



FOR MORE INFORMATION, PLEASE CONTACT YOUR TEMSA REGIONAL HEAD OF SALES



Randy Angell W & Head of Sales randy.angell@temsa.com 612-940-8219 Tony Mongiovi NE tony.mongiovi@temsa.com 856-325-0094 Tim Guildin SE tim.guildin@temsa.com

Ethan Sprengeler Central Plains ethan.sprengeler@temsa.com 507-491-8164 Ryan Angell MW/NW ryan.angell@temsa.com 612-965-1245 Andy Byars
Southwest
andy.byars@temsa.com
817-247-1819

## National Bus Trader

The Magazine of Bus Equipment for the United States and Canada

#### **STAFF**

Editor & Publisher Larry Plachno

**Business Manager** Nancy Ann Plachno

Typesetting/Page Layout Sherry Mekeel

Production/Design/Web Jake Ron Plaras



**National Bus Trader** 9698 W. Judson Road Polo, Illinois 61064-9015 Phone: (815) 946-2341 Web site: www.busmag.com

Volume XLV

Number 8

July, 2022

#### Features

#### **CONTRIBUTORS**

Safety and Liability Ned Einstein

Dave Millhouser

NATIONAL BUS TRADER (ISSN 0194-939X) is published monthly by National Bus Trader, Inc., 9698 W. Judson Road, Polo, Illinois 61064-9015. Subscriptions, \$30 (in US funds) annually, Canada & International \$35 (in US funds). Printed in U.S.A. Periodicals postage paid in Polo, Illinois 61064 and at additional mailing offices. POSTMASTER: Send address changes to National Bus Trader, 9698 W. Judson Road, Polo, Illinois 61064-9015. Change of Address: Please send

Change of Address: Please send old mailing label (or old address and computer number) as well as new address.

new address.
Advertising: Classified ad rate is
\$30 for first 25 words, 25¢ for each
additional word. Rate includes
Internet access. Name, address, and
phone number are not included in
word count. Display advertising
rates sent on request. Advertising
deadline is the fifteenth day of the
2nd preceding month unless otherwise indicated.
Affiliations and Memberships:

wise indicated.
Affiliations and Memberships:
American Bus Association, The Bus
History Association, Family Motor
Coach Association, International
Bus Collectors, North American
Trackless Trolley Association,
Motor Bus Society, Omnibus Society
of America, Tourist Railway
Association, United Motorcoach
Association.

Association, United Motorcoach Association.

NATIONAL BUS TRADER is THE Magazine of Bus Equipment for the United States and Canada.

The contents of this publication may not be reproduced either in whole or in part without the written consent of the publisher. The name National Bus Trader, the logo incorporating the outline of the United States, and the pricing guide to used buses are trade marks of National Bus Trader, Inc.







The annual Spring Fling at the Hershey bus museum took place on June 3 and 4 with 53 museum buses plus 30 visiting buses on display.

Will the Demographic Crisis Cause More Problems Than the The recent survey from the IRU and numbers from various countries suggest that the increasing shortage of drivers is tied to the Demographic Crisis.

West Point Trailways President Robert Brisman Rejoins Trailways Board (by Pat Plodzeen) ..... Robert Brisman, the third generation to run West Point Trailways, has rejoined the Trailways Board to further the brand with industryleading technology.

Liberty Coach 2022 (by Larry Plachno) .......28 Starting with a used PD4104, Liberty Coach has grown to be a leader in coach conversions and celebrates its 50th anniversary of incorporation in 1972.

Meet Kobussen Trailways' Dave Meyerhofer (by Pat Plodzeen) ...........30 Dave Meyerhofer, a lead mechanic at Kobussen Trailways in Kaukauna, Wisconsin has three wins and seven trophies in eight years of maintenance competition.

Is your business utilizing all possible marketing tools? (by Amy Nixon) ..... A look at various marketing tools that can help your bus business emerge from the pandemic and move ahead to a new era.

#### **Cover Photo**

June 3 and 4 marked the annual Spring Fling event at the bus museum in Hershey, Pennsylvania. In addition to 53 museum buses, another 30 buses braved the price of diesel fuel and drove in for the event. Activities included the presentation of several awards, rides to see the buses at the annex and a flea market. STEFAN ALEO.

#### Departments

Equipment News 4
Regulations and Safety – Dave Millhouser 36
Photographs
Curious Coachowner
Back Issues
Classifieds

Advertiser's Index appears on page 42

#### FlixBus Partners with MCI on Electric Bus Pilot Route

FlixBus, North America's fastest-growing intercity bus service, is celebrating a new sustainability milestone with the debut of its first electric bus pilot program in the Los Angeles metropolitan area that started on May 17, 2022. FlixBus has long made sustainability a key part of its mission to bring low-cost, convenient, eco-friendly transportation for everyone throughout its growing network of 200+ destinations in the U.S. and Canada.

In addition to biogas and hydrogenpowered bus pilot programs in Europe, FlixBus has been a market leader in supporting the development of carbon neutral, fully-electric intercity buses in North America. The company was the first to run an intercity electric bus pilot in 2019 between Sacramento and San Francisco and the first interstate electric bus pilot in U.S. history in 2021 between Seattle, Washington, and Eugene, Oregon. The chief goals of this pilot program are to bring EV service to more passengers and test how bus partners can utilize an EV bus as part of their day-to-day operations for almost two weeks. To date, FlixBus has brought electric bus pilot programs to seven cities on the West Coast.

"Since our entry into the U.S. market in 2018, FlixBus has believed in the potential of the U.S. intercity bus system," said Pierre Gourdain, managing director of FlixBus USA. "With this project, we continue our path of providing millions of people sustainable and affordable mobility and help ensure that intercity buses are central to the green mobility revolution."

FlixBus' local bus partner, Alvand Transportation based in Los Angeles, ran electric bus service in downtown Los Angeles along one of its business bus routes in the U.S. for 11 days starting on May 17, 2022. Alvand partnered with FlixBus in 2018, making them one of the first FlixBus partners in the U.S. and known for their consistent high-quality service and is keenly interested in electrifying their fleet in the near future.

The all-electric coach, J4500 CHARGE™ was provided by Motor Coach Industries (MCI), a zero-emission version of the industry's best-selling J series tour and charter luxury coaches, which leverages EV technology from New Flyer and delivers more than 200 miles of range, while also delivering enhanced safety features.

"Our J4500 CHARGE was made for high performance through unmatched design,

with each detail developed to provide an exceptional passenger experience while supporting zero-emission travel with clean, safe, reliable mobility," said Chris Stoddart, president, NFI North America Bus and Coach, 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<sup>TM</sup>.

#### Lewis Coaches Inc. Adds First Prevost to Their Fleet

New Orleans-based Lewis Coaches Inc. recently took delivery of their first Prevost coach, a new H3-45 to complement their fleet of nine coaches. The family-owned and operated company has been fully committed to providing outstanding charter service with an emphasis on safety since its foundation in 1960.

Lewis Coaches had been looking to grow their fleet to better service their clientele. and a shift in the market provided Prevost with an opportunity to support. As director of operations Braden J. Lewis explained, "We have liked the simple, yet elegant design of Prevost motocoaches for years. We felt that now, more than ever, it was time to do something different. After we learned that our preferred engine would no longer be offered in motorcoaches. Prevost came in and had our local diesel shop certified to work on the Volvo engine in their product. With many shops choosing not to work on motorcoaches, Prevost making sure we have serviceability in our region made the switch a no-brainer."

Prevost shares Lewis Coaches' long-standing focus on safety and providing a world-class passenger experience, so Prevost Regional Sales Manager Trey Hertel worked diligently on a win-win solution that would highlight the benefits of choosing Prevost over the long term. With features including Cloud One seating, 360-degree cameras and panoramic lighting, the H3-45 was a good fit for the lewis Coaches' fleet. Going the extra mile to ensure the availability of local service to keep the coach on the road for years to come clinched the deal.

"We have had a long relationship with Lewis Coaches through the South Central Motorcoach Association, and we know how important local service is to them. They have continued to grow in their market, and we

FlixBus partnered with MCI for an electric bus pilot program on its route between Los Angeles and San Diego from May 17-28, 2022. The all-electric J4500 CHARGE bus left downtown Los Angeles at 9:55 a.m. for San Diego and left Old Town San Diego at 4:30 p.m. for Los Angeles. One intermediate stop was made at La Jolla. FLIXBUS.



wanted to be a part of that growth," explained Hertel. "Building a new relationship with a local service facility makes things easier for Lewis Coaches, and it benefits other Prevost customers in the area."

A dependable charter service provider since 1980, Lewis Coaches has expanded from the school bus service Earl Lewis Sr. founded 20 years prior. The current leadership team now represents the second, third and fourth generations of Lewises to run the company. Family is a value that runs deep throughout the company. In fact, all nine coaches are named in honor of current president Harold Lewis Sr.'s grandchildren: the new H3-45 is now known as Princess Arabella, or Bella for short.

"We've had Bella for about three months now, and we love the attention she gets from our drivers, customers and friends on social media. We love the Cloud One seating, great luggage space and the commanding stance the coach emits. We are excited about this new coach and cannot wait to see what the future holds with Lewis Coaches Inc. and Prevost," Lewis said.

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

#### Oklahoma's EMBARK Transit Unveils New EV

EMBARK Transit unveiled its new batteryelectric Xcelsior CHARGE® and Xcelsior® compressed natural gas transit buses during an official ceremony held in Oklahoma City. The NFI team, including Rex Colorado, regional sales manager, and James Smith, customer program manager, joined the Vehicle Showcase and new RAPID Vehicle Reveal event.



Lewis Coaches Inc. recently acquired its first Prevost coach, an H3-45 model. As with other coaches in the fleet, it was named for one of the grandchildren of current President Harold Lewis Sr and carries the name Princess Arabella or Bella for short. Based in New Orleans, Lewis Coaches was founded in 1960 and currently operates nine coaches. PREVOST.

NFI's zero- and low-emission buses immediately reduce greenhouse gas emissions, adding sustainability to the Oklahoma region.

#### Vicinity Motor Corp. Announces Strategic Partnership with Sustainability Partners

Vicinity Motor Corp., a North American supplier of commercial electric vehicles, recently announced it has entered into a Master Goods and Service Agreement with Sustainability Partners LLC (SP), an ESG-focused company committed to eliminating deferred maintenance infrastructure by enabling sustainability, to utilize its Electric Vehicles as a Service™ (EVaaS) program to finance the conversion of traditional government fleets to Vicinity's electric vehicles.

Sustainability Partners works with government institutions including municipalities, airports, universities and schools, hospitals and water/rail/power districts to convert essential fleet infrastructure into a monthly utility service in a manner that protects institutions, the assets and taxpayers. The EVaaS program replaces unreliable, unsafe and costly fleet infrastructure with modern electrified solutions from Vicinity, robustly engineered with embedded long-term support. SP can pay for 100 percent of the purchase price while concurrently ensuring the vehicles are continually maintained in a state of good repair.

Under the terms of the agreement, SP will engage Vicinity as an independent contractor to purchase its portfolio of elec-

**EMBARK** Transit recently unveiled its NFI battervnew electric Xcelsior CHARGE® and Xcelsior® compressed natural gas transit buses during an official ceremony held in Oklahoma City. EMBARK serves the greater Oklahoma City area with 22 bus routes and two streetcar routes. NFI.



tric vehicles including Vicinity Lightning™ buses, VMC Optimal vehicles and VMC 1200 Class 3 electric trucks for government and corporate fleets utilizing its EVaaS program.

"SPP's month-to-month use-based service is a uniquely structured, OpExoriented alternative to the traditional purchase of government fleets," said William Trainer, founder and chief executive officer of Vicinity Motor Corp. "The program enables institutions and private industry to modernize their fleets while benefitting from high-performance, cost-effective Vicinity electric vehicles. SP is a clear alternative to traditional purchase or public works procurement with financing, bonding, PPP's, leasing, EPCs and Shared Savings arrangements.

"Our wide portfolio of commercial electric vehicles can be used across the vast spectrum of SP customers and fleets. We look forward to helping their sales team share the benefits of our heavy-duty, light-duty and special purpose electric vehicles with their significant customer base," concluded Trainer.

Thomas Cain, CEO and founder of Sustainability Partners, added: "Vicinity products are a great addition to our EVaaS program as our customers increasingly look for electrified options to meet their sustainability and ESG goals. Our customers' electric vehicle needs and priorities continue to evolve, and we believe Vicinity's product line has the diverse and compelling range of EV options they require – all from a widely-respected leader in the expanding EV market."

#### East Troy Railroad Museum Acquires Historic La Crosse Streetcar

Seventy-six years after it last carried passengers, and after a nomadic Wisconsin afterlife that has taken it from La Crosse, to Waukesha, to East Troy and to the Port Washington area, Mississippi Valley Public Service streetcar 56 has returned to East Troy for restoration and operation.

"Very few people even knew this car still existed," said Ryan Jonas, president of the East Troy Railroad Museum. "But one of our volunteers remembered the car and reconnected with the car's most recent owner – a former volunteer who had planned to restore the car in his backyard near Port Washington. Because of the demands of his business, and later his failing health, the restoration never happened."

Car 56 is a 46-seat, 19-ton streetcar manufactured by the St. Louis Car Company in 1916 for the Wisconsin Railway



The latest arrival at the East Troy Railroad Museum is car 56, a streetcar from La Crosse, Wisconsin that was built in 1916. Streetcars were discontinued in 1945 and the car was moved to various locations and survived outside under tarps for the past 20 years. Plans are to restore the car and run it on the East Troy line. EAST TROY RAILROAD MUSEUM.

Light & Power Company, which operated the streetcar systems in La Crosse, Wisconsin and across the Mississippi River in Winona, Minnesota. In 1926 the company changed its name to the Mississippi Valley Public Service Co., which was the name on Car 56 when the streetcars were discontinued in 1945.

The car has been stored outdoors under tarps for the last 20 years, but inspections showed that the car is complete and restorable, with the frame and steel sides solid and in good condition. Today the car is tucked away in one of the East Troy Electric Railroad's storage barns, waiting its turn in the restoration line. Last year the railroad completed restoring North Shore Car 761. This year, the restoration team has already completed restoration of Chicago Elevated Car 4439 and is working on North Shore Merchandise Dispatch Car 228 and South Shore Car 107.

If you would like to make a donation to help with these restoration projects – or to provide support for the East Tory Railroad Museum's operations – you may donate online using a credit car or PayPal at www.easttroyrr.org/donate.html. You may also send a check, made out to the East Troy Railroad Museum, to East Troy Railroad Museum, PO Box 943, East Troy WI 53120.

The East Troy Railroad Museum operates 14-mile, round-trip rides from its historic East Troy depot and museum to Indianhead Park in Mukwonago, with a stop at the popular Elegant Farmer store and deli. Fifty years of riding the rails through southeast Wisconsin's Kettle Moraine countryside is being celebrated. The not-for-profit museum is operated, maintained and managed by more than 130 volunteers dedicated to engaging visitors in the heritage of electric interurban railways and trolley systems through restoration, preservation and operation of historic equipment.

#### NFI Announces Orders from New York, California, Texas and Maryland

NFI recently announced four more orders for New Flyer's battery-electric buses from agencies across America.

Maryland's MDOT Maryland Transit Administration, one of the largest multimodal transit systems in the United States, purchased seven zero-emission Xcelsior CHARGE NGTM transit buses.

