8 — July, 1990
- Vol. XIII, No. 10 — September, 1990

- Vol. XIV, No. 2 — January, 1991
- Vol. XIV, No. 4 — March, 1991
- Vol. XIV, No. 7 — June, 1991
- Vol. XIV, No. 10 — September, 1991
- Vol. XIV, No. 11 — October, 1991
- Vol. XIV, No. 12 — November, 1991
- Vol. XV, No. 2 — January, 1992
- Vol. XV, No. 3 — February, 1992
- Vol. XV, No. 4 — March, 1992
- Vol. XV, No. 6 — May, 1992
- Vol. XV, No. 7 — June, 1992
- Vol. XV, No. 8 — July, 1992
- Vol. XV, No. 9 — August, 1992
- Vol. XV, No. 10 — September, 1992
- Vol. XVI, No. 7 — June, 1993
- Vol. XVI, No. 11 — October, 1993
- Vol. XVI, No. 12 — November, 1993
- Vol. XVII, No. 2 — January, 1994
- Vol. XVII, No. 3 — February, 1994
- Vol. XVII, No. 4 — March, 1994
- Vol. XVII, No. 6 — May, 1994
- Vol. XVII, No. 7 — June, 1994
- Vol. XVII, No. 10 — September, 1994
- Vol. XVII, No. 11 — October, 1994
- Vol. XVII, No. 12 — November, 1994
- Vol. XVIII, No. 2 — January, 1995
- Vol. XVIII, No. 3 — February, 1995
- Vol. XVIII, No. 4 — March, 1995
- Vol. XVIII, No. 6 — May, 1995
- Vol. XVIII, No. 7 — June, 1995
- Vol. XVIII, No. 8 — July, 1995
- Vol. XIX, No. 2 — January, 1996
- Vol. XIX, No. 3 — February, 1996
- Vol. XIX, No. 4 — March, 1996
- Vol. XIX, No. 8 — July, 1996
- Vol. XIX, No. 11 — October, 1996
- Vol. XIX, No. 12 — November, 1996
- Vol. XX, No. 2 — January, 1997
- Vol. XX, No. 5 — April, 1997
- Vol. XX, No. 6 — May, 1997
- Vol. XX, No. 6 — May, 1997
- Vol. XX, No. 7 — June, 1997
- Vol. XX, No. 8 — July, 1997
- Vol. XX, No. 9 — August, 1997
- Vol. XX, No. 10 — September, 1997
- Vol. XX, No. 12 — November, 1997
- Vol. XXI, No. 2 — January, 1998
- Vol. XXI, No. 3 — February, 1998
- Vol. XXI, No. 5 — April, 1998
- Vol. XXI, No. 7 — June, 1998
- Vol. XXI, No. 8 — July, 1998
- Vol. XXI, No. 9 — August, 1998
- Vol. XXI, No. 10 — September, 1998
- Vol. XXI, No. 11 — October, 1998
- Vol. XXI, No. 12 — November, 1998
- Vol. XXII, No. 2 — January, 1999
- Vol. XXII, No. 4 — March, 1999
- Vol. XXII, No. 5 — April, 1999
- Vol. XXII, No. 6 — May, 1999
- Vol. XXII, No. 7 — June, 1999
- Vol. XXII, No. 8 — July, 1999
- Vol. XXII, No. 9 — August, 1999
- Vol. XXII, No. 10 — September, 1999
- Vol. XXII, No. 11 — October, 1999
- Vol. XXII, No. 12 — November, 1999
- Vol. XXIII, No. 2 — January, 2000
- Vol. XXIII, No. 3 — February, 2000
- Vol. XXIII, No. 4 — March, 2000
- Vol. XXIII, No. 5 — April, 2000
- Vol. XXIII, No. 6 — May, 2000
- Vol. XXIII, No. 7 — June, 2000
- Vol. XXIII, No. 8 — July, 2000
- Vol. XXIII, No. 9 — August, 2000
- Vol. XXIII, No. 10 — September, 2000
- Vol. XXIII, No. 11 — October, 2000
- Vol. XXIII, No. 12 — November, 2000
- Vol. XXIV, No. 3 — February, 2001
- Vol. XXIV, No. 4 — March, 2001
- Vol. XXIV, No. 5 — April, 2001
- Vol. XXIV, No. 6 — May, 2001
- Vol. XXIV, No. 7 — June, 2001
- Vol. XXIV, No. 9 — August, 2001
- Vol. XXIV, No. 10 — September, 2001
- Vol. XXIV, No. 11 — October, 2001
- Vol. XXIV, No. 12 — November, 2001
- Vol. XXV, No. 2 — January, 2002
- Vol. XXV, No. 3 — February, 2002
- Vol. XXV, No. 4 — March, 2002
- Vol. XXV, No. 5 — April, 2002
- Vol. XXV, No. 6 — May, 2002
- Vol. XXV, No. 8 — July, 2002
- Vol. XXV, No. 9 — August, 2002
- Vol. XXV, No. 11 — October, 2002
- Vol. XXVI, No. 4 — March, 2003
- Vol. XXVI, No. 6 — May, 2003
- Vol. XXVI, No. 7 — June, 2003
- Vol. XXVI, No. 8 — July, 2003
- Vol. XXVI, No. 9 — August, 2003
- Vol. XXVI, No. 10 — September, 2003

