6 Editor’s Notebook
   Greg McDonnell

8 On the Record
   Kevin P. Keefe, Greg McDonnell

10 Motive Power Review
   Tables, tallies, and trends
   Chris Guss

18 Big Six by the numbers
   A census of the Big Six fleets

20 EVO call home
   How Wabtec monitors 17,000 locomotives around the globe
   Bill Stephens

24 Tip of the hat
   Norfolk Southern’s Dash 9-40Cs
   Samuel Phillips

26 Alco’s exit ... an accounting
   D.P.M.’s Alco obituary
   David P. Morgan

30 Tougher than the rest
   Delaware-Lackawanna’s enduring Alco allegiance
   Greg McDonnell

40 That Motown sound
   Classic EMD Geeps
   Michael Ross Valentine

42 F59
   The inside story on EMD’s F59PH and F59PHI locomotives
   David R. Busse

48 ‘Sorry to hear of the Falcon’
   An unforgettable encounter with a Southern Pacific DH643
   Ted Benson

50 Alco gallery
   Alco survivors across the country and around the world

58 Two Centuries
   A pair of Spokane, Portland & Seattle Alcos reunite in Scranton
   Garland McKee

62 Lackawanna legacy
   Delaware, Lackawanna & Western 409 lives on
   John K. Howell

64 Union Pacific 4141
   The first and final miles of a legendary presidential locomotive: “George Bush 41”
   Michael E. Iden

72 A-B-B-B-B-A
   Shades of the cab-unit era, BNSF Geeps in classic formation on the Kettle Falls Sub in Washington
   Tom Danneman

78 Not in the guidebooks
   A rare operating RS1
   David Baer

80 Six-motors from Montreal
   The history of Montreal Locomotive Works’ six-motor Alcos
   Ken Goslett

88 Alco interchange
   WNY&P’s Oil City Branch
   Kevin N. Tomasic

90 Oklahoma!
   Exploring land of red dirt roads, grain trains, and vintage Geeps
   Ryan Gaynor

96 Mundane no more
   Recalling L&N Alcos in Kentucky
   Ron Flanary

98 Together, forever
   Lennon and McCartney, Jagger and Richards, Alco and GE
   A. Ross Harrison

On the cover:
TOUGHER

LIVES
Delaware-Lackawanna’s enduring Alco allegiance

Story and photos by Greg McDonnell

In the poker game of power, Alco always seemed to have one playable hand left. Its last was the C636 riding brand-new high-traction trucks — more powerful than GE’s U33C, equal in output to EMD’s SD45 but with four fewer cylinders.

— David P. Morgan, Trains, January 1970

Fifty years after Alco Locomotive Inc. folded its cards and called it quits in the locomotive manufacturing business, Delaware-Lackawanna C636 3642 — the sole survivor of that “last playable hand” — basks in the cool light of a brilliant spring morning at Bridge 60 in Scranton, Pa. The low sun highlights the complex curves of its hi-ad trucks, the “high-traction trucks” that once offered such promise. Its gray-and-white dress, the Alco demonstrator-inspired paint scheme of D-L parent Genesee Valley Transportation, bears evidence of years of hard work hauling tonnage up and down Pocono Mountain grades. The Alco 16-251E engine under its hood is as robust as ever, faithfully delivering on the builder’s promise of 3,600 hp with four fewer cylinders than the V-20 645 powering the competition’s SD45. The historic significance of the big Alco, turned out of Schenectady on April 18, 1968, as Penn Central 6342, is of no concern to the railroaders going about their business in the yard. Nor is its presence particularly notable. It’s just one of 13 Alco-powered locomotives called for duty at Bridge 60 on this May 2019 morning.

Pounding to a four-cycle beat, a 176-cylinder, 44,600-hp, all-Alco chorus fills the morning air as crews marshal power and build trains set to depart in three directions out of the onetime Delaware, Lackawanna & Western terminal. It’s an Alco-powered baker’s dozen comprised of nine different models: RS3, RS11, C420, C424, C425, and C636 from the Schenectady catalog, and M420, M630, and M636 from Alco’s Canadian affiliate Montreal Locomotive Works. Montreal continued to produce Alco-powered locomotives for nearly 20 years after Schenectady shut down.

Delaware-Lackawanna 3642, the last C636 in existence, awaits the call to duty at Bridge 60 in Scranton, Pa., May 20, 2019.
MLW carried on as MLW-Worthington until Bombardier bought the business in 1975. Bombardier closed the Montreal plant in 1988 and sold the facility to GE. On the yard lead at Bridge 60, it’s like 1969 and 1988 never happened. The erstwhile American Locomotive Co. may have pushed away from the table and its famed Schenectady works fallen to the wrecking ball, but Alco is anything but dead. Not in Scranton.