Texas' Dallas Fort Worth International Airport, the first and largest carbon-neutral airport in North America and the world, awarded a contract for four Xcelsior CHARGE NG buses, making it DFW's first purchase of NFI transit buses.

New York's CDTA purchased four zeroemission Xcelsior CHARGE® buses, which will help New York reach its goal of transitioning transit fleets to 100 percent renewable energy by 2035.

California's Santa Barbara a Metropolitan Transit District also purchased nine Xcelsior CHARGE buses, becoming the 11th agency in California to purchase New Flyer's EVs.

#### **ABA Foundation Motorcoach Sales Report**

The American Bus Association Foundation (ABAF) recently released the First Quarter 2022 Motorcoach Builders Survey, which is based on surveys of the major motorcoach manufacturers that sell vehicles in the United States and Canada. According to data, motorcoach manufacturers continue to face unprecedented challenges. While new motorcoach sales in the first quarter of 2022 are 11 percent above where they were during the period of 2021, sales are still well below before the onset of COVID-19.

This quarter the participating manufacturers sold 191 new and 109 pre-owned coaches, for a total of 300 motorcoaches. This compares with just 270 during January 2021. The bulk of new coach sales

were made to public entities like transit companies, which accounted for 58 percent of sales. These public entities tended to continue to purchase motorcoaches during the COVID shutdowns, while sales to private companies fell by almost 50 percent to an average of just 152 per quarter following the lockdown.

Overall, the three-month moving average of total coach sales is down by about 30 percent from the last month prior to the COVID pandemic.

NFI recently announced orders from New York, California, Texas and Maryland. Included were seven Xcelsior CHARGE NG™ buses for Maryland's MDOT, four Xcelsior CHARGE NG buses for Dallas Fort Worth International Airport, four Xcelsior CHARGE™ buses for New York's CDTA and nine Xcelsior CHARGE buses for California's Santa Barbara Metropolitan Transit District.

Overall, the three-month moving average of total coach sales is down by about 30 percent from the last month prior to the COVID pandemic.

"The motorcoach industry is still reeling from the effects of the pandemic," said Peter Pantuso, ABA Foundation president. When motorcoaches aren't running, the trickledown effect on suppliers is devastating. As the industry struggles to rebound from the past two years, we are hopeful sales will also improve. However, it could be well into 2024





#### 2000 - 2006 Gillig Buses

30', 35' & 40' Low & High Floor ISD/ISL/Series 50/Cummins M-11 Allison B400R with EMP



MIDWEST BUS CORPORATION, 1940 W. STEWART STREET, OWOSSO, MI 48867

800-627-6627 | dmorrill@midwestbus.com | www.midwestbus.com

and beyond before we see a true comeback for the industry."

The bus industry is the greenest and most affordable transportation sector and was moving more than 600 million passengers annually before the pandemic. As of the beginning of 2022, industry passenger volumes were still down by 62 percent from pre-COVID levels, making it one of the hardest hit parts of the economy.

### ZF Recognized as "Best Brand" for Commercial Vehicle Transmissions

ZF has been recognized for being the "Best Brand – Commercial Vehicle Transmissions." That is the verdict of almost 6,000 readers who voted ZF as a winner in the ETM Awards 2022. Representing manufacturers, fleet operators and professional drivers, the award recognizes that ZF's drive systems offer leading levels of quality efficiency and value.

Sponsored by publisher ETM, the annual readers' poll is widely recognized across the commercial vehicle industry as a strong barometer of a company's image and its product quality. Forming a formidable industry-wide judging panel, the readers of magazines lastauto omnibus, trans aktuell and FERNFAHRER cast a total of more than 5,978 votes across several vehicle and product categories.

Speaking ahead of accepting ZF's award at the ceremony in Berlin on June 1, Winfried Gründler, responsible for Driveline Systems with ZF's Commercial Vehicle Solutions division, said "The remarkable success of ZF's advanced transmission product, powerfully reflects the trust of vehicle manufacturers, fleet operators and drivers alike. This prestigious award is testament to our relentless innovation to develop ever more efficient and robust driveline technology." Once again, ZF owes its latest victory to its innovative Commercial Vehicle Transmission products. With more than half of the vote (51 percent), ZF, retained its best Brand title in the "Commercial Vehicle Transmissions" category.

ZF's multi-award winning TraXon automatic transmission system continued to be a decisive factor in the group's unbroken record at the ETM Awards. The group recently announced that half a million TraXon systems had been manufactured in Friedrichshafen alone since production began there in 2014. With proven durability, performance and fuel-efficiency, TraXon is equipped with several transmission functions, including ZF's powerful PreVision GPS predictive shift strategy. For passenger transport, ZF's EcoLife automatic transmission supports all daily



ZF was recently recognized for being the "Best Brand – Commercial Vehicle Transmissions" in the ETM Awards 2022. Nearly 6,000 manufacturers, fleet operators and professoinal drivers were involved in the decision. Shown here is ZF's EcoLife 2, a second generation automatic transmission for city buses. ZF.

city bus operations while its second generation EcoLife Coachline tranmission has been specifically designed for coaches.

Launched on January 1, 2022, ZF's Commercial Vehicle Solutions (CVS) division has a mission to help shape the future of commercial transportation system by being the preferred global technology partner to the commercial vehicle industry. Employing approximately 25,000 people across 28 countries, the division powerfully combines ZF's commercial vehicle systems expertise, extensive technology portfolio and global operations, to innovate and supply components and advanced control systems for increasingly autonomous, connected and electrified (ACE) vehicles. ZF CVS division unites ZF's former Commercial Vehicle Technology and Commercial Vehicle Control Systems divisions, the latter being formed following ZF's acquisition of WABCO in spring 2020.

#### FMCA Welcomes Blue Ox as Title Sponsor for "Golden Getaway" Convention

FMCA, an international organization for RV owners, has announced that Blue Ox, manufacturer of RV-related towing equipment, will be the title sponsor for the association's 105th International Convention & RV Expo in Lincoln, Nebraska. FMCSA's "Golden Getaway" convention presented by Blue Ox will take place at the Lancaster Event Center from August 24-27, 2022.

Having a title sponsor is a first for FMCA, but Blue Ox officials approached FMCA leaders about doing something special to welcome those attending the August convention. Blue Ox maintains its headquarters in Pender, Nebraska, and has a facility in Lincoln as well.

"FMCA is delighted to have Blue Ox serve as the title sponsor for our Lincoln convention," said Rett Porter, FMCA national president. "Through the years, our members have purchased thousands of their tow bars and other safety equipment. Blue Ox is an industry leader for towing equipment and has been a caring and supportive company for FMCA members."

Mike Hesse, CEO of Blue Ox, agreed that the long-standing relationship with FMCA has been beneficial to his company. "The FMCA partnership has been great for us," he said. "FMCA has very loyal members, which has resulted in many loyal Blue Ox customers. At Blue Ox, you'll often hear the phrase, 'Towing doesn't have to be a drag.' That process starts by listening to our customers' experience towing all types of cars, trailers and RVs and how we can make their journey as great as the destination."

"With a facility in Lincoln and our headquarters in Pender, we wanted to go above and beyond to welcome FMCA and its members to Nebraska and give an exceptional customer experience at this year's rally," said Alex Walker, director of sales with Blue Ox. "We are excited to showcase our many quality

products, thank our current customers and welcome our new customers."

As title sponsor, Blue Ox will have a major presence in FMCA's promotional efforts for the convention and on-site at the Lancaster Event Center. The company also will co-host "Welcome To Lincoln Night" in the city's downtown area on Tuesday, August 23. That evening, convention attendees will be invited to the Historic Haymarket District for a night of food and fun. With dozens of restaurants, shops and other attractions within an eightblock area, FMCA members will have multiple dining and browsing options, with discounts offered by many area businesses. At Lincoln Station Great Hall, entertainment and refreshments will be available for convention attendees throughout the night during the "Blue Ox Bash."

"In partnership with Blue Ox, we are so excited to put together this event for those coming to Lincoln," said Chris Smith, FMCA CEO. "I know our attendees will love the area once they check it out, and this will be a great way to get their convention experienced started. I can't wait to see the streets of Lincoln filled with folks wearing their 'Golden Getaway' badges."

For more information about FMCA's "Golden Getaway" Convention presented by Blue Ox, and to register, visit FMCA.com or phone (800) 543-3622.

#### MCI's J4500 CHARGE EV Drives Across the United States

MCI's luxury zero-emission J4500 CHARGE™ coach completed a 3,200-mile, cross-country trip from Seattle to New Jersey, demonstrating the future of battery-electric transportation. During the trip, the electric coach made stops in 15 cities to charge at established public charging grid stations

FMCA'S 105 TH INTERNATIONAL CONVENTION & RV EXPO

AUGUST 24-27, 2022

LANCASTER EVENT CENTER

LINCOLN, NEBRASKA

PRESENTED BY

BLUE OX

Blue Ox, a manufacturer of RV-related towing equipment, will be the title sponsor for the Family Motor Coach Association's 105th International Convention in Lincoln, Nebraska. FMCA.

listed on the Electrify America Web site, covering 200-240 miles between charges.

Along the way, the battery-electric J4500 CHARGE coach stopped at MCI's Service Center in Des Plaines, Illinois, for a customer demonstration and test drive. The event included DePaul University Public Service and Sustainable Urban Development pro-

grams' graduate students, along with local Chicagoland transportation providers.

#### NFI Environmental, Social and Governance Report for 2021

NFI Group (NFI), a leading independent bus and coach manufacturer and a leader in electric mass mobility solutions, recently released its Environmental, Social and Governance (ESG) Report for 2021 (ESG Report or report), which can be found at https://www.nfigroup.com/esg/.

"As leaders in transportation solutions, NFI plays a critical role in driving tangible environmental and social impact. Our products and services lower emissions, create economic opportunities and build healthier communities. NFI's fourth annual ESG Report demonstrates our impact and the significant growth and maturity in our company-wide ESG practices," said Janice Harper, executive vice president, People and Culture, NFI. "Throughout 2021, we continued to lead the evolution to zero-emission transportation - what we like to call the ZEvolution<sup>™</sup> – through the launch of six new battery and fuel cell-electric models. NFI now has zero-emission buses and coaches operating or on order, in more than 80 cities, and 2021 saw us expand our zero-emission presence in Ireland, Britain, New Zealand and Australia. We also accelerated our company-wide sustainability strategy and roadmap, focused on serving all our stakeholders. This included the hiring of a sustainability manager, launching an ESG materiality assessment and launching a company-wide diversity, equity and inclusion initiatives."

NFI's ESG Report for 2021 provides updated key performance indicators, highlights for 2021, ESG priorities for 2022, as well as case studies outlining some of the

MCI's battery-electric J4500 CHARGE™ coach recently completed a 3,200-mile cross country trip from Seattle to New Jersey making stops in 15 cities to charge at public charging grid stations. MCI.



Along the way, MCI's battery-electric J4500 CHARGE™ coach paused at the MCI Service Center in Des Plaines, Illinois for an inspection by customers as well as a demonstration and test drive. мсı.



specific projects and initiatives the company undertook in the year. The report focused on the three main components of NFI's Sustainability Pledge, first adopted in 2006: "Better Product. Better Workplace. Better World," which guides the company's daily actions and long-term planning.

Better Product: Each NFI bus is designed and built for either zero-emissions or fuel efficiency. NFI's impressive line-up of zero-emission and battery-electric products, as well as telematics and connected technology to monitor performance, demonstrate the company's commitment to a sustainable future for all. From 2015 through to the end of 2021, NFI delivered 2,032 EUs zero-emission buses, or ZEBs, that have travelled more than 65 million miles and prevented the emission of billions of pounds of CO<sub>2</sub> into the atmosphere. NFI electric buses were featured at 26th United Nation's (UN) Conference of the Parties (COP@26) in Glasgow, Scotland, and NFI also expanded its battery recycling partnership with Li-Cycle Corporation.

Better Workplace: In 2021, NFI engaged an independent third party to conduct a diversity, equity and inclusion (DEI) survey of the organization to assess current state and areas for opportunity; formalized a Human Rights Statement, which includes Freedom of Association; invested \$7 million in employee training; and conducted a living wage assessment of the company's main transit bus production facilities, which found that 99.78 percent of employees were at or

above the living wage standard in their region. The company takes pride in being an employer and partner of choice, with a focus on building a respectful, inclusive and vibrant workplace culture.

NFI's Board is now 40 percent female and 80 percent independent, while the executive leadership team is 21 percent female. In 2021, the company implemented a flexible work program, retained eight new team members through its Anniston Workforce Development Program (a national workforce development initiative) and signed onto the American Public Transportation Association's (APTA) Racial Equity Commitment Program.

Better World: NFI is focused on being a responsible corporate citizen and creating positive change for all its stakeholders and their communities. In 2021, NFI submitted its first response to the CDP Climate Change Questionnaire; took part in a social innovation lab focused on Indigenous youth employment in the manufacturing industry; and completed ongoing projects to improve the company's operational impact on climate change.

NFI continued its strong relationship with Untied Way agencies across North America, raising more than \$370,000 in 2021. Collectively, NFI has donated more than \$3.1 million to the United Way from its workplace campaigns since 2009. NFI was presented with the Spirit of Collaboration award for its partnership with the International Associa-

tion of Machinists and Aerospace Workers (IAMAW) and Unifor during its 2021 workplace campaign.

To develop this report, NFI consulted with a broad range of external stakeholders on regional and global levels, including key internal departments, customers, suppliers, investors, creditors and community partners. The report is published with the approval of NFI's senior executives and the board of directors.

#### **ZF Presents EcoLife CoachLine Transmission System**

ZF's Commercial Vehicle Solutions (CVS) division has set a new industry benchmark in coach transmission system performance and efficiency with the unveiling of EcoLife CoachLine. The second generation of its proven six-speed automatic transmissions, EcoLife CoachLine is suitable for coach applications, whether operating in a city, intercity or even on a challenging, steep mountain track. It offers advantages for customers including outstanding passenger comfort and significant fuel savings of up to three percent, compared to the previous generation.

"Environmentally and economically smart. EcoLife CoachLine sets a new standard of transmission performance, efficiency and driving comfort for even the most demanding coach applications, from city streets to mountain roads," said Dr. Jochen Witzig who is responsible for transmission systems at ZF's Commercial Vehicle Solutions division. "Given the continued predominance of traditionally internal combustion engine-powered buses in public transport and long-distance travel worldwide it is vital that we focus on delivering ever-higher levels of fuel efficiency to help reduce emissions. EcoLife achieves this and so much more," added Witzig.

Fuel savings of up to three percent over the previous generation EcoLife are possible thanks to EcoLife CoachLine's innovative start/stop function which saves fuel during the entire transmission service life. The powershift transmission has an optimal gear ratio spread, from 3.36 to 0.59. This is powerfully combined with a particularly high level of mechanical efficiency, ensuring that the vehicle operates in the optimum engine speed range at all times. Further enhancing driver comfort, effortless gear shifting has been enabled using ZF's TopoDyn Life software controls. Using driving resistance-dependent shift controls, the program ensures the right gear is always selected as the topography changes. The hydrodynamic torque converter with standard torsional damper enables high input torques to be achieved at relatively low engine speeds. The key

ZF's Commercial Vehicle Solutions division recently unveiled EcoLife CoachLine. This second generation of its six-speed automatic transmission for coach applications offers advantages over the previous generation including significant fuel savings and an improved retarder. The EcoLife CoachLine is suitable for all types of bus applications. zF.



