

Product Description:

“Arrowhead’s Committee Design Hopper is surely among the finest models ever created.”

David Lotz, Editor of the CB&Q and D&RGW historical society publications, Burlington Bulletin And The Prospector, and former Product Director of Railway Classics brass models.

About the Prototype:

The “committee design” car refers to a family of cars whose design specifications were set forth by the Norfolk & Western, Chesapeake & Ohio and Pennsylvania Railroads. It is one of the most prolific hoppers ever constructed, and it has a rich history. Depending on how one tells its story, the committee design hopper will mean different things to different people. It is one of the largest, single classes of freight car (of any type) to ever be constructed, and simultaneously, it represents, a failure of cooperating railroads to standardize around a single design.

As the craft of car building developed, improved axle ratings set into play conditions for the development of new 70-ton cars. Where the Norfolk & Western railroad had long embraced practices of standardization on its own railroad, the president of the N&W, R.H. Smith, thought to reap the advantages of this concept through the cooperation of other railroads as well. The idea was that, if cooperating railroads could standardize the design of a single car, economies of scale would result in material efficiencies for all of the parties.

Smith found agreement with the Pennsylvania and Chesapeake & Ohio railroads. These three railroads were among the largest carriers of coal. Collectively, they rostered 31% of the nation’s hopper cars--an impressive statistic when one considers that the attrition of the 1960s and 1970s hadn’t yet ravaged the industry with mergers and bankruptcies. Although the design of the car was a committee effort, the Chesapeake & Ohio directly managed the task through its Mechanical Design Office in Richmond, Virginia. By December 1957, there was consensus on the design of a 70-ton, 13-post car with 39’-10” interior length, 10’-6.75” exterior width dimensions and a combination of 45 and 30 degree slope sheets.

In 1958, the railroads agreed to build one prototype each. C&O built car #300006 at its Raceland Car Shops and assigned it to the H33 car class. N&W built car #59000 at its Roanoke car shops and assigned it to the H12 car class. And, Pennsylvania built car #274001 at its Hollidaysburg car shops and assigned it to the H39 car class. Immediately following construction of its prototype, the C&O sent #300006 to the National Malleable and Steel Casting Company in Cleveland, Ohio for testing. N&W #59000 was left unpainted for a period of strain testing.

While the PRR embraced the design, the Norfolk & Western railroad resisted constructing additional cars. They took the position that the design was larger than the loading capacity necessitated and the dimensions should be reduced. According to Andrew Dow, the Norfolk & Western had experience with cars of spare cubic capacity as being “both dangerous and

expensive to operate” (Mainline Modeler, September 1990, pg. 67). To underscore this perspective, N&W’s H10-class hopper was smaller, lighter, and less expensive than the committee design car, and yet despite this, they were rated to carry the same load. The N&W did not see the committee design car as a step forward, and therefore, not the right platform to rally its standardization efforts around. Other than the prototype, the N&W would never build another committee design car. That said, the N&W did employ the lessons of the committee project to design its H11 hopper--a car with many design similarities as the committee car. And, not unlike the PRR’s H39 class, the H11 class is among the largest single car classes ever constructed.

Pennsylvania Railroad:

Only the Pennsylvania Railroad moved the design forward for immediate production. Eventually, the PRR alone would construct 16, 133 committee design cars. This car comprised its massive H39 fleet--one of the largest car classes of any type. In fact, the H39 was so numerous, that by the time these cars made it onto Conrail’s roster, Conrail temporarily abandoned its attempts to standardize around 100-ton cars. The Pennsylvania H39 is a fact of Eastern railroading from the 1960s through the 1990s, and beyond that, many cars continued in secondary roles and company service.

Denver & Rio Grande Western:

Where the Denver & Rio Grande Western once preferred drop bottom gondolas for moving coal, by 1957, this preference shifted from gondolas to open hoppers. In the period between 1957 and 1966, the D&RGW began purchasing 70-ton open hoppers in earnest. Of the three different designs acquired during this period, the committee design hopper was the prominent 70-ton hopper. And, arguable, this car set into play the general character of Rio Grande’s fleet of open hoppers from 1960 and onward.

In 1960, the Rio Grande purchased a lot of 200 committee design hoppers. These were built by Bethlehem Steel Company and numbered 17500-17699. Although these weren’t the first 70-ton open hoppers to have the design elements characteristic of a modern conveyance. Previous orders were fulfilled by Bethlehem Steel Company (albeit, an NYC design) and American Car & Foundry, and these cars had (mostly) welded side posts, and it is a construction method that was soon viewed as less favorable than riveted methods.

