

DATA SHEET

United States Department of the Interior
Heritage Conservation and Recreation Service

National Register of Historic Places Inventory—Nomination Form

See instructions in *How to Complete National Register Forms*
Type all entries—complete applicable sections

1. Name

historic The Pennsylvania Railroad Rolling Stock Thematic Resource

and/or common

2. Location

street & number Route 741, east of Strasburg, Pennsylvania Railroad Museum hot for publication

city, town Strasburg vicinity of congressional district 16th

state Pennsylvania code 42 county Lancaster code 071

3. Classification

Category	Ownership	Status	Present Use	<input checked="" type="checkbox"/> museum
<input type="checkbox"/> district	<input type="checkbox"/> public	<input type="checkbox"/> occupied	<input type="checkbox"/> agriculture	<input type="checkbox"/> park
<input type="checkbox"/> building(s)	<input checked="" type="checkbox"/> private	<input type="checkbox"/> unoccupied	<input type="checkbox"/> commercial	<input type="checkbox"/> private residence
<input type="checkbox"/> structure	<input type="checkbox"/> both	<input type="checkbox"/> work in progress	<input checked="" type="checkbox"/> educational	<input type="checkbox"/> religious
<input type="checkbox"/> site	Public Acquisition	Accessible	<input type="checkbox"/> entertainment	<input type="checkbox"/> scientific
<input type="checkbox"/> object	<input type="checkbox"/> in process	<input checked="" type="checkbox"/> yes: restricted	<input type="checkbox"/> government	<input checked="" type="checkbox"/> transportation
<input checked="" type="checkbox"/> thematic	<input type="checkbox"/> being considered	<input type="checkbox"/> yes: unrestricted	<input type="checkbox"/> industrial	<input type="checkbox"/> other:
		<input type="checkbox"/> no	<input type="checkbox"/> military	

4. Owner of Property

name Penn Central Transportation Company

street & number 1700 Market Street

city, town Philadelphia vicinity of state Pennsylvania 19103

5. Location of Legal Description

courthouse, registry of deeds, etc. Philadelphia County Courthouse

street & number City Hall

city, town Philadelphia state Pennsylvania

6. Representation in Existing Surveys

title The Pennsylvania Inventory of Historic Places has this property been determined eligible? yes no

date 3/20/78 federal state county local

depository for survey records Pennsylvania Historical and Museum Commission

city, town Harrisburg state Pennsylvania

7. Description

Condition		Check one	Check one
<input type="checkbox"/> excellent	<input type="checkbox"/> deteriorated	<input type="checkbox"/> unaltered	<input type="checkbox"/> original site
<input checked="" type="checkbox"/> good	<input type="checkbox"/> ruins	<input checked="" type="checkbox"/> altered	<input checked="" type="checkbox"/> moved date _____
<input checked="" type="checkbox"/> fair	<input type="checkbox"/> unexposed		

Describe the present and original (if known) physical appearance

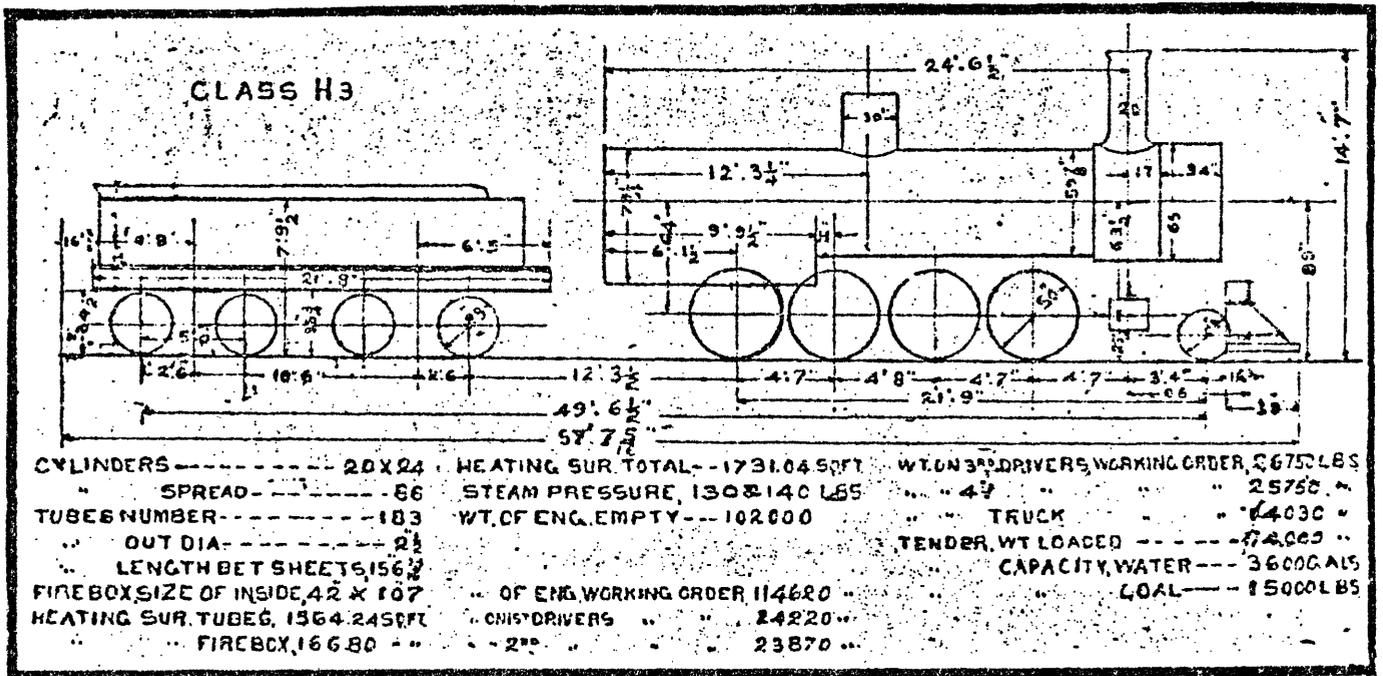
The Pennsylvania Railroad rolling stock consists of thirteen engines dating from 1888 to 1930 and twelve cars dating from 1855 to 1906. This rolling stock is on loan to the Pennsylvania Historical and Museum Commission from trustees of the Penn Central Railroad (The Pennsylvania Railroad Company).