- Vol. XXVI, No. 11 — October, 2003
- Vol. XXVI, No. 12 — November, 2003
- Vol. XXVII, No. 2 — January, 2004
- Vol. XXVII, No. 3 — February, 2004
- Vol. XXVII, No. 4 — March, 2004
- Vol. XXVII, No. 5 — April, 2004
- Vol. XXVII, No. 8 — July, 2004
- Vol. XXVII, No. 9 — August, 2004
- Vol. XXVII, No. 10 — September, 2004
- Vol. XXVII, No. 11 — October, 2004
- Vol. XXVII, No. 12 — November, 2004
- Vol. XXVIII, No. 2 — January, 2005
- Vol. XXVIII, No. 3 — February, 2005
- Vol. XXVIII, No. 4 — March, 2005
- Vol. XXVIII, No. 5 — April, 2005
- Vol. XXVIII, No. 6 — May, 2005
- Vol. XXVIII, No. 7 — June, 2005
- Vol. XXVIII, No. 9 — August, 2005
- Vol. XXVIII, No. 10 — September, 2005
- Vol. XXVIII, No. 11 — October, 2005
- Vol. XXVIII, No. 12 — November, 2005
- Vol. XXIV, No. 2 — January, 2006
- Vol. XXIV, No. 3 — February, 2006
- Vol. XXIV, No. 4 — March, 2006
- Vol. XXIV, No. 5 — April, 2006
- Vol. XXIV, No. 6 — May, 2006
- Vol. XXIV, No. 7 — June, 2006
- Vol. XXIV, No. 8 — July, 2006
- Vol. XXIV, No. 9 — August, 2006
- Vol. XXIV, No. 10 — September, 2006
- Vol. XXIV, No. 11 — October, 2006
- Vol. XXIV, No. 12 — November, 2006
- Vol. XXX, No. 1 — December, 2006
- Vol. XXX, No. 2 — January, 2007
- Vol. XXX, No. 3 — February, 2007
- Vol. XXX, No. 4 — March, 2007
- Vol. XXX, No. 5 — April, 2007
- Vol. XXX, No. 6 — May, 2007
- Vol. XXX, No. 7 — June, 2007
- Vol. XXX, No. 8 — July, 2007
- Vol. XXX, No. 9 — August, 2007
- Vol. XXX, No. 10 — September, 2007
- Vol. XXX, No. 11 — October, 2007
- Vol. XXX, No. 12 — November, 2007
- Vol. XXXI, No. 1 — December, 2007
- Vol. XXXI, No. 2 — January, 2008
- Vol. XXXI, No. 3 — February, 2008
- Vol. XXXI, No. 4 — March, 2008
- Vol. XXXI, No. 5 — April, 2008
- Vol. XXXI, No. 6 — May, 2008
- Vol. XXXI, No. 7 — June, 2008
- Vol. XXXI, No. 8 — July, 2008
- Vol. XXXI, No. 9 — August, 2008
- Vol. XXXI, No. 10 — September, 2008
- Vol. XXXI, No. 11 — October, 2008
- Vol. XXXI, No. 12 — November, 2008
- Vol. XXXII, No. 1 — December, 2008
- Vol. XXXII, No. 2 — January, 2009
- Vol. XXXII, No. 3 — February, 2009
- Vol. XXXII, No. 4 — March, 2009
- Vol. XXXII, No. 5 — April, 2009
- Vol. XXXII, No. 6 — May, 2009
- Vol. XXXII, No. 7 — June, 2009
- Vol. XXXII, No. 8 — July, 2009
- Vol. XXXII, No. 9 — August, 2009
- Vol. XXXII, No. 10 — September, 2009
- Vol. XXXII, No. 11 — October, 2009
- Vol. XXXII, No. 12 — November, 2009
- Vol. XXXIII, No. 1 — December, 2009
- Vol. XXXIII, No. 2 — January, 2010
- Vol. XXXIII, No. 3 — February, 2010
- Vol. XXXIII, No. 4 — March, 2010
- Vol. XXXIII, No. 5 — April, 2010
- Vol. XXXIII, No. 6 — May, 2010
- Vol. XXXIII, No. 7 — June, 2010
- Vol. XXXIII, No. 8 — July, 2010
- Vol. XXXIII, No. 9 — August, 2010
- Vol. XXXIII, No. 10 — September, 2010
- Vol. XXXIII, No. 11 — October, 2010
- Vol. XXXIII, No. 12 — November, 2010
- Vol. XXXIV, No. 1 — December, 2010
- Vol. XXXIV, No. 2 — January, 2011
- Vol. XXXIV, No. 3 — February, 2011
- Vol. XXXIV, No. 4 — March, 2011
- Vol. XXXIV, No. 5 — April, 2011
- Vol. XXXIV, No. 6 — May, 2011
- Vol. XXXIV, No. 7 — June, 2011
- Vol. XXXIV, No. 8 — July, 2011
- Vol. XXXIV, No. 9 — August, 2011
- Vol. XXXIV, No. 10 — September, 2011
- Vol. XXXIV, No. 11 — October, 2011
- Vol. XXXIV, No. 12 — November, 2011
- Vol. XXXV, No. 1 — December, 2011
- Vol. XXXV, No. 2 — January, 2012
- Vol. XXXV, No. 3 — February, 2012
- Vol. XXXV, No. 4 — March, 2012
- Vol. XXXV, No. 5 — April, 2012
- Vol. XXXV, No. 6 — May, 2012
- Vol. XXXV, No. 7 — June, 2012
- Vol. XXXV, No. 8 — July, 2012
- Vol. XXXV, No. 9 — August, 2012