# Systematic Perfection!

ZF EcoLife transmission for your conventional driveline needs... Now available for coach applications and with Start/Stop capability.

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

**ZF** Ecolife



**ZF CeTrax** 



**ZF AxTrax AVE** 



linkedin.com/company/zf-group













benefits of this include noise reduction as well as lowering fuel consumption.

An innovative, integrated primary retarder and dual cooling set-up enables the highest level of braking power to always be available - even at low speeds. The dual cooling system features a large retarder heat exchanger and an integrated transmission heat exchanger. This ensures longer retarder braking and greater retarder availability important features given that coaches frequently operate for longer periods on steep mountain tracks and over greater distances. Effectively reducing the strain on the vehicle's service brakes and protecting against overheating, the dual cooling system also extends oil-change intervals by up to 480,000km. Overall, the numerous improvements lead to higher energy efficiency CO<sub>2</sub>reduction and improved TCO.

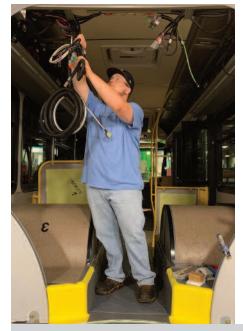
Additionally, EcoLife CoachLine increases the digitalization of servicing and maintenance to help not simply predict breakdowns but to prevent them from happening. Providing predictive maintenance and preventive service package, maintenance and repair costs are reduced, required work more easily planned and vehicle uptimes enhanced.

Launched on January 1, ZF's Commercial Vehicle Solutions (CVS) division has a mission to help shape the future of commercial transportation systems by being the preferred global technology partner to the commercial vehicle industry. Employing approximately 25,000 people across 28 countries, the division powerfully combines ZF's commercial vehicle systems expertise, extensive technology portfolio and global operations, to innovate and supply components and advanced control systems for increasingly autonomous, connected and electrified (ACE) vehicles. ZF CVS division unites ZF's former Commercial Vehicle Technology and Commercial Vehicle Control Systems divisions, the latter being formed following ZF's acquisition of WABCO in spring 2020.

#### **Meet Hunter**

Mason Hunter McLeod – who goes by Hunter – always knew he wanted to enter the manufacturing industry, but he was not sure how. Born and raised in Alabama, he had eyed joining New Flyer from an early age but needed to finish high school first. For McLeod, high school completion also meant earning a Production Technician Certification but with the onset of the pandemic, hands-on training was interrupted alongside school programming. Learning transitioned to virtual, and completion of his certification was delayed.

McLeod came to New Flyer through its Anniston Workforce Development Program





NFI has been highlighting some of its staff members. Hunter McLeod works at the NFI facility at Anniston, Alabama and came to NFI through the Anniston Workforce Development Program. He recently celebrated his one-year anniversary with New Flyer. NFI.

(AWDP), created in partnership with the Transportation Diversity Council (TDC). With a stroke of luck, he met the TDC team at a Calhoun County Career Academy (CCCA) Career Access Event in Annison, Alabama. The Career Academy and TDC had formed a partnership through New Flyer's AWDP, and it was an academy representative who knew of McLeod and encouraged him to attend the event.

"Hunter is an extremely bright young man, and we knew we needed to connect him with a stable and meaningful career in manufacturing, and the right training to get him there," said Kevin Lockridge, career technical director, Calhoun County Career Academy. "We immediately thought of New Flyer's Anniston Workforce Development Program as the perfect opportunity, and leveraged our partnership with the Transportation Diversity Council to help him enter the candidate pipeline. We are so proud to see Hunter thriving just one year into the role and look forward to watching his career with New Flyer grow in the years ahead."

At 19, McLeod was the youngest candidate to have joined New Flyer through the AWDP, having been hired and given the training to succeed immediately out of school. He celebrates his one-year anniversary with New Flyer recently and has his sights set on an electrician role in the near future.

Eventually, McLeod returned to complete his high school education and Production

Technician Certification. Then, upon joining New Flyer, he completed five weeks of intensive technical training (including blueprint reading, use of power tools, electrical systems and machine operation) and three days of workplace readiness training (including ethics, communication and teambuilding, financial health and managing wellness), started his role as an Assembler II and has not looked back.

"The training New Flyer provides helps to simplify all you need to know about the facilities and processes when coming onboard," says McLeod. "Some people worry about getting a job that early out of high school, but New Flyer helped me understand that there's nothing to worry about. I am now trying to get my friends to apply here too – New Flyer is a great place to work, and they actually care about you."

By all accounts, McLeod has a bright future ahead. His manufacturing career is underway and at night, he studies at Gadsden State Community College where he will eventually earn a dual diploma in electrical engineering and industrial automation.

"Being able to work and earn a full-time income while going to school is a really big deal, plus I gain hands-on experience working in the facility," explains McLeod. "And the four-day workweek helps a lot – it really helps my home life in terms of time with family, chores and errands and catching up on schoolwork."

He is eager to learn, grow and advance his career to ready his future and establish



## Sustainable technology at your service



#### **SALES**

Jason Rounsaville (916) 802-9802 jrounsaville@irizarusa.com

#### **SERVICE**

Miguel Oliva (702) 756-1995 service@irizarusa.com

#### **Irizar USA**

100 Cassia Way Henderson NV, 89014 (702) 431-0707 www.irizarusa.com





@**IrizarUSA** #ByYourSide

a foundation from which to support his family. McLeod is expecting his first child this fall.

"I plan on retiring in this field. For now, I'm looking forward to completing school, building my career with New Flyer, and eventually buying a new home for my family."

The AWDP is a local program under New Flyer's Community Benefits Framework. Through the program, New Flyer is strengthening its community outreach and recruitment capacity and committing to the placement of groups of people not traditionally employed in the manufacturing industry.

"At only 19, I was impressed by how serious Hunter's interest in his career and his future was. Just out of high school he already had a portfolio of credentials," said Ayeshah Lockwood, TDC's director of workforce development, Southeast Region. "Hunter was an ideal employee candidate for New Flyer because he knocks on opportunity's door, and undoubtedly it will continue to answer. I'm very proud of him."

#### CVSA Results from 2022 Human Trafficking Awareness Initiative

This year, the Commercial Vehicle Safety Alliance (CVSA) launched its new annual three-day Human Trafficking Awareness Initiative. All three of the Alliance's member countries – Canada, Mexico and the U.S. – participated in this awareness and outreach effort to educate commercial motor vehicle drivers, motor carriers, law enforcement officers and the general public about human trafficking.

Taking into consideration each country's existing human trafficking awareness dates, CVSA's Human Trafficking Awareness Initiative was set for different dates in each country. In the U.S., the three-day initiative took place January 11-13. In Canada, it took place February 22-24. In Mexico, it was March 15-17.

CVSA jurisdictions recorded human trafficking awareness and outreach data and submitted that data to the Alliance. For the 2022 North America-wide Human Trafficking Awareness Initiative:

- 35 jurisdictions participated.
- 2,460 individual law enforcement officers/troopers/inspectors participated.
- There were 163 reported events (possible indicators of human trafficking or documented cases).
  - 13,274 wallet cards were distributed.
  - 6,355 window decals were distributed.
  - 1,818 presentations were delivered.
  - There were 640 media contacts.

The United Nations defines human trafficking as the recruitment, transportation, transfer, harboring or receipt of people through force, fraud or deception with the aim of exploiting them for profit. Men, women and children of all ages and from all backgrounds can become victims of this crime, which occurs in every region of the world, including North America. Human traffickers often use violence or fraudulent employment agencies and fake promises of education and job opportunities to trick and coerce their victims.

After a successful launch year and input from jurisdictions during the CVSA Human Trafficking Prevention program committee meeting at the CVSA Workshop, the CVSA Board of Directors voted to extend the initiative from three days to five days next year. Next year's Human Trafficking Awareness Initiative is scheduled for January 9-13, 2023 in the U.S; February 20-24, 2023, in Canada; and March 13-17, 2023 in Mexico.

"The fight to end human trafficking does not end now that the three-day Human Trafficking Awareness Initiative has concluded," said CVSA President Capt. John Broers with the South Dakota Highway Patrol. "We remain fully committed to educating the public, every day of the year, about the crime of human trafficking, the signs to look for and what to do if you suspect someone if being trafficked. Our ultimate goal is to eradicate human trafficking entirely."

Truckers Against Trafficking (TAT) collaborated with CVSA on the launch of the human trafficking education and awareness campaign. Training materials were developed and available for industry and law enforcement use. In addition, CVSA worked with TAT to provide an online order form for jurisdiction members to order TAT wallet cards and/or window decals, which are now available year-round.

To find out what your local jurisdiction is doing to increase human trafficking awareness throughout the year, contact the agency/department responsible for over-

seeing commercial motor vehicle safety within your state, province or territory.

#### **Keolis Using New Technology to Reduce Fraud**

This new innovation is being tried out on the Ginko network from May 9: the "fraudometer." The aim of the innovation is to "transform fraudulent passengers into valid customers" by changing their behavior with the help of behavioral science and "nudges."

The Ginko network is the first network in France to offer this innovation, developed by the teams of Keolis Besançon Mobilités with the support of a Lyon-based firm specializing in behavioral sciences and Keolis Group's innovation department.

This innovation is the result of an investment by Grand Besançon Métropole in a passenger counting system, which makes it possible to identify precisely when passengers get on and off at each stop. The entire bus and tram fleet is equipped, representing more than 125 vehicles. The equipment can also be used to gather precise statistics on passenger numbers and deploy a variety of innovations, such as the "fraudometer."

The fraudometer is based on behavioral science and "nudges," a gentle method aimed at encouraging individuals to adopt more virtuous behavior on a day-to-day basis, without every trying to force them. At each stop, when the driver opens the vehicle doors, the "fraudometer" shows up on the information screens. The passengers get on. The number of boardings (provided by the counting system) and the number of validations (ticketing data provided by the validators) are then displayed, highlighting the number of passengers who failed to validate their ticket.

Depending on how many validations there have been, a message is displayed to "congratulate," "encourage" or, failing that, "alert" the passengers on board. This

Keolis has developed a new system being called a "fraudometer" that is being tried out in France. The system counts passengers boarding at each stop as well as the number of tickets validated. It then displays the number of passengers who failed to validate a ticket. KEOLIS.



new innovative tool is being tested on the "Lianes" (lines) 4 and 5 until July 2022. It will then be deployed on the other lines of the Ginko network if the results of the experiment are successful.

This innovation is the latest addition to a large variety of measures being deployed by Keolis Besançon Mobilités on the Ginko network to combat fraud.

The fraudometer will alert the teams to those stops on the Ginko network where fraud is most prevalent, both in real time and after the event. In the first case, the intervention of controllers can be activated. In the second case, the data is analyzed and used to develop control schedules for the days and weeks to come.

The control teams, present seven days a week on the Ginko network, carry out 30,000 controls per month. They use a large number of methods to carry out their controls, using plainclothes checks, and possess new tools (like the fraudometer) for more targeted operations and actions.

#### 90 Electric Irizar Buses for EMT of Madrid

Madrid's Municipal Transport Company (Empresa Municipal de Transportes de Madrid – EMT) is continuing to pursue its goal to electrify its fleet and, for the fifth time, it has awarded another order to Irizar e-mobility this time consisting of 90 buses. This latest order means that EMT Madrid will now have a total of 175 zero-emissions Irizar buses in its fleet.

The zero-emissions Irizar vehicles will have latest generation batteries with more than 430 kWh of energy. The traction unit of the vehicles will be a central 206 kW motor. The buses can be charged using an inverted pantograph or by slow-charging in-depot.

Madrid's Municipal Transport Company, which has designed ambitious projects to make progress towards electrification, has put their trust in Irizar e-mobility for a fifth time by awarding them an order for 90 electric buses. It is the largest order of electric buses awarded to Irizar e-mobility up to now, and it is the largest tender for electric buses by EMT of Madrid to date. The EMT of Madrid will add 175 electric Irizar buses to its fleet with this new order.

In the words of Carlos Sierra, director of Transport Service at EMT Madrid, "The EMT has been electrifying their fleet for several years. Irizar e-mobility has been by our side during the process of technological transformation and in our strategy that will make it possible to have 25 percent of our fleet being electric in 2025."

"We're very grateful to EMT Madrid for this new order. We're filled with pride to be part of this enormous project of EMT Madrid, which is a world leader in the electrification of public transport," adds Irizar E-mobility Commercial Director Txema Otero.

The new vehicles that will be included in the EMT fleet will be equipped with latest generation 430 kWh batteries from Irizar, which will ensure the buses have an optimal range. The vehicles will be charged using an inverted pantograph or a Combo 2 charger connector, and the traction unit will be a 206 kW central motor.

Individualized tests were done by EMT Madrid to measure the range and efficiency requirements to award the tender. Irizar e-mobility got record results in the test, easily exceeding more than 350 km.

The vehicles will be 12 meter (39 feet) long ie bus models. They will have two doors, 28 passenger seats, one driver's seat

and two wheelchair areas. In addition to the environmental benefits of zero  $\mathrm{CO}_2$  emissions and low noise levels, the buses also stand out because of their design. The operator has chosen to include some aesthetic features of the Irizar ie tram into the fleet, like using cameras instead of rear view mirrors.

#### Van Hool Builds New Range of Buses

Van Hool, the Belgian manufacturer of buses, coaches and industrial vehicles, presented its first edition of a completely new range of 100 percent zero-emission buses on the first day of Euro Mobility Expo 2022, an international trade show for public transport. The Van Hool A12 Battery Electric is the first vehicle in a completely new range of buses in four different lengths (39, 43, 59 and 79 feet) equipped with exclusively zeroemission powertrains: battery-electric, fuel cell (hydrogen) and trolley. With this new A range, the company is building on the knowledge and experience it has gained in the area of eco-friendly buses for public urban and regional transport. Van Hool is ready to provide a response to the ever-growing demand from public transport companies that are focusing on "greening" their fleets. Even before the official announcement of the new A range, Van Hool had 13 orders on its books, for a total of 162 buses.

Filip Van Hool, CEO of Van Hool NV, explains: "The intention in designing the new A range was to come up with an eco-friendly (100 percent zero emissions), comfortable, safe, timeless and sustainable bus range that can be used in urban and regional transport in Europe. Our aim was to present an integrated new range to meet the high expectations of the transport companies, the drivers and the passengers. The new interior and exterior design and the choice of three different powertrains were linked, on the one hand, to the international expe-



Empresa Municipal de Transportes de Madrid, the municipal transport company in Madrid, Spain, has ordered 90 battery-electric buses from Irizar. The buses are about 39 feet long, have two doors, seat 28 passengers and can be charged with a Combo 2 charger connector or along the route using an inverted pantograph. With this order, EMT Madrid will have 175 zeroemission Irizar buses in the its fleet. IRIZAR.

riences that we have built up over the past few decades and, on the other, to the challenges that public transport companies will face over the coming years. Our customers are focusing on greening their fleets and are pursuing zero emissions. They are tying that to comfort and safety for the users of public transport, a pleasant working environment for the driver and a TCO (total cost of ownership) in order to perform their task profitably. More than ever, we are ready to play a significant role on the European public transport market. We now have a completely new range of urban buses, in four different lengths (39, 43, 59 and 79 feet), which are equipped with exclusively zero emissions powertrains: battery-electric, fuel cell (hydrogen) and trolley."

