Test Track



Spring Mills Depot DODX Heavy-Duty Flatcars and CONEX Containers

With military bases distributed across the continental United States as well as worldwide, the Armed Forces, and specifically the Army and Marines, have the need to transport entire brigades of armored fighting vehicles and support vehicles between bases for annual training and other movements. Rail transport has been the most efficient and least disruptive way to accomplish this task. Though most support vehicles and lighter combatants are transported on traditional flatcars, postwar heavy armored vehicles such as main battle tanks typically weigh 45-60 (or more) tons each, and are best transported in pairs to conserve train length. In the 1950s, this task was accomplished with six-axle heavy-duty flatcars of riveted construction from builders such as Magor Car Corporation.

In 1980, the US Army began fielding a new main battle tank known as the M1 Abrams. Weighing in at around 60 tons due largely in part to its innovative new Chobham armor, the early Abrams weighed over ten tons more than its predecessor, the M60. The deployment of the new M1 also marked the arrival of an all-new group of heavy-duty flatcars needed to transport the heavier M1. While the old 54' riveted flats had a maximum carrying capacity of 200,000 lbs. (100 tons), the new cars could haul loads up to 301,000 lbs. (150.5 tons) and measure a full 14 feet longer - more than sufficient for a pair of Abrams tanks.

Now available from Spring Mills Depot as its seventh rolling stock release are these modern DODX Heavy-Duty Flat Cars in a multitude of variations and paint schemes. As with other high-end HO scale freight car offerings, this release is not merely for a single car in a single version, but for an entire family of heavy-duty flat cars. While these cars may seem outwardly similar at first glance, their prototypes were manufactured by four different car builders — Fruit Growers Express (FGE), General Railway

Equipment (GRE), Ortner, and Thrall — each with their own distinct bodies and idiosyncratic spotting features. Offered separately in this release are metal tie-down chains, and U.S. Army CONEX intermodal containers.

Regardless of the builder and minor build differences, whether prototype or model, all of these modern DODX heavy-duty flatcars are constructed to the same dimensions: measuring 68 feet in overall length, each with 125-inch-wide decks equipped with four channels to accommodate tie-down chains for vehicle payloads and pedestals for securing intermodal containers. Twelve container pedestals are included with each model in a small bag within the inner clamshell of the packaging. Per the instructions, the pedestals can be installed in a stowed or deployed position, or left off entirely at the modeler's discretion.

Beneath the finely cast plastic deck and heavy metal underframe is an excellent fine-scale representation of the air brake system, including wire-form piping with plastic air tanks, ABD valve, clevises and brake rods that thread their way through triangular cross members; all of which are rendered precisely to scale with realistic cross sections.

DODX 40002 - FGE-built U.S. Navy Material Car

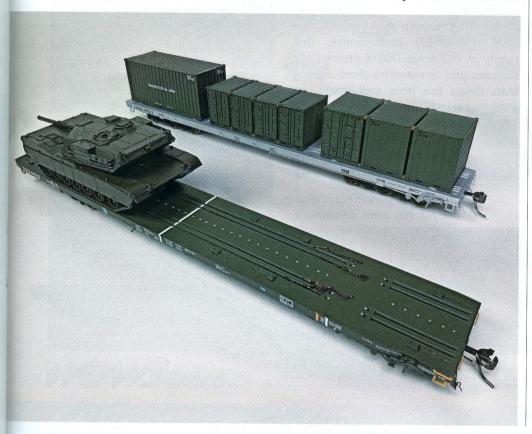
DODX 40002 represents one of the heavy-duty flatcars constructed by FGE in 1981 for the Department of Defense. The model represents a car assigned to the U.S. Navy Supply Systems Command. Painted in silver, the car is otherwise mechanically identical to its sister cars serving DOD in different shades of green. Regardless of the paint scheme, it is interesting to note that the heavyduty flats built by FGE have a rounded outer edge to the top of the deck versus a flat squared edge for the Thrall, Ortner, and GRE cars. Among many other subtle differences, this nuance is captured perfectly on the models.