- Vol. XXXV, No. 10 September, 2012
- Vol. XXXV, No. 11 October, 2012
- Vol. XXXV, No. 12 November, 2012
- Vol. XXXVI, No. 1 December, 2012
- Vol. XXXVI, No. 2 January, 2013
- Vol. XXXVI, No. 3 February, 2013
- Vol. XXXVI, No. 4 March, 2013
- Vol. XXXVI, No. 5 April, 2013
- Vol. XXXVI, No. 6 May, 2013
- Vol. XXXVI, No. 7 June, 2013
- Vol. XXXVI, No. 8 July, 2013
- Vol. XXXVI, No. 9 August, 2013
- Vol. XXXVI, No. 10 September, 2013
- Vol. XXXVI, No. 11 October, 2013
- Vol. XXXVI, No. 12 November, 2013
- Vol. XXXVII, No. 1 December, 2013
- Vol. XXXVII, No. 2 January, 2014
- Vol. XXXVII, No. 3 February, 2014
- Vol. XXXVII, No. 4 March, 2014
- Vol. XXXVII, No. 5 April, 2014
- Vol. XXXVII, No. 6 May, 2014
- Vol. XXXVII, No. 7 June, 2014
- Vol. XXXVII, No. 8 July, 2014
- Vol. XXXVII, No. 9 August, 2014
- Vol. XXXVII, No. 10 September, 2014
- Vol. XXXVII, No. 11 October, 2014
- Vol. XXXVII, No. 12 November, 2014
- Vol. XXXVIII, No. 1 December, 2014
- Vol. XXXVIII, No. 2 January, 2015
- Vol. XXXVIII, No. 3 February, 2015
- Vol. XXXVIII, No. 4 March, 2015
- Vol. XXXVIII, No. 5 April, 2015
- Vol. XXXVIII, No. 6 May, 2015
- Vol. XXXVIII, No. 7 June, 2015
- Vol. XXXVIII, No. 8 July, 2015
- Vol. XXXVIII, No. 9 August, 2015
- Vol. XXXVIII, No. 10 September, 2015
- Vol. XXXVIII, No. 11 October, 2015
- Vol. XXXVIII, No. 12 November, 2015
- Vol. XXXIX, No. 1 December, 2015
- Vol. XXXIX, No. 2 January, 2016
- Vol. XXXIX, No. 3 February, 2016
- Vol. XXXIX, No. 4 March, 2016
- Vol. XXXIX, No. 5 April, 2016
- Vol. XXXIX, No. 6 May, 2016
- Vol. XXXIX, No. 7 June, 2016
- Vol. XXXIX, No. 8 July, 2016
- Vol. XXXIX, No. 9 August, 2016
- Vol. XXXIX, No. 10 September, 2016
- Vol. XXXIX, No. 11 October, 2016
- Vol. XXXIX, No. 12 November, 2016
- Vol. XL, No. 1 December, 2016
- Vol. XL, No. 2 January, 2017
- Vol. XL, No. 3 February, 2017
- Vol. XL, No. 4 March, 2017
- Vol. XXXX, No. 5 April, 2017
- Vol. XXXX, No. 6 May, 2017
 - UMA Motorcoach Expo in St. Louis
 - The Prize-Winning Aerocoach at the Museum of Bus Transportation
 - Rochester City Lines Still Making, Preserving and Celebrating History
- Vol. XXXX, No. 7 June, 2017
 - Industry History From UMA Shows – Installment I
 - Extended Service Protection on Your Bus Fleet
 - Bus History on a Wall
- Vol. XXXX, No. 8 July, 2017
 - Vicinity – A Mid-Size Bus Success Story
 - Prevost Conversion Shells for All Types of Coaches
 - The Bus Accident in Red Lion, Delaware
- Vol. XXXX, No. 9 August, 2017
 - “J” is for Jackpot with the 2018 J4500
 - Industry History from UMA Shows – Installment II
 - Book Review
- Vol. XXXX, No. 10 September, 2017
 - Propane Continues to be Clean and Economical
 - H&L Charter – The Best Comes in Small Packages
 - Industry History from UMA Shows – Installment III
- Vol. XXXX, No. 11 October, 2017
 - ABC & Van Hool Celebrate 30 Years
 - Taking a Venture in Norfolk
 - The Five “No’s” You Must Overcome to Sell Your Bus Business
- Vol. XXXX, No. 12 November, 2017
 - MCI Reliability Rally 2017
 - BusCon 2017 in Indianapolis
 - Exit Planning Becoming More Complicated for Family-Owned Bus Businesses
- Vol. XXXXI, No. 1 December, 2017
 - Complete Coach Works and the Carson Heritage
 - The Busboys Vintage Bus Rally in Evansville, Indiana
 - Virginia’s Commonwealth Coach and Trolley Museum Ravaged by Fire
 - Re-Energizing the North American Diecast Model Bus Scene
- Vol. XXXXI, No. 2 January, 2018