In the design and development of the new A range, particular attention was paid to the weight, sustainability and modularity of the buses. Structural weight savings were achieved through the use of high-strength stainless steel, low-weight composite materials and sustainable bonding techniques. For this computer simulation and optimization techniques were used, combined with more than 75 years of skill and experience.

A modular fastening system has been fitted on the self-supporting sandwich roof of the bus for the integration of parts such as batteries, and air conditioning and control systems. Upgrading/updating, any subsequent modifications and replacement with other parts will be easier as a result, therefore guaranteeing a long life of the vehicle.

This way, Van Hool is making an important contribution to the circular economy.

Even before the A range was officially introduced, the Koningshooikt-based company already had 13 orders on the books, for a total of 162 buses:

- 67 Van Hool A13 battery-electric buses for Tide – Aalborg (DK)
- 36 Van Hool A13 battery-electric buses for De Lijn – Flanders (B)
- 19 Van Hool A12 battery-electric buses for leaseholders of De Lijn – Groep Waaslandia (B), De Decker – Van Riet (B), Parmentier (B)
- 2 Van Hool A12 fuel cell buses for FAHMA – Frankfurt (D)
- 4 Van Hool A12 fuel cell buses for Pau
   F)
- 14 Van Hool A12 fuel cell buses for Réseau Astuce – Rouen (F)
- 7 Van Hool A12 fuel cell buses for SMTC90 – Belfort (F)
- 7 Van Hool A12 fuel cell buses for Lorient (F)
- 6 Van Hool A12 fuel cell buses for Eberswalde (D)

The design of the new A range is characterized by its aerodynamic shape at the front. The large windscreen provides an optimum view of both driver and passengers. The buses are fitted with the newest generation LED headlights with daytime driving lights.

The large rear window lets in plenty of natural light. Also at the rear, the newest generation LED lights have been used. The large access hatch in the rear panel pro-

vides user-friendly access to the technical section of the bus. Large side windows enhance the amount of natural light coming into the bus, contributing to a bright interior. The buses have wide passenger doors, making boarding and alighting easier for passengers. For the driver, a closed cab with plenty of storage space is provided as standard. The ergonomic cab, which meets the standards of the Verband Deutscher Verkehrsunternehmen (VDV), gives the driver a view of all the vehicle's features at a glance, improving general safety. The interior climate is regulated by a unique system whereby air conditioning comes from a central roof air duct, based on heat pump technology (with water as the condenser) and traction heat recovery, resulting in energy savings compared to a classic heat pump.

To maximize the vehicles' autonomy, it was crucial to minimize their empty weight. By using finite element calculation techniques on the one hand and high strength (duplex) types of stainless steel on the other, it was possible to optimize the steel structure of both the chassis and the side frame. The integration of a state-of-the-art lightweight sandwich roof completes the weight optimization.

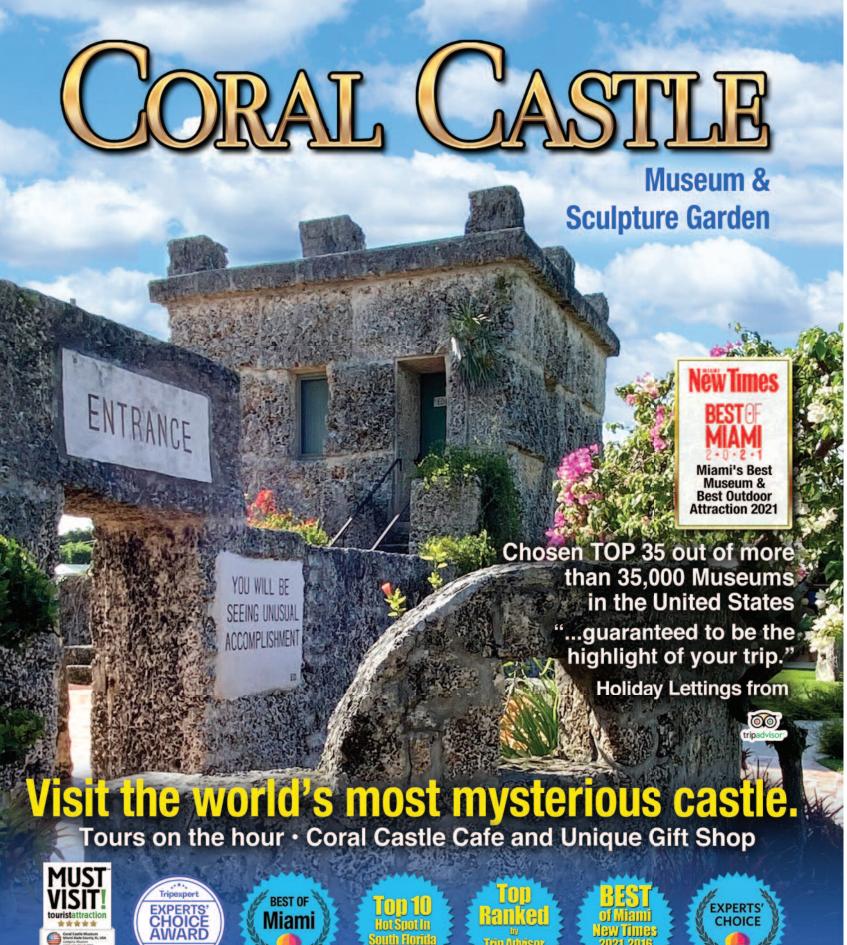
The new A range has been specially designed to support a carbon-free future without compromising drivability, passenger comfort or vehicle performance. To achieve this goal, Van Hool, as a fully independent integrator, is working with components and technology from various suppliers and project partners. Van Hool's strength lies in the knowledge and experience of its staff for the perfect coordination of these components.

Ahead of the company's 75th anniversary (1947-2022) Van Hool is hereby affirming its innovative capability, based on years of experience. It has already built more than 1,400 electrically-powered buses and coaches in various complex designs: battery-electric, hybrid, hydrogen and trolley. At the end of 2020 Van Hool delivered the first of 10 fully battery-powered electric coaches of the CX45E model with loading infrastructure, destined for the United States. A total of 22 units have now been sold and, just recently, the world's first 100 percent battery-electric, double-decker coach, the TDX25E, was launched.

Van Hool is an independent Belgian bus, coach and industrial vehicle manufacturer, based in Koningshooikt. The company was founded in 1947 and celebrates its 75th anniversary in 2022. The vast majority of units produced are destined for Europe and the U.S. Van Hool has around 3,500 staff worldwide, the majority of whom work at the

Van Hool has introduced a new range of transit buses known as the "A" range. The entire range will be zero emission using battery-electric, hydrogen fuel cell or overhead trolley for power. Initial lengths offered include approximately 39, 43, 59 and 79 feet long. VAN HOOL.





28655 South Dixie Hwy • Miami, Fl. 33033 • Tel: 305-248-6345 • www.coralcastle.com















production facilities in Koningshooikt (Belgium) and Skopje (North Macedonia).

#### 84 New VDL Citeas for Amsterdam

GVB, the public transport company of Amsterdam, is further expanding its electric fleet with 84 new generation VDL Citeas. These vehicles, based entirely on an electric powertrain, will be deployed from 2023 onwards. The framework contract includes an option for a further 130 new VDL Citeas, which in the coming years will contribute to a further reduction in CO<sub>2</sub> emissions.

VDL Bus & Coach will deliver 30 articulated new generation VDL Citeas of type LF-181 and 54 VDL Citeas LF-122. For the expansion of the GVB fleet, VDL Bus & Coach is also responsible for implementing the charging infrastructure. GVB has been using electric buses since the end of 2019: Forty-four are currently in service and an additional 31 will enter service during the summer period, bringing the total number of electric buses to 75 in 2022.

President Willem van der Leegte of VDL Groep stated: "With the development of the new generation VDL Citea, we have developed a versatile mobility platform that matches the sustainability ambitions of our customers. That also applies to GVB. In this way, we will remain at the forefront of the public transport market, where we are leading the way in Europe on the basis of our more than 150 million electric kilometers driven. By signing this contract, we are making an important contribution to making Amsterdam an even cleaner city for its residents and visitors, based on our collaborative strength. We are proud to be able to supply buses to our capital city again. GVB and VDL has been working together for many years. The fact that this cooperation is continuing is a sign of its success."

Amsterdam is working to further reduce  $\mathrm{CO}_2$  emissions in the city. To this end, the municipality has developed the "Route Map Amsterdam Climate Neutral 2050." Amsterdam will reduce its  $\mathrm{CO}_2$  emissions by five percent in 2025, 55 percent in 2030 and 95 percent in 2050 compared to 1990 levels. Part of this is that GVB provides completely emission-free bus transport in 2025.

Claudia Zuiderwijk, managing director GVB, added: "This order is a good step towards nicer, cleaner and more sustainable public transport in Amsterdam. More and more inhabitants of Amsterdam will experience how the droning acceleration of buses is disappearing from the city and that the air is cleaner when they cycle or walk around."

"With this order, the GVB fleet will eventually be entirely VDL," said Ard Romers, managing director of VDL Bus & Coach Nederland. "GVB is going to phase out the last diesel buses and permanently switch to zero emission VDL Citeas in Amsterdam. We are proud that, based on the trust built up over the past decade, we can continue our cooperation with the partners in this project. The Netherlands is a European forerunner in the electrification of public transport and VDL is happy to provide its experience and expertise as a transition partner. More than 1,100 VDL Citeas now cover over 135,000 electric kilometers together every day in a large number of European cities and regions.'

Over the past decade, VDL Bus & Coach has become one of the leading players in Europe in the field of e-mobility. Since the introduction of the first Citea SLF-120 Electric in Geneva, during the UITP Mobility & City Transport exhibition in 2013, VDL Bus & Coach has focused strongly on electric mobility.

In 2021, VDL Bus & Coach presented the new generation of electric Citeas. Based on the VDL vision, a bus concept has been developed that is entirely based on an electric drive train and that is ready for the future, with zero emissions as a matter of course. Batteries in the floor, a one-piece composite sidewall, clever energy management, a sophisticated climate control system and an ergonomic driver's environment. With these five important innovations, VDL Bus & Coach introduces the new generation Citea product range, consisting of four length variants and five types. The range of the new generation of Citeas has been considerably improved.

The new generation of Citeas has already been sold in several countries and will be deployed in a number of cities and areas starting this year: The Netherlands (Eindhoven), Finland (Kotka and Lahti), Belgium (all of Flanders), Germany (Oberhausen and Braunschweig) and France (Bordeaux).

GVB provides public transport in and around Amsterdam. Before the coronavirus outbreak, GVB transported approximately 938,000 passengers on an average working day by metro, tram and bus, and on the ferries across the IJ and the North Sea Canal. GVB's goal is to transport passengers safely, hospitably and on schedule. The starting point is that they should feel comfortable,



The public transport company of Amsterdam, GVB, has ordered 84 new generation low-floor VDL Citea buses. Included are 30 articulated of type LF-181 while 54 are of type LF-122. There is an option for an additional 130 new VDL Citeas in the future, VDL.

informed and valued. GVB uses all its experience to be a full mobility partner for the city and the region.

Together with various parties, GVB is working on an inviting, accessible and sustainable public transport network. The City of Amsterdam, the Transport Authority and GVB have the joint ambition to offer completely emission-free bus transport in 2025. Amsterdam's subways and trams already run on 100 percent green electricity and the first electric ferries are also in operation.

The core activities of VDL Bus & Coach consist of the development, manufacturing, sales and after-sales of a wide range of buses and coaches, the conversion or extension of mini and midi buses and the purchase and sales of used buses. VDL Bus & Coach consists of multiple bus companies that operate cooperatively in the global market. Manufacturing takes place in Western Europe. VDL Bus & Coach places high value on quality, safety, durability, the environment, low fuel consumption, comfort and low maintenance costs. In the transition to zero-emission transport, VDL Bus & Coach offers turnkey solutions and is not only a bus supplier but also system supplier.

Sales of VDL Bus & Coach products take place through a worldwide network consisting of corporate-owned sales offices, importers and agents in more than 30 countries. For after-sales and maintenance, the client can count on rapid, hassle-free assistance from VDL Bus & Coach employees in any of the many service locations. An extensive distribution network ensures that spare parts and accessories are delivered to the requested destination as quickly as possi-

ble. VDL Bus & Coach is one of the largest bus and coach producers in Europe.

VDL Bus & Coach is part of VDL Groep. This international industrial company focuses on the development, production and sales of semi-finished products, buses and coaches and other finished products and the assembly of cars. The headquarters are in Eindhoven, The Netherlands. Since the founding in 1953, this family-owned company has grown to include 105 operating companies, spread over 19 countries with more than 15,000 employees and an annual turnover of 4.955 billion euros in 2021. The strength of VDL Groep lies in the cooperation between the companies.

#### **Irizar Buses for Portugal**

Forty-three vehicles for urban transport in the Guimaraes municipality, 48 intercity units for the Lisbon metropolitan area and 15 Irizar i6 units for the Madeira region, among others, make Irizar a sure bet in the Portuguese market.

In 2021 Irizar provided all the new vehicles, more than 16 tons, for urban transport for the Guimaraes municipality. There were 26 low-entry vehicles on MAN chassis and another 17 100-percent electric Irizar vehicles that will be completed with another four units in 2022. Irizar has thus been able to close significant deals in segments where it had not traditionally had penetration.

The urban services in Guimaraes are run by the Guimabus company, which belongs to the Vale do Ave group and which has made a qualitative leap in recent years with solid and steady growth.

Additionally, a double operation with 48 intercity type vehicles has been closed for the Lisbon metropolitan area consisting of

23 14-meter Irizar i4H vehicles and 25 i4H units with CNG technology and MAN chassis. The latter gas units have stop request buttons with Braille for the first time on this kind of vehicle.

Irizar has also recently closed several operations for companies that operate for FlixBus and Rede Expressos, and it is the brand with the highest demand for those kinds of services.

Even 100 km from the Portuguese capital Irizar is the undisputed leader in the tourism and intercity segments in the Madeira region, with a presence in all the large companies on the island. In 2021 their position in the market was strengthened even more by closing an operation for 15 Irizar i6 model vehicles for the Horarios de Funchal state-owned company that operates the urban transport services for the city, showing their firm commitment to stimulating tourism on the island. Those units were a major challenge, because the vehicles were adapted to meet the demand conditions of the island and the unique requirements of the project. The vehicles have also been equipped with PRM lifts. Without a doubt, Irizar has consolidated itself as a leading company in the tourism sector on the island.

In the last two years, Portugal has taken a step forward in renewing their fleet, aiming for 90 percent low-floor vehicles. In that time, there have been tenders for services for large suburban and metropolitan areas of the country in addition to tenders for urban services for the most important cities, which have chosen alternative technologies like CNG (compressed natural gas) and electric vehicles, among others.