Delaware-Lackawanna is the busiest railroad in the shortline and regional portfolio of Genesee Valley Transportation. D-L employs some 20 Alco and MLW locomotives to serve an 88-mile network of Scranton-area rail lines owned by the Pennsylvania Northeast Regional Railroad Authority. The trackage consists of former Conrail and Delaware & Hudson lines including the mountainous Scranton-Portland, Pa., segment of the onetime Delaware, Lackawanna & Western main line, the Scranton-Carbondale portion of the D&H Penn Division, and a revived Scranton-Minooka remnant of the former Lackawanna & Wyoming Valley “Laurel Line,” a onetime interurban electric line that includes the 4,750-foot-long Crown Avenue Tunnel and a switchback to reach industrial customers at the end of the Minooka Spur.

An Alco allegiance

In the mid-2000s, Lackawanna County re-electrified Laurel Line trackage between Steamtown in downtown Scranton and Montage Mountain in Moosic, where a new station was established near PNC Field, home of the New York Yankees Triple-A affiliate the Scranton/Wilkes-Barre Railriders. D-L Alcos operate under Laurel Line catenary between Steamtown and a connection with the Minooka Spur at Virginia. Temporal separation blocks govern shared use of the route when restored Philadelphia Suburban Transportation Co. Brill trolleys are operating seasonal excursions for the Electric City Trolley Museum.

Alco roots run deep in Scranton. A cornerstone implanted in the red brick walls of a repurposed factory at the intersection of Penn Avenue and Vine Street identifies the origin of the sprawling, clock-tower-topped building: “Machine Shop Rebuilt A.D. 1882, The Dickson Manufacturing Company Organized 1856.” Dickson began constructing steam locomotives in Scranton in 1856. Its builder’s plates were bolted to 1,312 locomotives — including conventional and Camelback 4-4-0s, 2-6-0s, 2-8-0s, and 4-8-0s for local carriers DL&W, D&H, and New York, Ontario & Western — before Dickson joined the eight-builder syndicate that formed the American Locomotive Co. in 1901. Under Alco, the Dickson works built 500 more locomotives, including Camelback 0-6-0s and 2-8-0s for D&H, before production at the Scranton factory ceased in 1909. D-L’s Alcos come within sight of the place as they work along the former D&H Penn Division.

A few miles south on the old Penn Division tracks, in the tiny, two-bay, aluminum-sided shed that serves as D-L’s South Scranton shop, the labors of a small band of dedicated workers make GVT’s Alco allegiance both possible and practical. The simple look and cramped quarters of the place belie the volume, quality, and complexity of work conducted by D-L Chief Mechanical Officer Don Colangelo and his talented crew. From everyday service, maintenance, and repairs, to from-the-rails-up overhauls, upgrades, and repainting, they do it all.

If all goes according to plan, by spring 2020 they’ll be working in a new state-of-the-art, 80-by-200-foot enginehouse being built at the location of the old D&H Green Ridge roundhouse.

When it comes to Alcos, Colangelo is one of the most respected authorities on everything from maintenance and operation to design, troubleshooting, repairs, exacerbating steam locomotives in Scranton in 1856. Its builder’s plates were bolted to 1,312 locomotives — including conventional and Camelback 4-4-0s, 2-6-0s, 2-8-0s, and 4-8-0s for local carriers DL&W, D&H, and New York, Ontario & Western — before Dickson joined the eight-builder syndicate that formed the American Locomotive Co. in 1901. Under Alco, the Dickson works built 500 more locomotives, including Camelback 0-6-0s and 2-8-0s for D&H, before production at the Scranton factory ceased in 1909. D-L’s Alcos come within sight of the place as they work along the former D&H Penn Division.

A few miles south on the old Penn Division tracks, in the tiny, two-bay, aluminum-sided shed that serves as D-L’s South Scranton shop, the labors of a small band of dedicated workers make GVT’s Alco allegiance both possible and practical. The simple look and cramped quarters of the place belie the volume, quality, and complexity of work conducted by D-L Chief Mechanical Officer Don Colangelo and his talented crew. From everyday service, maintenance, and repairs, to from-the-rails-up overhauls, upgrades, and repainting, they do it all.

If all goes according to plan, by spring 2020 they’ll be working in a new state-of-the-art, 80-by-200-foot enginehouse being built at the location of the old D&H Green Ridge roundhouse.

When it comes to Alcos, Colangelo is one of the most respected authorities on everything from maintenance and operation to design, troubleshooting, repairs,

One of only two surviving RS27s, Minnesota Commercial Railway 316 takes a nighttime spin on the turntable at the road’s roundhouse in St. Paul, Minn., on April 29, 2016. Marshall W. Beecher

Working the Bath & Hammondsport local, Livonia, Avon & Lakeville C424 423 and B&H RS18 416 roll through the backstreets of Painted Post, N.Y., en route to the Norfolk Southern interchange at Corning. Joseph Bishop