 - Prevost Again Moves Ahead in Support, Service and Parts
 - New 2018 J4500 Highlights Busy Season for MCI
 - Common Rail Technology and the GHG17 Volvo Engine
- Vol. XXXXI, No. 3 February, 2018
 - Walking the Irizar Assembly Line in Ormaiztegui
 - Busworld 2017 in Belgium
- Vol. XXXXI, No. 4 March, 2018
 - UMA Motorcoach Expo 2018i
 - Van Hool to Build Buses in Eastern Tennessee
 - The New MCI D45 CRT LE
- Vol. XXXXI, No. 5 April, 2018
 - Charging Ahead with Electric Buses
 - Holiday Tours Puts Customers First
 - How Chicago’s “Party Bus” Ordinance is Affecting Bus Tourism
- Vol. XXXXI, No. 6 May, 2018
 - The CHTC HT45 and HT35 Coaches
 - The Pacific Bus Museum – From Hobby to Formal Museum
 - Twenty Tips on Hiring Bus Drivers
 - Van Hool Builds Bus Factory in Morristown, Tennessee
- Vol. XXXXI, No. 7 June, 2018
 - MCI Academy Wins Fans Across Industry
 - Where are the Buses Built? #1
 - The Campaign Bus for the President of the Philippines
 - The Penn Highway Transit Company
- Vol. XXXXI, No. 8 July, 2018
 - Farber Continues Custom Coach Traditions
 - Prevost’s New Flat Floor Slide-Outs
 - Liberty Coach Busch Bus
- Vol. XXXXI, No. 9 August, 2018
 - ZF Components for Electric Buses
 - Museum of Bus Transportation Spring Fling Open House Success
 - “Friends” of the NJ Heritage Center Takes Eight Vintage Coaches to the 2018 MOBT Spring Fling
- Vol. XXXXI, No. 10 September, 2018
 - Van Hool’s CX35 – Small in Size, Big in Quality
 - Diecast Model Buses Impress in a Big Way
 - Master’s Transportation – Where to go to increase your fleet quickly or temporarily
- Vol. XXXXI, No. 11 October, 2018
 - ZF Technology Day in Friedrichshafen
 - MCI’s 2018 Reliability Rally
 - How Will Autonomous Cars Impact the Bus Industry?
- Vol. XXXXI, No. 12 November, 2018
 - Peter Pan Celebrates 85 Years on the Road
 - Clean Up Your Fleet with a Bitumex Wash-Bot
- Vol. XXXXII, No. 1 December, 2018
 - Prevost Unveils New Features and New Possibility on the Volvo 9700 at UMA Expo
 - MCI’s New J3500 – Small in Size, Big in Features
 - The e.GO Mover – Filling a Gap in Transportation with ZF Technology
 - Giving Buses a Second Life at Complete Coach Works
- Vol. XXXXII, No. 2 January, 2019
 - BusCon 2018 in Indianapolis
 - Panorama Tours Keeps Things in the Family
 - How Will Demand or Congestion Toll Pricing Impact Bus Operations?
- Vol. XXXXII, No. 3 February, 2019
 - Test Driving the New Electric MCI J4500e CHARGE
 - Stagecoach Group Sells Coach USA and Coach Canada
 - The Story of the Australian Scenicruiiser
- Vol. XXXXII, No. 4 March, 2019
 - UMA 2019 Motorcoach Expo in Fort Lauderdale
 - Angel Tours Celebrates 20 Years
 - The Saga of #5496, a 1937 Yellow Coach Model 733
- Vol. XXXXII, No. 5 April, 2019
 - Buses at the 2019 ABA Marketplace in Louisville
 - Are Pre-Owned Coach Sales Declining?
 - The Six Levels of Autonomous Vehicles
- Vol. XXXXII, No. 6 May, 2019
 - Temsa North America Inc. – Temsa’s Increased Support for the American Market
 - MCI Launches Motorcoach Technician Apprenticeship Program
 - 2019 Spring Fling Announced
- Vol. XXXXII, No. 7 June, 2019
 - Looking Beyond the Driver Shortage to Demography and the Global Economy
 - Are the Reasons for Coach Seat Belts Changing?
 - The Passengers Left Behind – Take the Accessible Information Test
- Vol. XXXXII, No. 8 July, 2019
 - Prevost Motorhome Expo
 - Featherlite Luxury Coaches