Irizar has had some new bus sales in Portugal including 48 intercity units for the Lisbon metropolitan area, 43 vehicles for urban transport in the Guimaraes municipality and 15 Irizar i6 units for the Madeira region. Shown here is one of 25 two-door Irizar i4 units going to Lisbon that are built on a MAN chassis and are powered with CNG technology. IRIZAR,

## The Gang's All Here for 2022 Spring Fling

by Dave Millhouser



Hundreds of bus industry veterans and bus enthusiasts converged on Hershey, Pennsylvania on June 3 and 4 for the 2022 Spring Fling at the bus museum. In addition to the 52 museum buses, another 30 "visiting" buses showed up for the event. The buses on display were built between 1912 and 2022 – a range of 110 years. STEFAN ALEO.

the Gang's All Here" was the theme of this years Spring Fling at the Museum of Bus Transportation/Antique Automobile Club of America Museum in Hershey, Pennsylvania.

On June 3 and 4 hundreds of enthusiasts and industry veterans gathered in perfect weather to celebrate the history and evolution of the bus industry in North America. Roughly 30 "visiting" coaches braved \$6 a gallon diesel fuel prices to join with the

museum's 53 buses, offering the opportunity for guests to see and touch more than 80 historic vehicles ranging from 1912 to 2022 - a span of 110 years.

The museum moved many of its fleet from the annex to the main campus for the event, but to see everything Fling offered a shuttle from the main building to the annex. Wolf Bus lines has, for many Flings, provided a shuttle bus and driver – and the museum is grateful to them for coming through again.

All day Saturday the museum's Bus Exhibition Hall hosted a flea market with a wide variety of bus models, parts and memorabilia for sale at 23 tables. Attendance was down slightly from pre-pandemic levels, and high fuel prices gave the event a more "Middle Atlantic" flavor than years past.

At Friday evening's "Town Hall," Bus Committee Chair John Oakman gave a "State of the Museum" briefing, indicating that since merging with AACA Museum the bus group's financial state has not only stabilized, but, for the first time, revenue exceeded expenses. The fleet in the past two years has grown by more than 10 units. Oakman is stepping down at year end after a three-year stint, and he introduced Dan Lenz as the next chair.

Fleet Manager Randy Wilcox pointed out that movie bus rentals have made a large contribution, both in terms of revenue and recognition. Giant strides have been made in cataloging and sorting parts, and the Annex library has grown to more than 250 maintenance manuals and parts books. These books are both historic records and a valuable resource for the museum and colleagues across the country.

After pointing out that none of this would have been possible without a dedicated team of volunteers and museum staff, he announced that the museum was starting an annual "Volunteer of the Year" award, and the inaugural winner was Tom Mozer. Mozer loves "all things wheeled" and has become virtually indispensable in every aspect of managing and maintaining the fleet.

A fun stat typifying the bus industry is that, among the more than a dozen volunteers who labored for three days to get set up for Fling, there were at least four ex bus company owners and three retired executives. It was great fun watching retired executives mowing grass and wielding a mean "weed whacker."

On Saturday the museum recognized and thanked Annett Bus Lines, JC Tours, Alexandria Transit Company (DASH) and Premier Transportation for their generous donation of buses to the historic fleet. Annett contributed a 1981 Prevost Mirage, JC Tours

a 1986 MCI 102A3, DASH a 2007 Orion V, and Nick Cazana or Premier Transportation donated a 1947 Fitzjohn Duraliner.

Not only have these folks donated buses, they have transported them to Hershey, and in Annett's case provide an annual contribution for the upkeep of their Mirage. Eric Annett, the company's founder and bus industry legend for literally decades, had wanted to personally present the coach, but sadly passed away before that could happen. His family has honored his wishes in a big way.

Every bus at the Fling is special and all have stories, but perhaps this year's best was the 11 members of the Parra family from Chihuahua, Mexico who made the eight-day, 4,400 mile (round trip) journey to Fling in their spectacular 1970 four-axle Sultana coach. Cesar Parra has been in the business for 30 years running two companies. This coach is still in revenue service for "Noroeste," and Parra family lore has it that the president of Mexico once rode this coach. Cesar's son Isaac pointed out that he has 11 uncles, and every one of them is a bus driver. The family is headed home with plaques representing three categories won to keep them company.

This year's award winners were:

- Farthest traveled: Parra family's 1970 Sultana 2,200 miles each way from Chihuahua, Mexico.
- Best Restored bus: Parra family's 1970 Sultana. It is worth mentioning, this bus is still used in occasional commercial service.
- Best "Story":... you guessed it... Parra family's 1970 Sultana.
- Oldest Bus: "Friends of The New Jersey Transportation Heritage Center" 1957 GM PD4104.
- Best Transit Bus: Alexandria Transit Company (DASH)'s 2007 Orion V.
- Best Modern Bus: Transbridge Lines Prevost H3-45.
- Best Conversion/Motor home: Dan Hunt's 1989 Model 15 Eagle.

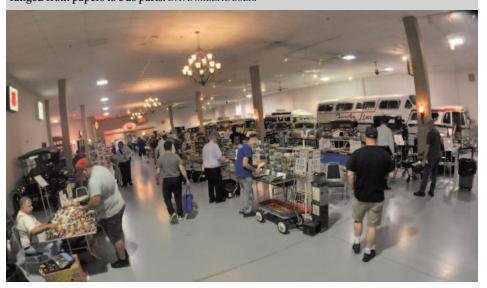
Special thanks to ABC and Irizar for showing new demonstrators. ABC brought a 2022 C2045 battery-powered bus and Irizar an i6 touring coach.

Next year's Spring Fling will be a celebration of the Pennsylvania Bus Association's 100th anniversary. PBA has been one of the most ardent supporters of the Museum of Bus Transportation/Antique Automobile Club of America Museum. The bus industry in Pennsylvania has a rich and colorful history, which will be prominently on display.

The bus winning the most awards this year was an impressive 1970 four-axle Sultana. Eleven members of the Parra family drove it up from Chihuahua, Mexico. In addition to the award for the greatest distance (2,200 miles), the Sultana also received awards for the best restored bus and for the best story. DAVE MILLHOUSER.



Expectedly, the bus flea market was a hit at the Spring Fling. Here, several vendors are seen displaying goods on the lower level of the museum in between historical vehicles. Items offered ranged from papers to bus parts. DAVE MILLHOUSER.



## Will the Demographic Crisis Cause More Problems Than the Pandemic?

by Larry Plachno



Both the bus driver and the tour escort can be seen on this European bus tour using a MAN Lions coach. The new numbers are in showing that the lack of drivers is only getting worse. Most of the problem stems from a lack of younger workers. MAN.

Ithough we covered this topic in the August, 2021 issue of NATIONAL BUS TRADER (a PDF version is available at www.busmag.com, then click on Archived Articles) so much has happened since including the new IRU report, that an update is appropriate. While little is being said of the Demographic Crisis in America, the demographers are pointing to worsening

statistics in Asia and Europe that may lead to a global recession. Several Asian and European countries are taking steps to encourage higher birthrates and more children while the latest surveys are showing increasing shortages of truck and bus drivers globally. The concern is that while the pandemic is easing, the Demographic Crisis has the potential for getting worse. The Demo-

graphic Crisis is the name for reduced birthrates in most developed countries all over the globe. This results in fewer babies, fewer workers, fewer taxpayers and an aging population that is changing the way we live. As society has more senior citizens and retired people but fewer children and workers, it changes numerous things from taxation to education to health care. These changes bring about three concerns. All of them will impact the bus industry.

- 1. Reduced Population The most obvious of these is that population has started declining around the globe. Some places will be affected sooner or to a greater degree than others. In some countries the birthrate has declined to a point where they lose a significant percentage of their population with each generation. Some of them could easily be called endangered species. What this means to the bus industry is that sooner or later we will see a decrease in total passengers. However, a decrease in specific types of passengers, particularly the younger ones, may be more immediate.
- 2. Demographic Imbalance This is of particular concern to the demographers since it means we will have fewer young people and workers but more older people and retirees. In the past our demographics could be diagrammed like a pyramid with lots of babies at the bottom, workers in the center and a small amount of seniors and retired at the top. With the reduction in birthrates but increasing medical technology and longevity, our demographics are now shaped more like a diamond on playing cards. This has few babies at the bottom but an increasing number of seniors and retired folks.

This is starting to create some undesired situations. Because there are fewer babies, the result is fewer workers. An immediate concern is the lack of workers paying in to Social Security to support those retired. There are also concerns that we may not have enough doctors, nurses and tour bus

drivers to support the elderly in the years ahead.

3. Recession – There is increasing concern that the demographic imbalance will lead to a global recession. Fewer workers will lead to less production while more of our resources will have to be used to take care of the elderly. On a short-term basis we may see some industry and manufacturing move to other countries with more workers. Eventually this could be a problem.

One has to question why these concerns are not being made more obvious in America? Are the news sources concentrating on the pandemic, inflation and politics? Have Demographic Changes come so slowly that they are not obvious? However, the increasing need for truck drivers, bus drivers, restaurant workers, postal workers, pilots, nurses and others has made it obvious that America has joined Asia and Europe in feeling the results of the Demographic Crisis.

Let me cover some of the more worrisome developments in Asia, Europe and the United States and then take a look at the driver shortage.

#### Asia

China's birthrate is at its lowest level since 1978. In 1979, China's leader Deng Xiaoping imposed their infamous One-Child policy to avoid overpopulation. What it also did was to eventually eliminate workers. In 2018, China's labor force fell by 4.3 million. Realizing what they had done, China went to a Two-Child policy in 2016 and in 2021 to a Three-Child policy. Some researchers say that this may be too little, too late and the

decline may be unstoppable. Since the global economy has relied on China and its inexpensive work force, for growth, this reduction in workers may have a negative impact on other economies around the world.

Worse yet, the One-Child law prompted many couples to abort baby girls, but keep a boy to better guarantee the financial support of a child in their old age. As a result China today has 34 million more men than women, and hence fewer opportunities for marriage and family, giving them another demographic imbalance problem.

Researchers have said that Japan is aging faster than any country in history. Since 2011, more adult diapers have been sold in Japan than baby diapers. By the year 2040, there will be one Japanese citizen above the age of 100 for every baby born. There is a prediction that in 2050, only 28 percent of Japan's population will be of working age, a situation that may be impossible to deal with. Other Asian countries, including Singapore, Hong Kong and South Korea have put policies in place to support babies and increase the birthrate.

#### Europe

The lowest birthrates in Europe are in Italy and Spain. The birthrate in Italy in 2012 fell to the lowest level since it became a nation state in 1861 and has been declining every year since then. One headline read: Ciao, Ciao Bambini: Bye, Bye Children. Italy is expecting that there will be 1.4 million fewer students over the next 12 years and more than 10,000 national education jobs will be eliminated. Estimates are that by 2050 the population will decline by five million with only slightly more than half of working age. A meeting called The General State of the Birth Rate was initiated in Italy in 2021. Attendees included Gian Carlo Blangiardo, president of Italy's national statistics institute, Prime Minister Mario Draghi and Pope Francis. A second annual event was held in 2022. The government of Draghi has implemented a law on the family and has even launched universal family allowances.

Gigi De Palo, president of the Family Associations Forum that organized the birth crisis meeting event in Italy, has been an outspoken advocate for relief of the Italian tax burden on families. Some 2015 statistics show that Italian families with two children have higher rates of poverty than families with one. Some researchers suggest that places with lower taxes and more support for families and marriage have more children. As the declining birthrate becomes more obvious as well as its negative impact on future taxes and production, more and more countries are changing national policies to support marriage and children to help their future economy.

Russia is also fighting declining birthrates. Statistics show that Russia had

This interesting little bus was photographed in China on the Yutong assembly line. China went to a One-Child policy in 1979 that reduced their birth rate and began reducing their work force substantially. As a result, China went to a Two-Child policy in 2016 and to a Three-Child policy in 2021, but their work force is in decline. NBT.



147 million inhabitants in 1989, but it was down to 145.5 million in 2021 which included 2.4 million inhabitants of the Crimean peninsula that was annexed in 2014. Russia is now spending billions of rubles on allowances for the second or third child. While these measures helped slow down the birthrate decline, the war in Ukraine has made things worse. Several European countries are facing problems because of fewer children and workers and some are taking steps to help families and increase the birthrate.

#### **United States**

To some extent, the United States has been slow in seeing changes due to the Demographic Crisis because of immigration. However, the statistics show that typically the second generation of immigrants has a similar birthrate as the rest of the country. Moreover, it appears that as a general rule the immigrants are generally not interested in taking the jobs that are experiencing problems because of the Demographic Crisis. In 2030, approximately 20 percent of the population of the United States will be retired.

This photo was taken looking west on the Via della Consoliazione in Rome as a tour group prepares to board their little tour bus. Yes, that is St. Peter's in the background. Italy has one of the lowest birthrates in Europe. NBT.



This will be the first time since the founding of our country that we will have more retired people than children.

Some of the demographers trace the birthrate crisis in the United States back to 1935 and President Roosevelt's creation of Social Security to help during the Great Depression. Prior to that, families had several children so that someone would take care of mom and dad when they got old. At that time Social Security made sense since you had several workers for each retired person. The problem is that after the introduction of Social Security, people started having fewer children and started to depend on Social Security. Many, if not most, expected others to have the children we still needed for workers, to pay into Social Security and to work to keep the economy going. However, the "others" apparently never got the message that they were supposed to make babies. Today, Social Security is in trouble because we have fewer workers to pay into it and fewer workers to keep the economy moving.

The birthrate in the United States has fallen by 20 percent since 2007. We are feeling a shortage of truck drivers, bus drivers, postal workers, restaurant workers, pilots and even nurses. This does not bode well for the future since we need more people paying into Social Security, more people to keep the economy going and more people to take care of our aging senior population.

#### **Truck Drivers and Bus Drivers**

Based in Europe, the IRU is the International Road Transport Union. It is the voice of more than 3.5 million companies operating road and multimodal transport services in all global regions. Results on their latest



This bus driver patiently sits in his Mercedes-Benz twodoor Tourismo tour coach waiting for his tour group to return. Italy has been so concerned about its declining birthrate that it started an annual meeting that was attended by the Italian Prime Minister and Pope Francis. Results were a second annual meeting in 2022 and movement towards a law on the family. NBT.

survey on driver shortages in 25 countries were released on June 16, 2022. It suggests that driver shortages are expected to jump to 40 percent in 2022. Unfilled driver positions reached 71,000 in Romania, 80,000 in both Poland and Germany and 100,000 in the UK. The report indicated that driver shortages in Mexico increased by 30 percent to reach 54,000 and by 140 percent in China to reach 1.8 million. In passenger transport, the report stated that seven percent of bus

and coach driver positions were unfilled in 2021 in Europe.

The report provided some interesting information. One is that higher driver wages, especially in Europe and the United States, have not reduced the driver shortage. Statistics on age suggested that the primary problem was a lack of younger drivers to take over for the older drivers who are retiring. The recent report indicated that there

are between two and five times more older drivers over 55 in all regions, except for China and Mexico. Europe has the highest average driver age at 47. With passenger transport in Europe, the difference was even more pronounced with an average driver age of 50. Hence, it is obvious that the shortage is with a lack of younger drivers as a result of the Demographic Crisis.

#### The Pandemic and the Demographic Crisis

The best place to end is where we started; with the question of whether the Demographic Crisis will cause more problems than the pandemic? As of today, we can say that the pandemic is easing. Bus operations are increasing. The two biggest negatives remaining are getting more passengers on buses and increasing motor coach sales from private companies.