From the 1960 delivery and forward, the Rio Grande never looked back--both in terms of the committee design and its builder, Bethlehem Steel Company. From here forward, every new, HT AAR class car that the Rio Grande purchased was from Bethlehem and every new, 70-ton, HT class car that the Rio Grande acquired was of the committee design. In 1962, the D&RGW placed a second order of committee design cars. These cars were numbered in the 17700-17899 series. They had ASF roller bearing trucks, Miner hand brakes, and Wine double door locks, hopper doors and hopper frames. In 1966, they placed a final order of 400 cars. These were placed in the 14600-14999 series. Unlike the previous lot, the 14600-14999 cars had 1955

Ajax hand brakes. In total, the D&RGW owned 800 committee design hoppers. This car comprised 44% of its total 70-ton hopper fleet.

Southern Railway:

In June 1966, the original Norfolk Southern (NS) purchased 70 committee design hopper from Bethlehem Car Co. In 1974, the Southern Railway acquired the Norfolk Southern's committee design cars when the Southern acquired the NS. These cars were repainted into Southern's sharp Claytor lettering scheme and rolled into its massive fleet of steel, three-bay hoppers. In 1982, the Southern Railway merged with the Norfolk & Western, and the 57 cars that remained on the roster were of the owner "Norfolk Southern" once again.

About the model:

Arrowhead has produced two distinct sets of body tooling to accurately match the distinct car variations of the PRR Pullman-Standard 666000-666999 series, D&RGW Bethlehem Car Co. 14600-14999 series, and Southern Bethlehem Car Co. 74689-74758 series cars.

This, in combination with a matrix of unique detail parts (outlined below) means that Arrowhead's committee design car announcement is really the announcement of two all-new freight cars from the point of view of tooling and product development.

Arrowhead's Committee Design Hopper features:

Pennsylvania paint scheme is available in 48 road numbers!

Rio Grande paint scheme is available in 24 road numbers!

Southern paint scheme is available in 12 road numbers!

Undecorated kits are available for each variation!

Prototype specific details:

4-piece 1955 Ajax or 3-piece 1942 Miner hand brakes

2-piece Keystone Monoloc hopper door locks or 3-piece Wine double door locks

Keystone or Wine hopper frames

Keystone or Wine gate doors

End sheet or center sill release valve mounting locations

Riveted or welded superior bolster plate

Two underframes to account for variations with: slack adjuster locations, variations in brake rod and brake rod hanger locations and a compliment of four accurate brake levers.

ASF solid bearing or ASF 70-ton roller bearing trucks

Pullman-Standard or Bethlehem Car Co. styles of defect card holder

Top chord stiffener detail for Bethlehem Car Co. version

Pullman-Standard or Bethlehem variations of retaining valve rods and release valve lines.

Multi-piece small parts for high fidelity applications:

3-piece air reservoirs

Emergency half, air reservoir body

Auxiliary half, air reservoir body

Bolted flange, air reservoir body

4-piece Ajax 1955 hand brake:

Distinct 1955 Ajax brake wheel

1955 Ajax hand brake housing

Ajax hand brake release lever

Separate internal gear, chain and vertical rod

3-piece Miner 1942 hand brake:

Distinct 1942 Miner brake wheel

1942 Miner hand brake housing, brake rod, chain and release lever

1942 Miner (3290-XL) mount plate

2-piece ABD valve:

ABD valve body/emergency portion

ABD service portion

2-piece Keystone Monoloc Hopper door locks or 3-piece Wine double door locks

3-piece "scale" draft boxes, with accurate key, shank, plate, and bolt details

Slack adjuster with separate brake rods and loop eyes

Brass parts for high-fidelity applications:

Brass slack adjuster guard for Bethlehem Car Co. applications

Brass mounting platforms for:

ABD valve

Brake cylinder

Hopper frame L-braces

Wire Parts:

Air reservoir, brake cylinder, ABD plumbing lines

ABD-trainline plumbing

Retaining valve line

Retaining valve rod

Brake rods

Slack adjuster loop eye for Bethlehem Car Co. applications

Coupler cut lever

Other Features:

Etched metal brake step

CNC-machined wheels

Separate air hoses

Kadee #58 couplers

Prototypical asymmetry on coal loads