 - Emerald Luxury Coaches Unveils First H3-45 Conversions
- Ten Things to Consider When Choosing a Luxury RV
- Vol. XXXXII, No. 9 August, 2019
 - NFI Group Acquires Alexander Dennis
 - Getting the Glow – Take a look inside the “New Look” of Liberty
 - Book Review – Chicago Motor Coach
- Vol. XXXXII, No. 10 September, 2019
 - The 2019 Spring Fling in Hershey
 - Congestion Pricing May Affect Bus Operators
 - In the Beginning – The Bus Industry Prior to Regulation in 1935
- Vol. XXXXII, No. 11 October, 2019
 - Proterra Launches Proterra Powered™ Vehicle Electrification Solutions for Commercial Fleets
 - Bendix Tech Tips: Avoiding the “Gotchas”
 - The “Shorty” Flixibles of Pikes Peak
- Vol. XXXXII, No. 12 November, 2019
 - 30 Years of Foxy Travel & FTI Coach
 - Fleet Graphics is an Art at ABC Companies
 - MCI debuts 2020 model line-up with a SNEAK PREVIEW of the battery-electric D45 CRTe LE CHARGE at Bay Area Reliability Symposium on October 1
- Vol. XXXXIII, No. 1 December, 2019
 - Temsa’s Redesigned TS 30
 - BusCon 2019 in Indianapolis
 - Hammond Transportation
- Vol. XXXXIII, No. 2 January, 2020
 - Anchor Transportation – 30 Years and Counting in a Growing Nashville
 - David Thomas Tours and Their Short Temsa Coaches
 - Museum of Bus Transportation to Merge with Antique Automobile Club of America Museum
- Vol. XXXXIII, No. 3 February, 2020
 - Busworld 2019 in Brussels, Part I
 - Heroes’ Honeymoon
 - Philadelphia to New York Every Half Hour
- Vol. XXXXIII, No. 4 March, 2020
 - Busworld 2019 in Brussels, Part II
 - The Changing Bus Industry
- Vol. XXXXIII, No. 5 April, 2020
 - ABA Marketplace 2020 in Omaha
 - Procedure and Liability After a Collision with an Automated Vehicle
 - Impaired Drivers
- Vol. XXXXIII, No. 6 May, 2020
 - Bringing Back the Bus Industry
 - Bus Industry Suggestions from Shriver Insurance
 - What Can Bus Companies Do To Reduce Insurance Costs During COVID-19?
 - UMA Motorcoach Expo 2020 in Nashville
 - Bus Preservation After the Merger
- Vol. XXXXIII, No. 7 June, 2020
 - Grants, Loans and Programs to Help Transportation Companies Survive COVID-19 Business Disruption
 - Time to Think Tours
 - Motorcoaches Rolling for Awareness
- Vol. XXXXIII, No. 8 July, 2020
 - What the IATR and Transportation Regulators are Doing to Respond to the COVID-19 Pandemic
 - A Tribute to Kirwan Elmers and Custom Coach Corporation
 - RiverLandings Motorcoach Resort, Where True Luxury Reaches New Heights
- Vol. XXXXIII, No. 9 August, 2020
 - The Evolving MCI Product Line
 - The Impact of COVID-19 on the Transportation Ecosystem
 - Marijuana and Drivers
- Vol. XXXXIII, No. 10 September, 2020
 - New Coach Review
 - Seven Simple Steps to Show Your Customers You Are Open for Business
 - Can Bus Operators Change to Survive?
- Vol. XXXXIII, No. 11 October, 2020
 - Getting People Back on the Buses
 - 10 Easy Ways to Update Your Web Site During COVID-19
 - Didn’t See That Coming
 - The Eucharistic Congress in Chicago
- Vol. XXXXIII, No. 12 November, 2020
 - How Temsa Developed Their Programmable Electric Bus
 - Can Bus Companies Get to and Survive in the “New Normal?”
 - Talk’s Cheap – Let’s Play
- Vol. XXXXIV, No. 1 December, 2020
 - Keolis Moves People
 - Are Mergers the Answer?
 - A Lesson from the Sea – Time to Choose a Strategy
 - Now is Not the Time to Skip on Bus Maintenance
 - The Small Business Reorganization Act – A New Option in Bankruptcy