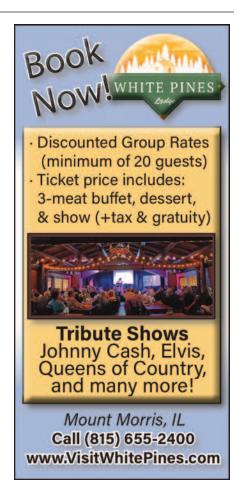
In contrast, the Demographic Crisis will not ease unless birthrates increase. What may be the obvious solution is for government leaders to understand that higher birthrates are necessary in order to have workers for the future to maintain their economy. This will require programs to reward marriage and to encourage larger families. Several countries are already working in this direction, but substantially more effort is required to turn around the declining birthrates.

While most of the concern over the driver shortage comes from the truck and motor coach operators, other industries are also affected. This includes transit bus drivers, postal workers, restaurant workers, pilots and even nurses. Shown here is a Van Hool transit bus operating for AC Transit in Oakland, California. AC TRANSIT.



Both the numbers from the various countries as well as the IRU numbers from operators in 25 countries show that the driver shortage situation is not getting any better. The reduced birthrates have caused increasing problems in finding drivers as well as workers for other industries. This photo shows your editor test driving a BCA coach in China. NBT.





### West Point Trailways President Robert Brisman Rejoins Trailways Board

by Pat Plodzeen

obert (Bob) Brisman, president of West Point Trailways, who served on Trailways Board more than a decade ago, has rejoined the Board with a major mission in mind — to serve and help further the brand with industry-leading technology that boosts revenue while appealing to new generations of riders.

"We get a lot of leads coming from Trailways," he said. "In the age of apps and technology, customers expect immediate replies. They don't want to speak to anyone, either. They just want the data, quickly."

Brisman, the third-generation to run West Point Trailways, Vails Gate, New York, is most interested in the organization's two newest technology ventures, the Trailways.com Web site and fulfilling Trailways vision for its Busic cloud-based, tripplanning and charter booking future. He knows internal and systemwide technology are important to a company's future.

#### **About West Point Trailways**

The West Point Trailways story begins with Brisman's industrious grandfather. Max Weiner was busy in the 1920s building bus bodies, parlor cars and transit vehicles before starting a bus service in 1947 for mason workers at expanding postwar construction sites in the West Point and Highland Falls, New York area.

Brisman's father, Jerome Brisman, who graduated from the United States Military Academy West Point in 1952 with a degree in engineering, worked as an engineer around the country for a decade before joining the business in 1962. At that time, the company's school bus operations began taking off and many of those contracts won back then are still in place with West Point Trailways today.

Bob Brisman and his brother Jay now lead West Point Trailways. Brisman joined after earning a bachelor's degree in Economics from Syracuse University and a career in finance working for firms in Manhattan and White Plains, New York. "When the insurance market spiked in 1987, I called my father asking if he had any interest in me coming to work for him," recalls Brisman. "My father was happy to have me on board. We had a good father-and-son relationship. I like the risk and reward along with the diversity of our business."



Robert Brisman, the president of West Point Trailways, has recently rejoined the Trailways Board. His primary interest in again serving on the Board is to help further the brand with industry-leading technology that boosts revenue while appealing to new generations of riders. Brisman started working for West Point Trailways in 1987 and previously served on the Trailways Board a decade ago. WEST POINT.

A fourth generation has joined the ranks. Brisman's son Ethan is learning the ropes starting in office reception booking trips. "We're not letting him drive, that's not his talent," jests his dad, who got his

CDL when he was 30 years old to drive school bus routes.

Primarily a school bus company, West Point purchased its first motorcoach in 1993 from Chuck Toohy, MCI's East Coast representative, who Brisman fondly recalls as having a John Wayne persona. They became a Trailways operator in June 2000.

Today, West Point has a fleet of 220 vehicles, including 16 motorcoaches for school, charter and tour operations. They keep three coaches exclusively for its contract with the military academy. The company operates Blue Bird activity buses for its daily West Point Tours operations serving West Point's campus and historical sites.

Describing himself as an escape artist by nature, Brisman is a big reader of novels. His two favorites are author's Jonathan Franzen's *Crossroads* and John Irving's *The* World According to Garp. "They write about life experiences and enjoyable challenges," said Brisman, who began playing guitar at the age of nine. He now owns four guitars including Fender electrics and likes to play in the style of Derek Trucks, a top guitarist whose music encompasses blues, rock, jazz and soul. Brisman jams with a group at a local school on Tuesdays. "Escape in the form of music keeps you in a good mood," he reasons. When it comes to business life, these are his three philosophies: anything is possible; start each day as if it is your first and have a purpose to be of service.

#### **Bus Tours Welcome**

Clinton, Missouri . . . where small town life is alive and well. We invite you to cruise the shoreline of Truman Lake or visit our town square, shopping and museum. The Golden Valley where we live offers a multitude of opportunities for your group to connect with our natural surroundings. Come share all the things we love: our events, our square, our museum, our nature and our people. We are Clinton and we are great people by nature.

For more information, call 1-660-885-8166, visit www.clintonmo.com or Like Our Facebook Page @Greater Clinton Area Chamber of Commerce





1.800.BUS.SALE

**CALL US TODAY!** 







The year 2022 marks the 50th anniversary of the incorporation of Liberty Coach. Conversions date back to 1968 when Frank and Jeanne Konigseder purchased a used Greyhound PD4104 and spent the summer converting it in their Libertyville, Illinois backyard. Shown here is one of the modern conversions the company continues to turn out today.

n the last week of this past January, a contingent of 50 or more late model Prevost motorcoaches converged on the Liberty Coach of Florida dealership in Stuart for the company's annual rally and open house celebration. Nothing unusual about that, outside of the size of the crowd – about 20 percent greater than usual – and the somewhat greater occasion they gathered to celebrate.

That, of course, was the 50th anniversary of Liberty's incorporation in 1972, an event many regard as the birth of the modern motorcoach conversion industry.

It was a humble beginning to say the least. Bus conversions at the time were limited to hobbyists and RV enthusiasts frustrated by the poor quality of Class A motor homes of the era. Such was the case of Frank and Jeanne Konigseder in 1968, when they bought a 1958 Greyhound passenger bus with more than two million miles and spent the summer converting it in their Libertyville (Illinois) backyard.

When they sold it the following summer, Liberty Coach was born.

It was slow going at first. Through most of the 1970s, Frank and Jeanne continued building coaches one at a time, buying and converting a succession of used Greyhound buses and reselling them as fast as they could finish. That all changed in the summer of 1978, when their trip to the FMCA convention in Sioux Falls, South Dakota led to a chance meeting with Andre Normand, president of Canadian coach manufacturer Prevost Car. Frank and Andre inked a handwritten contract on the spot, and the first Liberty Coach built on a Prevost La Mirage chassis debuted the following year.

Almost overnight, Liberty Coach was transformed from a sideline business to a major player in the luxury RV space. Production soared from one or two per year to 12 in 1980 and as many as 24 in subsequent years. Staff size grew proportionally, from a handful of part-time laborers to more than 50 skilled craftsmen and service

professionals. The company quickly outgrew the original North Chicago shop space they shared with the Konigseders' other family business, F.K. Pattern and Foundry, and in 1984 opened a new 15,700-square-foot production and office facility across the street.

Meanwhile, the industry itself was also growing. Liberty's success spawned a wave of new bus convertors, and Prevost was their chassis of choice. Competitors have come and gone over the years; some succeeded, many faded away, but none has ever been able to match Liberty's sustained success in the category. The reasons?

One lies in Liberty's commitment to engineering and technological leadership. The company's claim that it is responsible for "virtually every important breakthrough" in coach engineering and technology since 1979 is no exaggeration. From automatic coach leveling and CAD design in the 1980s, to programmable logic and integrated touchscreens in the 90s, to Crestron control systems and the first lithium



This 1958 PD4104 coach was purchased from Greyhound in 1968 and became the first coach converted by the Konigseders. It led to the incorporation of Liberty Coach in 1972 and the following 50 years of progress by the company.



Liberty Coach uses state-of-the-art equipment and components in today's conversions. The company is a major player in the luxury RV business with Prevost their chassis of choice. Shown here is the living area in a current conversion.

ion batteries in the 2000s, the list of Liberty achievements is simply unrivaled in the field. With Frank (Jr.) and Kurt Konigseder in charge – both engineering professionals by trade – you can be sure that list will only grow longer.

Which brings us to the second reason for Liberty's sustained success: family. Or to be more specific, three generations of the Konigseder family, and the passion they share for the RV lifestyle. At a time when family-owned and operated businesses are an ever-increasing rarity in every industry, it may seem hard to imagine a company like Liberty Coach dominating the Prevost conversion field for 50 years. On the other hand, if you really know the Konigseders, it is hard to imagine anything else.

## Let FMCA Help You Get Back To You



#### FMCA is your ally to navigating the RV world with confidence.

Here are a few of the great benefits that come with being a member of FMCA.



#### FMCAssist Medical Emergency & Travel Assistance Program

All members receive emergency medical evacuation coverage included with the membership. (over a \$200 value).



#### Roadside Rescue®

FMCA members can purchase roadside assistance at FMCA's discounted group rate.



#### FMCA's Tire Savings Program

Save hundreds of dollars on name-brand RV, light truck, and passenger tires.

FMCA Call 800-543-3622 or visit join.fmca.com/nationalbustrader/

### Meet Kobussen Trailways' Dave Meyerhofer

#### Three-Time Champion of UMA Maintenance Competition

by Pat Plodzeen



Dave Meyerhofer is a lead mechanic at Kobussen Trailways in Kaukauna, Wisconsin, where he focuses his talents on the 25 motorcoaches operated by the company. He took first place in the 2022 Maintenance interchange at the UMA show in Long Beach, making this his third win and seventh trophy in his eight years participating in this event. He is shown here during the 2022 competition, sponsored by ABC Companies, where he won a cash prize of \$2,500. UMA.

Trailways' signature red logo grabs attention and conveys fun, but that is not the only reason Trailways-branded coaches look so good going down the road. Credit also goes to knowledgeable, seasoned mechanics and maintenance teams who can not be beat for keeping Trailways' fleets pristine and running to perfection.

Meet Dave Meyerhofer, a lead mechanic at Kobussen Trailways in Kaukauna, Wisconsin. He took first place at the 2022 Maintenance Interchange at UMA Expo in Long Beach, California, marking his third first-place win and seventh trophy in his eight years participating in the industry's most

challenging maintenance competition. Meyerhofer also holds several amateur race car trophies and works on race cars as a hobby he enjoys with his son.

Sponsored by ABC Companies, the 24th annual UMA competition includes nearly two dozen professionals, representing motorcoach companies across North America, who compete by answering 50 questions on a written test and finding eight to 10 rigged defects on two motorcoaches in the fastest time. In the 2022 challenge, Meyerhofer was the only one to catch an incorrect rear backup light and achieved the highest overall score with a cash prize of \$2,500.

Meyerhofer attributes his mechanical aptitude to growing up on a farm where he fixed and repaired machinery. He joined Kobussen Trailways as a mechanic in 1990 out of high school, working on school buses. Now, with a fleet of 1,000 buses of all types, Meyerhofer focuses on his company's 25 motorcoaches and leads a team of technicians at the company's headquarters. He also trouble-shoots equipment issues at the company's 22 locations throughout Wisconsin. "Í got in with a very good company and plan to finish out my career here," says Meyerhofer. "I like my work and I treat the coaches like they are my very own."

Meyerhofer, who has taken "as many technical training courses from manufacturers as possible," recommends mechanics focus on electronics. "Anybody can change nuts, but today's new buses have 15 computers. You have to keep up your education to excel," he says.

Excellent roadside assistance is never far away when you are a Trailways carrier.

Meyerhofer knows first-hand the value of Trailways membership. "Breakdowns happen and just recently I contacted Thrasher Brothers Trailways in Alabama for assistance. Alan Thrasher himself went out to look after our coach," said Meyerhofer. "No one (in Trailways) ever turns anyone away and we won't either."

When not at a Kobussen garage, you will find Meyerhofer working on his two street stock Chevys, a '99 Monte Carlo and 2020 Camaro. His racing hobby started when he was 35, leading him to 10 stock car racing wins. Now retired from racing, Meyerhofer volunteers as crew chief for his son and nephew's racing team that participates in nearly 40 stock car races in the Mid-Am Racing Series each year in Wisconsin, Illinois and Iowa.

When not working on coaches, Dave Meyerhofer can often be found working on his two street stock Chevys, a 1999 Monte Carlo and a 2020 Camero. In earlier years, Meyerhofer was active in racing and had 10 stock car racing wins. Today, he volunteers as crew chief for his son and nephew's racing team. KOBUSSEN TRAILWAYS.







Marketing is a big factor in restarting your business following the pandemic. There are several ways to communicate with your customers including print, digital and social media. Keeping customers informed of what you have to offer is a good place to start with growing your business.

our small business has a Web site, and therefore a presence online. Do you really need to produce videos and utilize social media, too? In a word: Yes. Utilizing social media and video in conjunction with print media can broaden your audience, and ultimately help you grow your business. During this difficult time, marketing of all types is more important than ever. Social media is the least expensive option, so it is a good place to start. Make sure you are using every option available to you.

While it is true that more people are turning to the Internet for information, print is still an important component to the entire package, especially now. Misinformation online is not uncommon, and print is a reliable tool to help you reach your customers. Send out press releases with any updates on your business. This will help your customers

by providing them with useful information and it will remind customers you are still there, ready to serve them.

Did you know most people stop reading articles online after a single stroll on their phone? The higher the word count, the more likely you are to lose your readers toward the end of your release. Because of this, the most important thing you can do when writing a press release is to grab the attention of your readers from the get-go. Make sure your most important information is in the first paragraph of your press release.

Now is also a good time to introduce potential customers to your staff. Since they may not be able to meet you face-to-face, consider using press releases to tell a narrative. Maybe you have an employee who is celebrating an anniversary with your com-

pany. Consider writing a profile on that employee. Or maybe you have an employee who started with your company on the ground level and worked his or her way up to an upper level position. Use a press release to tell his/her story.

Send out newsletters via e-mail to share the same key information with customers. Keep in mind, however, that timing is key. You do not want to bombard your customers with e-mail after e-mail, which may cause them to discard the e-mail before reading it.

Taking out an advertisement in the local newspaper or a trade magazine or publication is also important. People often think spending money on advertising when business is slow is not a good idea, but that is not the case. Now is the time to spend the money to let people know you are still open. Let your customers know what you

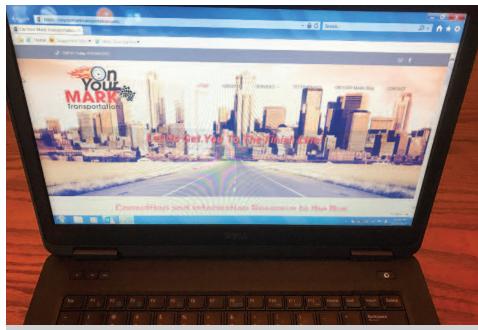
are doing to keep them safe. Sometimes, you must spend money to make money, and this is the perfect example. National trade publications can help you reach others in your industry while raising awareness of your business.

"Whether you are attempting to sell a used motorcoach, or perhaps a destination, print advertising still has an important place in marketing efforts," explains Mark Szyperski, president and CEO of On Your Mark Transportation. "A well placed advertisement can be easily retrieved when a potential client remembers the print ad but can not recall the right name to search online. They can go back to the magazine and easily find the advertisement for which they were looking."