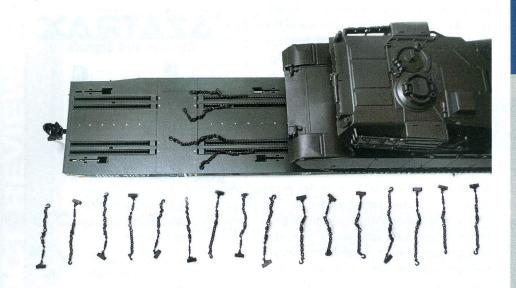
DODX 40537 - Ortnerbuilt Heavy-Duty Flatcar

Finished in a coat of olive green, SMD's model of DODX 40537 is a precise replication of an Ortner-built DODX Heavy-Duty Flatcar in its as-delivered paint scheme. While the decks are nearly identical between all builders, the story is different beneath the deck. Ortner-built cars have a different arrangement for its air brake equipment and utilize solid triangular gussets vs. open frame triangular gussets underneath the FGE-built cars. Jacking pad designs as well as the mounting location for the brake line at the end sills are also different between our two cars.

Standard details on all cars include separately applied .008" diameter wireform grab irons, brake lines, cut levers, air hoses and much more; all rendered crisply and exquisitely to scale. Pad printing on all samples is sharp and opaque without any visible flaws. Assembly and paint were also flawless across our samples, with no loose or missing parts when removing the cars from their packaging.

With regards to running gear, each of the flatcars rides on identical 3-axle Buckeye trucks with static roller bearing details. Each truck is equipped with 36-inch diameter .110-inch profile CNC-machined metal wheelsets. Every wheel is pre-painted inside and out in a light rust color, leaving the tread in a polished nickel silver. Genuine Kadee "large-head" couplers with extended shanks are installed into draft gear boxes mounted directly to the underframe.





All couplers were in full conformance with our Kadee No. 206 coupler height gauge.

On the scales, these big flats come in at a healthy 4.6 ounces. Compared to NMRA car weight recommended practices RP-20.1, each car measures about an ounce shy, without load. Nevertheless, both cars tracked extremely well across our test layout straight out of the box.

So what about the loads? As mentioned earlier, the primary purpose for these cars is primarily to haul M1 Abrams Main Battle Tanks. However, these cars are commonly also seen hauling other armored fighting vehicles and support equipment.

Leaving the task of supplying HO scale armored vehicle replicas to other manufacturers such as Artitec, Herpa, and Trident, SMD took a different tack to provide an exquisite set of vehicle tie-down chains (20 per package) and three different versions of U.S. Army's "CONEX" family of military-spec intermodal containers seen often on military trains, but never offered in scale until now. "Tricon" containers are a set of three containers connected horizontally that occupy the same footprint as a standard 20-foot long intermodal container. "Quadcon" containers are a set of four containers that also total 20 feet in length when connected horizontally for transport. Lastly, there is a new 20-foot mil-spec "CONEX" intermodal container with a tunnel under the front of it to accommodate a trailer gooseneck when needed.

Like the flatcars, all printing and paint on these containers is sharp and opaque. Separately applied vertical door bars are the crowning touch to each container. Due to their lighter weight, containers such as these most often ride on 89' flatcars and less often on these heavy-duty flats in a military train, while HD flats are prioritized for the heaviest tanks and M88 recovery vehicles. As mentioned previously, container pedestals are provided with each car per the prototype.

Conclusion

With their superb level of detail and solid operational performance, this family of HO scale DODX Heavy-Duty Flatcars and accessories from Spring Mills Depot has been well worth the wait, especially for modelers of the 1980s to the present day seeking to replicate the transport of modern military equipment across their layouts.

- Harry K. Wong

We would like to sincerely thank David Olsen for his kind assistance with this review.

Spring Mills Depot **DODX Heavy-Duty** Flatcar Family

Multiple body styles available per the different builders for these cars:

Fruit Growers Express (FGE) Channel Deck & Flat Deck

Thrall Car Company - Channel Deck

Ortner - Channel Deck

General Railway Equipment (GRE) Channel Deck & Flat Deck

Liveries for the above body styles include:

Olive Green (1981+)

Urethane Green (1996+)

Cascade Green (2001+)

DODX Navy Material Car (silver - FGE)

DODX Buffer Car (GRE flat deck)

Multiple road numbers available per livery. All RTR cars \$64.95 each

U.S. Army CONEX Containers

Each Container set includes:

1 "Tricon" container (3 interconnected units)

1 "Quadcon" container (4 interconnected units)

1 20-foot "Conex" container

Each set available in either Desert Sand or Olive Drab. \$49.95 per set

USAU 20' Container 3-pack (1 Marine Gray, 1 Brown, 1 Patched Brown) \$49.95 per set

Three-axle Buckeye trucks with metal wheelsets \$12.50/pair

DODX chain tie-downs

\$39.95/set of 20 tie-downs

Available direct from Spring Mills Depot.

Spring Mills Depot P.O. Box 1616 Spring Mills, MD 21158 smd.cc