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Advertiser's Index

Archbishop Fulton J. Sheen Foundation	17
Bay Area Electric Railroad	24
Dupree	35
FMCA	35
Heartland Travel Showcase	25
Irizar USA	39
Midwest Bus Corporation	7
Minnesota Transportation Museum	35
Motor Coach Industries	44
Oil Creek & Titusville Railroad	42
Pacific Bus Museum	37
PixelGraphics	24
Prevost	43
Rockhill Trolley Museum	29
Shrine of Our Lady of Good Hope	17
Temsa Global	2
Town of Lexington	29
ZF	9

Down The Road

Coming events of interest to readers of NATIONAL BUS TRADER. Submissions for the department should be directed to the editor. Unless otherwise indicated, events are not open to the general public.

August 24-27, 2022. FMCA's 105th International Convention and RV Expo. Lincoln, Nebraska.

November 13-16, 2022. NTA Travel Exchange. Reno Tahoe, Nevada.

January 12-16, 2023. UMA Motorcoach Expo 2023. Orlando, Florida. For more information view motorcoach-expo.com.

February 2-8, 2023. American Bus Association Marketplace 2023. Detroit, Michigan.

March 15-18, 2023. FMCA's 107th International Convention and RV Expo. Georgia National Fairgrounds and Agricenter, Perry, Georgia.



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Love the way you roll.

We build more than coaches. We build trust.

Our J-Series and D-Series coaches combine stunning design and proven reliability with best-in-class service, parts and training. However you roll, MCI is with you all the way.