Social media can be a beast, especially in an election year during a global pandemic. It is understandable if it is the last thing you really want to dive into right now, but here is the thing. In a time where your customers may not be able to reach you in person, social media – and video – become important ways to communicate with both established and potential clients.

"Especially now, with COVID-19 putting most people at home, there is increased user activity online," explains On Your Mark Transportation Social Media/Marketing Assistant Mika Vickery. "People can't go to stores. Maybe they don't feel like calling on the phone. But they can use social media to reach out to your company."

Your phones might be ringing less. You may have fewer customers utilizing your



Print, digital and social media each have certain advantages. Traditional print can be used with advertising, news releases and even mailings to customers. Online options include your Web site as well as social media and video.

services. That does not mean your online presence needs to take a step back, too.

Whereas a Web site is more stagnant, social media allows businesses to update their customers in real time. You can update business hours, safety precaution information and specials at any time, and your followers can see those updates almost automatically, Vickery says.

You are an expert in your industry – make sure your customer base knows that.

Remind them you are still a resource to them. Many businesses have, or should have, already updated their Web sites with important COVID-19 information toward the top of their homepages. Update your social media accounts with similar information to let customers know what you are doing to keep your employees and customers safe. If you change your business hours, social media can help you inform your customers of those changes.

Potential clients searching social media will also see you are taking their health seriously. They may choose your business over a competitor if they can see all the precautions you are taking.

Make sure you include hashtags and your location, and pay attention to the timing of your posts to help boost engagement. Using your location and some keywords will help your business come up in a search when potential customers are browsing.

"Using, for instance, 'Nashville, Tennessee' in a Facebook search with hashtag 'motorcoach industry' will help boost your post organically," Vickery says. As for timing, while the Facebook algorithm changes frequently, the latest information suggests posting at least every 23 hours, Vickery explained. That will also help boost your posts, so they show up frequently in feeds. This should help you avoid having to boost your posts monetarily.

Using video is another way to gain potential customers. In fact, video is one of the strongest tools a business can use to better showcase what they do on their Web sites and social media platforms. YouTube is the

Video can be an effective way to reach out to your customers and potential customers. It can provide a visual review of what you have to offer. It also has the advantage that customers can go back and look at it again and again.



second largest search engine behind Google. While some might think of YouTube as just a Web site, many people now use it to search for myriad of things including business information, how-to videos, entertainment videos and more.

On Your Mark Transportation Video Intern Sydney Brashear explains that when you upload a video to YouTube, it stays there until you decide to delete it. Consumers love this, because if, for example, they are looking at a how-to video, they can pull up the video again and again should they need to. Perhaps you can produce a video on a tour destination, or on how to successfully host a group trip.

These videos do not have to be highly produced and costly. Using your phone and simple editing apps can still produce a great video. If the idea of that seems daunting, consider checking with your local high school or community college to see if they have a video production program. Students may very well be looking for projects for some hands-on experience.

Using video may also be a good way to target baby boomers, Brashear says. Potential customers who can not come in to check out your business in person may enjoy watching a video that introduces your staff. Getting to see the faces behind your business may give customers peace of mind. In addition, video is a great way to let customers know what you are doing to keep them safe during the COVID-19 pandemic.

Google and other search engines factor in several things when ranking your Web site on search. One of those key ingredients is video. Video can help increase the number



Mark Szyperski poses with a PD4104 coach. Szyperski is the president and CEO of On Your Mark Transportation, a company that provides marketing assistance to bus companies.

of clicks to your site. If you put a video on youtube.com, for example, and you use the embed code on your site, you will likely gain new visitors. If you post your videos to your social media accounts using the link to your Web site, you will also increase your Web site clicks.

An up-to-date Web site is also important when reaching new customers. If there is a golden rule to Web sites, On Your Mark Transportation Web site designer and owner of bigmeankitty.com Letha Edwards says content is king. New and fresh content is key to drawing people to your site – and keeping them there – and video helps meet that goal. When consumers view a video on your site, they are more likely to stay on your page longer than they would if they were just reading your About Us and Contact information, for example.

Brashear suggests placing a video explaining who you are as a business, or a video with important information – such as COVID safety measures – toward the top of your site. While she warns of having a video open as soon as a customer clicks on your site, she says placing it about a scroll down from the top is best. Just like you should have a tab for news or blogs on your site, consider a tab for video. That way, customers can click on the tab and view all the videos in one easy-to-find place.

Concerned about which platform to try first or focus your attention on? Vickery suggests starting with Facebook. While Twitter limits the amount of characters you can use and Instagram is a great way to highlight photos, Facebook is a better bet for businesses.

"Your Facebook business page will allow you the most features," Vickery says. "You can give a description of your business in the about section, list your business hours, link your business page to your Web site and track user activity."

Still, it is important to have a presence on other social media sites. It never hurts to engage your customers in various ways – be it asking them to send in photos or tag you in their posts – especially if they had a positive experience traveling with your com-



Use print, digital and social media to keep your customers informed of what you are doing. In addition to mentioning safety features, you can also tell them about the new coaches you just purchased. Shown here is a new Van Hool coach ready for delivery at the ABC facility in Winter Garden, Florida. ABC COMPANIES.

pany. To ask them to engage, you need to be on the platforms your customers are using.

Businesses should also consider utilizing Google My Business, Vickery adds.

Google My Business is another free social media platform that allows you to share your information with current and prospective clients. If you have ever wondered how companies get their names and locations on maps or how they are boosting their Google ranking, they are using Google My Business to do so.

"Google analytics is tied in with social media and your Web site. You can track where people are searching your business from, how long they are staying on your site, manage reviews and list your services and products," said Vickery.

For more information, type "Google My Business" into the Google search engine. When your social media and Web sites are current and actively engaging customers, they will only serve to supplement your newsletters, press releases and advertisements in print. Used in conjunction, Web content and print content create the ultimate package for your customers. Remember, now that some businesses are failing to advertise, it is the perfect time for you to get your name out front.

On Your Mark Transportation LLC is a consulting firm to the ground passenger transportation industry. This article was written by Amy Nixon, who writes press releases and blog content for their clients. With experience in transit, school bus, luxury transportation and motorcoaches, OYMT can bring a full range of extra services to an organization. Contact them at OnYour-MarkTransportation.com or (615) 669.0107.

Tell your customers and potential customers what you have to offer using print, digital and social media. Safety features, new buses and special features are worth talking about. This is a special interior in the back of a Van Hool coach. ABC COMPANIES.















#### MAKE HISTORY ON A BUS TOUR!

Sit back, relax, and allow our costumed step-on guides to transport your guests back in time to April 19, 1775. You'll explore the notable sites and historic houses around Lexington Battle Green, Minuteman National Park and the Old North Bridge in Concord. Or, create your own custom itinerary! Tours available seven days per week.

To book a step-on guide and custom tour contact: Casey Hagerty, Tourism Coordinator 781-698-4568 or email at chagerty@lexingtonma.gov. All tours depart from the Lexington Visitors Center;

1875 MASSACHUSETTS AVENUE, LEXINGTON

#### **ENJOY:**

- Dedicated Bus Parking
- Restrooms
- Gift Shop

VISIT US ONLINE:

TourLexington.us

Don't wait. Explore Lexington Today!

## Regulations and Safety

by Dave Millhouser



A recent accident brings up the question of whether we should train drivers to pass required tests or should they be trained to deal with the real world and not just the tests. Unfortunately, there are situations where tests imposed by regulators may not prepare the drivers for what is actually required. There may be a substantial difference between the tests and what is required for safety. DAIMLER/SETRA.

siana Airline's accident in San Francisco offered a number of lessons for those of us in the transportation business. Miraculously there were only three deaths. All were students who were thrown from the plane. Every passenger who remained within the fuselage survived. Just as in motorcoach accidents, keeping folks inside greatly improves their chances. Seat belts worked here.

There were other, perhaps more obscure, things we can learn from this crash and its aftermath.

As long as I can remember, whenever there was a major accident, the federal authorities were reluctant to divulge information until the investigation was complete. One reason for this is that, in addition to any quickly discovered facts, there is often a context that has impact (pardon the pun), and it

takes a while to fully understand it. In this case there was a rush to the media with preliminary conclusions. Facts were transmitted, without putting them in perspective. Their reasoning is obscure, but could part of it be an effort to make the regulators appear visible and relevant?

It was quickly noted that the pilots had minimal actual experience on this aircraft model. What seems to be coming out later, and more quietly, was that the airline was generally in compliance with regulations. Golly gee – maybe part of the context is that the rules in place were either ill-conceived or irrelevant. Some sources have indicated that Asiana was training pilots to pass required tests, rather than deal with the real world.

Maybe it is me, but are not there some parallels here to what we are seeing in FMCSA's aggressive compliance push?

First, is there a problem? Asiana sure had one, but are there statistics that show that the motorcoach industry has a growing safety problem? Obviously perfection is a lofty goal, but what if the pursuit wrecks an industry that is already performing well? (Driving people into cars that are more polluting and less safe).

Until Asiana's boo-boo, airlines had been near perfect for years, but airplanes do not travel roads surrounded by drivers of dubious competence. Last time I checked, major pilots made more money than bus drivers (hence airlines can be a bit pickier in hiring). Is there a demonstrated connection between what they are measuring and safety? There probably is an association between some of the categories and real world safety, but which ones?

Currently we are unavoidably acting the same way Asiana might have – complying at great expense with regulations that may have only a fleeting acquaintance with real safety. It is akin to students memorizing things to pass a test, without really understanding its meaning.

How is it that several companies have been declared "imminent dangers" shortly after good reviews? Please understand, some were troubled operators, but what of

It is very difficult to compare piloting a plane with driving a bus. The pilot has a considerable advantage in being separated from other traffic by substantial distances with airways and ground control. In comparison, the bus driver has to contend with other traffic on all sides, with few of these vehicles under the control of professional drivers. BLENDE12.

the officials that rated them "satisfactory?" What were they measuring?

It is anecdotal, but it seems that most of the companies on bussy death row are relatively small, lacking resources to contest regulators. Is that by design? We have not yet seen a GBB (great big busline) truly hammered. Certainly disrupting one of them would create major heartburn for the traveling public, but are they really safer, or simply "too big to fail?"

If the goal is to protect the **most** passengers, is not this where a watchdog can get the most bang for their buck? One executive

(and wiseacre) said, "Regulators do not practice actuarial science, they practice political science."

Whether planned, or as an unforeseen effect, the cost of compliance is making it increasingly difficult for small and mid-sized operators to survive. The likely result is a smaller industry with some GBB's becoming "too big to fail." That may benefit them, but the traveling public and the nation will be hurt.

It bears repeating from an earlier scribbling – GBB's should be careful what they wish for, because if they get it, they could end up in the same place as the private transit operators in ye olden days.

My friend (the wiseacre) says, "It is interesting that the FMCSA defends its CSA and SMS programs at every turn, and promotes its SaferBus app in press releases it puts out about shutting down some company. At the same time, and out of the other side of its mouth, it admits it does not even have enough information on more than one-third of all Motorcoach operators to assign basic scores."

Regulators often make the point that they are there to help us, to improve the industry. Certainly they are correct in assuming that safety is good for business. However, the folks doing enforcement, for the most part, have little understanding of the nuts and bolts of transportation, and are not really accountable for mistakes they make. We, and the public, pay for their errors.

In a final comparison with the Asiana tragedy – there were only three deaths, but one of them was a young woman who was run over by a rescue vehicle coming to "help" her.

Overregulation does not help the consumer. If the regulations force passengers off the buses and into private cars, their chances of being involved in an accident increase substantially. Buses are not only safer to ride but tend to survive accidents better. MCI.





## **Photographs**

Readers and advertisers are encouraged to send in photographs or slides of buses or equipment that may be of special interest to our readers. Please, include a list explaining what makes the pictured item different, unusual or interesting. 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.

Here are a few more photos from Dave Millhouser taken at the recent Spring Fling in Hershey, Pennsylvania on June 3 and 4.

At right: Not all of the buses on display at the Spring Fling are historical. Shown here is a new Irizar i6 that was driven in by the Irizar staff. To the rear is a new 2022 Van Hool C2045 battery-electric coach brought by the ABC staff.

Below: As has been traditional, the Friends of the New Jersey Transportation Heritage Center drove several of their historic buses to the event. In the center of the photo are several MCI Commuter coaches and a PD4104 that operated in New Jersey with a PD4106 on the right. The 1957 PD4104 won the award for the oldest bus.







## The Curious Coachowner

#### **Number 284 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. When will the bus industry go back to the way it was prior to the pandemic? — Several Readers

A. This does seem to be the most popular question in the bus industry right now. The answer is that there is no answer. I have yet to see anyone in the industry stick their neck out and offer a date on which things will "go back to normal." Other people are saying it may take years. There are numerous factors involved and the best we can do is to share some of what we know and have been told in regard to operations and purchasing.

#### **Operations**

We saw estimates saying that bus industry operations were back to somewhere between 60 percent and two-thirds of prepandemic levels at the end of 2021. However, actual numbers vary across different industry segments.

It appears that school bus operations have come back the best. Scheduled service, both transit and intercity, has generally come back to a substantial extent but continued progress appears to be slow in some places. Bus tours have come back nicely, presumably because of pent-up demand while people were forced to stay home during the pandemic. Charters, other than tours, have been slow coming back in some areas. social distancing concerns may be a factor here.

Results of the pandemic have not helped the situation. Some people retired during the pandemic and others left the work force. There are still many people working from home and in spite of the views of Elon Musk, I do not expect to see this change much in the future. While manufacturing, retail and similar operations cannot avail of staff working from home, there are places where it does well. The accounting firm that works for us closed one of their offices and has staff working from home.

Many in the bus industry expected that the record high fuel prices would drive more people to buses, but results have been somewhat disappointing. Some have suggested that interest in social distancing may be offsetting much of the impact of the high fuel prices. Where we do see an impact is in fewer long distance automobile trips, but many of these do not necessarily translate into bus ridership.

City transit operations are also having their problems. One recent report suggests that 15 percent of local trips in New York City have gone to the Uber and taxi operators. While some say that this is a result of social distancing, others feel that fixed route transit buses are not going where the people want to go and suggest that maybe it is time to re-think city transit.

Many transit operations are having ridership problems. Some have had to cut back on service while others have discontinued charging fares or are thinking about it. When the cost of fare collection exceeds the revenue generated, it is not a good thing. Will the public be willing to continue subsidizing public transit where the riders are few and the costs are high?

The "Elephant in the Room" is the increasing Demographic Crisis and reduced birth rate that has already hit hard in developed countries, particularly Asia and Europe. There are countries in Asia and Europe that have put in place special programs that reward families that have more children. China has gone from a one-child policy to a three-child policy. Italy has already had its second annual national meeting dealing with its accelerating birth crisis and is working on a Family Act with incentives for more babies.

This same situation is now hitting the United States and Canada. We already have a shortage of truck drivers, bus drivers, pilots, postal workers, nurses and others. With fewer children our society is increasingly aging and we have more people supported by Social Security than paying into it. What

will happen when we have too many seniors and not enough young people?

One thought is why are other countries taking action to increase their birth rate and the number of workers while the United States does not seem to be concerned? The second thought is that the experts are fearful that fewer workers will lead to less production which in turn could cause a recession. How will this impact the bus industry?

#### **Purchasing**

While operations and passengers impact the bus operators, the level of purchasing impacts the bus supply industry. The industry is simply not going to go back to normal until bus purchasing reaches, or at least comes close to, pre-pandemic levels.

Transit bus purchasing is coming back nicely. There are two reasons for this. One is that virtually all orders are subsidized with government money. The second is that the transit industry is moving strongly to zero-emission buses. As a result, a substantial percentage of new transit sales are for buses with battery-electric or hydrogen fuel cell power. We expect to see this continue on in the forseeable future.

The one negative is that some of the researchers are worried that a substantial increase in electric vehicles could overload the capacity of our electric grid.

In the private sector, the situation is substantially different. Other than the CERTS funding, private operators do not get government money to buy buses, and right now there is a surplus of used buses on the market. Hence, it is difficult to trade in a current bus as a down payment on a new one.

As a result, new motorcoach sales are down significantly. Worse yet, the numbers we see show that more than half of the new coach sales are commuter coaches going to government agencies.

Based on what we know and suspect, it appears that new U.S. motorcoach sales in 2022 may come close to 1,000 units with more than half going to government agencies. If we want to see the bus industry come back to pre-pandemic levels, we need to increase private new motorcoach sales.

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

#### **BACK ISSUES**

#### EVERY ISSUE IS NEW UNTIL YOU HAVE READ IT!

NATIONAL BUS TRADER continues to receive requests on the availability of back issues so that readers can either locate desired information or obtain missing issues.

While they last, the following back issues are available. Issues beginning with June, 1979 thru current are \$3 – US, \$4.50 – Canada and \$5 – International (US) each postpaid.

Several issues are already "out of print," hence we suggest that you indicate second choices. We reserve the right to refund money if issues requested are no longer available.

```
□ Vol. II, No. 7 — June, 1979
□ Vol. II, No. 10 — September, 1979
□ Vol. III, No. 4 — March, 1980
□ Vol. III, No. 5 — April, 1980
□ Vol. III, No. 6 — May, 1980
□ Vol. III, No. 9 — August, 1980
□ Vol. III, No. 10 — September, 1980
□ Vol. III, No. 12 — November, 1980
□ Vol. Vol. 7 — April 1981
☐ Vol. III, No. 12 — November, 1980
☐ Vol. IV, No. 5 — April, 1981
☐ Vol. IV, No. 6 — May, 1981
☐ Vol. IV, No. 7 — June, 1981
☐ Vol. IV, No. 9 — August, 1981
☐ Vol. IV, No. 10 — September, 1981
☐ Vol. IV, No. 11 — October, 1981
 □ Vol. V, No. 2 — January, 1982

□ Vol. V, No. 3 — February, 1982

□ Vol. V, No. 6 — May, 1982

□ Vol. V, No. 11 — October, 1982

□ Vol. V, No. 12 — November, 1982
□ Vol. V, No. 12 — November, 1982

□ Vol. VI, No. 2 — January, 1983

□ Vol. VI, No. 5 — April, 1983

□ Vol. VI, No. 7 — June, 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. 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. 5 — April, 1986

□ Vol. IX, No. 5 — May, 1986

□ Vol. IX, No. 6 — May, 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. 11 — October, 1987
    □ Vol. X, No. 12 — November, 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. 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. 12 — January, 1990
□ Vol. XIII, No. 4 — March, 1990
□ Vol. XIII, No. 5 — April, 1990
□ Vol. XIII, No. 5 — April, 1990
□ Vol. XIII, No. 7 — June, 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. 1 — October, 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. 7 — June, 1992
□ Vol. XV, No. 10 — September, 1992
□ Vol. XV, No. 10 — September, 1992
□ Vol. XVI, No. 7 — June, 1993
□ Vol. XVI, No. 11 — October, 1993
□ Vol. XVII, No. 12 — November, 1994
□ Vol. XVII, No. 3 — February, 1994
□ Vol. XVII, No. 4 — March, 1994
□ Vol. XVII, No. 6 — May, 1994
□ Vol. XVII, No. 10 — September, 1994
□ Vol. XVIII, No. 10 — September, 1995
□ Vol. XVIII, No. 3 — February, 1995
□ Vol. XVIII, No. 4 — March, 1995
□ Vol. XVIII, No. 5 — January, 1995
□ Vol. XVIII, No. 6 — May, 1995
□ Vol. XVIII, No. 8 — July, 1996
□ Vol. XIX, No. 9 — January, 1996
□ Vol. XIX, No. 11 — October, 1996
□ Vol. XIX, No. 12 — November, 1996
□ Vol. XIX, No. 13 — February, 1996
□ Vol. XIX, No. 14 — March, 1996
□ Vol. XIX, No. 15 — Aparust, 1997
□ Vol. XX, No. 5 — April, 1997
□ Vol. XX, No. 6 — May, 1997
□ Vol. XX, No. 6 — May, 1997
□ Vol. XX, No. 8 — July, 1997
□ Vol. XX, No. 9 — Averuet 1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       □ 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. 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. 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. 6 — May, 2005
□ Vol. XXVIII, No. 6 — May, 2005
□ Vol. XXVIII, No. 9 — August, 2005
□ Vol. XXVIII, No. 10 — September, 2005
□ Vol. XXVIII, No. 10 — September, 2005
□ Vol. XXVIII, No. 10 — September, 2005
□ Vol. XXVIII, No. 11 — October, 2005
□ Vol. XXVIII, No. 12 — November, 2006
□ Vol. XXVIII, No. 12 — November, 2006
□ Vol. XXVIII, No. 12 — November, 2006
□ Vol. XXVIV, No. 3 — February, 2006
□ Vol. XXVIV, No. 4 — March, 2006
□ Vol. XXVIV, No. 5 — April, 2006
□ Vol. XXVIV, No. 7 — June, 2006
□ Vol. XXVIV, No. 10 — September, 2006
□ Vol. XXXVIV, No. 10 — September, 2007
□ Vol. XXX, No. 5 — April, 2007
□ Vol. XXX, No. 5 — April, 2007
□ Vol. XXX, No. 5 — April, 2007
□ Vol. XXX, No. 6 — May, 2007
□ Vol. XXX, No. 7 — June, 2007
□ Vol. XXX, No. 10 — September, 2009
□ Vol. XXXI, No. 5 — April, 2008
□ Vol. XXXI, No. 5 — April, 2008
□ Vol. XXXI, No. 10 — September, 2009
□ Vol. XXXII, No. 10 — September, 2009
□ Vol. XX
    □ 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. 10 — September, 1998
         ☐ Vol. XXII, No. 2 — January, 1999
☐ Vol. XXII, No. 4 — March, 1999
       ☐ Vol. XXII, No. 5 — Maich, 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. 9 — August, 1999
□ Vol. XXII, No. 10 — September, 1999
□ Vol. XXII, No. 11 — October, 1999
□ Vol. XXII, No. 12 — November, 1999
□ Vol. XXIII, No. 12 — November, 1999
□ Vol. XXIII, No. 3 — February, 2000
□ Vol. XXIII, No. 3 — February, 2000
□ Vol. XXIII, No. 5 — April, 2000
□ Vol. XXIII, No. 5 — April, 2000
□ Vol. XXIII, No. 6 — May, 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. XXIII, No. 12 — November, 2000
□ Vol. XXIII, No. 3 — February, 2001
□ Vol. XXIII, No. 3 — February, 2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ☐ Vol. XXXIII, No. 1 — December, 2009
☐ Vol. XXXIII, No. 2 — January, 2010
☐ Vol. XXXIII, No. 3 — February, 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. 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. 3— February, 2011
☐ Vol. XXXIV, No. 3— February, 2011
       □ 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. XXXIV, No. 3— February, 20:
□ Vol. XXXIV, No. 4— March, 2011
□ Vol. XXXIV, No. 5— April, 2011
□ Vol. XXXIV, No. 6— May, 2011
□ Vol. XXXIV, No. 8 July, 2011
□ Vol. XXXIV, No. 9 August, 2011
  □ 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. 11 — October, 2001
□ Vol. XXIV, No. 12 — November, 2001
□ Vol. XXV, No. 3 — February, 2002
□ Vol. XXV, No. 3 — February, 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. 9 — August, 2002
□ Vol. XXV, No. 11 — October, 2002
□ Vol. XXVI, No. 6 — May, 2003
□ Vol. XXVI, No. 6 — May, 2003
□ Vol. XXVI, No. 8 — July, 2003
□ Vol. XXVI, No. 9 — August, 2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ☐ 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. 1 December, 2013 ☐ Vol. XXXVI, No. 2 January, 2013 ☐ Vol. XXXVI, No. 3 February, 2013 ☐ Vol. XXXVI, No. 4 March, 2013 ☐ Vol. XXXVI, No. 6 May, 2013 ☐ Vol. XXXVI, No. 7 June, 2013 □ Vol. XXXVI, No. 9 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. XXXVI, No. 11 October, 2013
  □ Vol. XXXVI, No. 12 November, 2013
  □ Vol. XXXVII, No. 1 December, 2013
  □ Vol. XXXVII, No. 3 February, 2014
  □ Vol. XXXVII, No. 3 February, 2014
  □ Vol. XXXVII, No. 5 April, 2014
  □ Vol. XXXVII, No. 6 May, 2014
  □ Vol. XXXVII, No. 7 June, 2014
  □ Vol. XXXVII, No. 7 June, 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. 1 Pebruary, 2015
  □ Vol. XXXVIII, No. 3 February, 2015
  □ Vol. XXXVIII, No. 6 May, 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. 9 August, 2015
  □ Vol. XXXVIII, No. 9 August, 2015
  □ Vol. XXXVIII, No. 10 September, 2015 □ Vol. XXXVIII, No. 10 September, 2015
  □ Vol. XXXVIII, No. 11 October, 2015
  □ Vol. XXXVIII, No. 12 November, 2015
  □ Vol. XXXIII, No. 1 December, 2015
  □ Vol. XXXIIX, No. 1 December, 2016 □ Vol. XXXIX, No. 1 January, 2016
  □ 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. 9 August, 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. XXXIX, No. 12 Povember, 2016
  □ Vol. XX, No. 1 December, 2016
  □ Vol. XI., No. 2 January, 2017
  □ Vol. XI., No. 3 February, 2017
  □ Vol. XI., 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 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 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

☐ 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

- 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

☐ Vol. XXXXI, No. 2 January, 2018

- Prevost Again Moves Ahead in Support, Service and
- 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 Ormaiztegi

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 amd HT35 Coaches

  The Pacific Bus Museum From Hobby to Formal Museum

Twenty Tips on Hiring Bus Drivers
Van Hool Builds Bus Factoryin Morristown,

□ 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

Uol. 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
- Vali Flooi S CA33 Shiff in Flazze, 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 Bitimec 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

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 Scenicruiser

  ☐ 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

□ 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 Clobal Economy.

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 CoachesEmerald Luxury Coaches Unveils First H3-45

- 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

 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 1035 tion 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" Flxibles of Pikes Peak
 Uol. XXXXII, No. 12 November, 2019
 30 Years of Foxy Traval & FTI Coach

30 Years of Foxy Travel & FTI Coach
 Fleet Graphics is an Art at ABC Companies
 MCI debuts 2020 model line-up with a SNEAK PRE-VIEW of the battery-electric D45 CRTe LE CHARGE at Bay Area Reliability Symposium on October 1
 Vol. XXXXIII, No. 1 December, 2019

- □ 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
   Muserus of Pur Transportation to Memory ith

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

 Heroes' Honeymoon
 Philadelphia to New York Every Half Hour
 Vol. XXXIII, No. 4 March, 2020
 Busworld 2019 in Brussels, Part II
 The Changing Bus Industry
 Vol. XXXIII, No. 5 April, 2020
 ABA Marketplace 2020 in Omaha
 Procedure and Liability After a Collision with an Automated Vehicle

Automated venicle
 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?
 IMA Meteorood Expo 2000 in Nashville

• 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

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

### Classified

Classified ad rate is \$30 per issue for first 25 words, 25 cents for each additional word. Rate includes Internet access. Name, address, zip and phone number are not included in word count. The total number of words in a classified ad can not exceed 70. Rates apply on each ad individually - the rate for multiple insertions is the total of each ad figured individually. Free classified ads are acceptable ONLY when submitted on or with your free classified ad certificate. Display advertising rates on request.

#### 1 - BUSES WANTED

Seeking 102D3 converted by Custom Coach. Prefer motor home interior with side aisle or semi-side aisle. Please provide details by e-mail to safety@busmag.com or phone Larry at (815) 946-2341.

#### 6 - MOTOR HOMES FOR SALE

1991 Hawkins motorcoach. 3208T CAT, 35 ft. with all awnings. Alcoa wheels, landing/docking lights, heated mirrors, ducted heat, levelers, two air conditioners, propane generator, exhaust brake. Always stored indoors. Asking \$15,000. Contact Dallas in MI at (269) 591-2564. 

☆

MCI MC5A '67 (shell). 8V-71, 4-speed. For sale to highest bidder. Call (928) 358-6415 or (505) 713-9242 in AZ.

1956 Flxible coach – old conversion. Phone (802) 948-2886 in VT for details. 
☆

Please mention National Bus Trader when answering advertisers

#### 10 - PARTS AND EQUIPMENT

Detroit Diesel engines, parts. New and used. S53, S71, S60, S92. Also will rebuild or repair your engine. Leid Diesel Service, 2952 W Carson City Rd., Sheridan MI 48884. Phone (616) 754-5871.

6V-92T Detroit Diesel engine. Fresh overhaul. In storage. Spent \$4,700. Make offer. Phone (815) 262-0587 in IL. ☆

#### 14 - NOTICES

Visit our 40+ vintage bus collection most Saturday mornings at Lakewood NJ Bus Terminal. Join: Friends NJ Transport Heritage Center (\$30 annually). See/learn: www.friendsnjthc.org. 

☆

#### **16 - MEMORABILIA & COLLECTIBLES**

Signed copy of Flxible A History of the Bus and the Company by Robert Ebert, PhD. \$55 includes shipping. Contact Dionne in ME at (207) 713-1499 or busman04280@yahoo.com. 

☆

#### NOTICE

Please make sure we have your email address so you are able to access your digital edition of NATIONAL BUS TRADER. Email readers@busmag.com or phone the office at (815) 946-2341.



Historic train excursions through the St. Croix Valley from Osceola, WI. Groups and charters welcome. 651-291-0074 | barb@trainride.org www.trainride.org

#### TWIS-LOC GATE VALVE Since 1964



Absolutely the finest dump valve ever.

- · Air powered version since 1985.
- · All parts easily replaceable

#### **DUPREE PRODUCTS**

Phone: (888) 668-4288 Fax: (905) 374-3796 www.dupreeproducts.com

#### Advertiser's Index

Complete Coach Works
Coral Castle Museum
Dupree
FMCA
Greater Clinton Area Chamber of Commerce
Irizar USA
Midwest Bus Corporation
Minnesota Transportation Museum
Motor Coach Industries
Prevost
Rocky Gap Casino
Starved Rock Lodge & Conference Center
Temsa Global
Town of Lexington
Visit the Colony
White Pines Lodge
ZF

#### **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 Motor-coach 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.



## UNMATCHED EXPERTISE. UNPARALLELED SERVICE.

The world's most advanced coaches deserve the best in support, and that's precisely what Prevost provides. No other service network delivers more technical expertise and years of hands-on experience. It's a commitment we make to your drivers, your passengers, your schedule and your bottom line.



## 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.