Twenty-three of the twenty-five pieces are housed at the Railroad Museum of Pennsylvania located east of Strasburg, Pennsylvania. This stock is displayed with an integrity of location. All stock is housed on standard railroad bed either inside the large museum gallery or outside on the museum grounds. Engine #1223 and Passenger Coach #3556 are on loan to the Strasburg Railroad Company for use on their historic short-line adjacent to the Museum property.

The Railroad Museum of Pennsylvania maintains a museum area and 1300 feet of parallel sheltered track as well as outside yard, track and a turntable. Plans to enclose another 1300 feet of track are being made. Museum track connects to the 4½ miles of Strasburg Railroad track which runs to the village of Paradise where it joins the open Conrail system.

Inventory of Rolling Stock

1. Consolidation Freight Locomotive #1187 Class H3 (R) 2-8-0 (1888)



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PENNSYLVANIA RAILROAD ROLLING STOCK

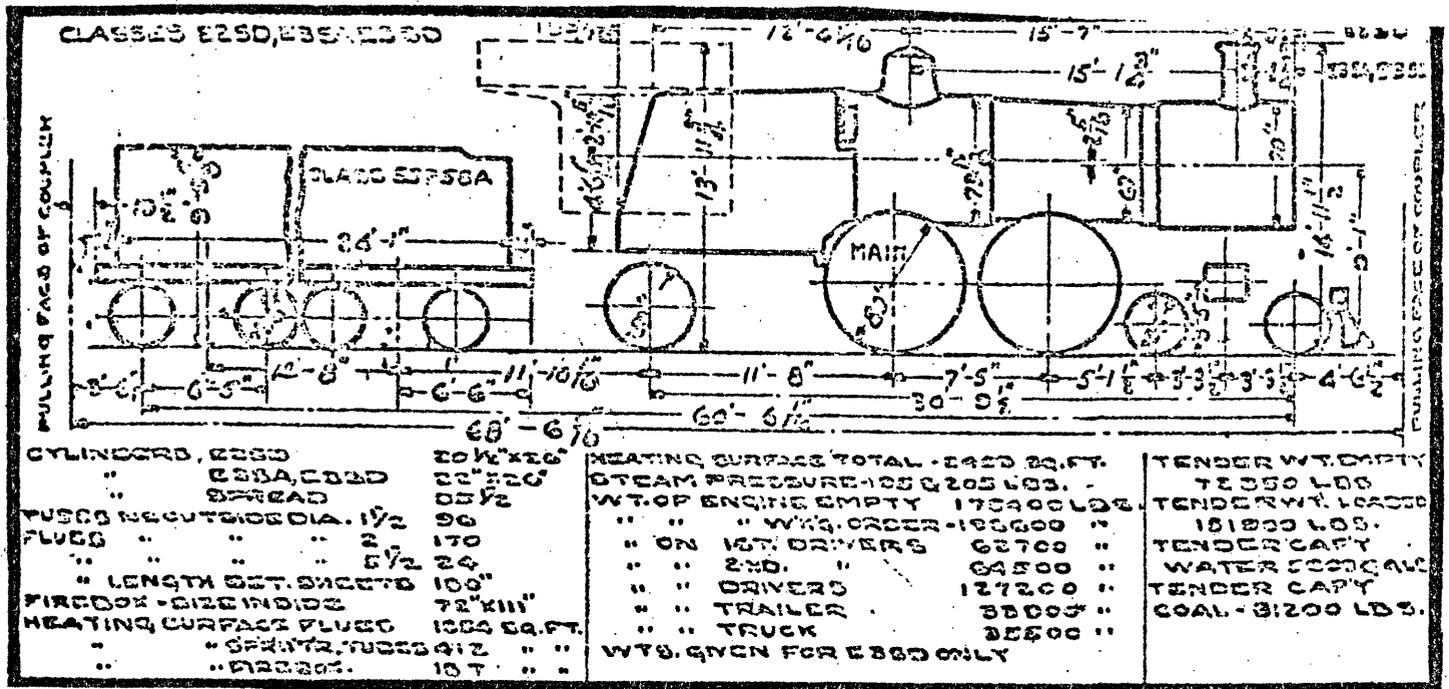
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By the early 1880's the road needed a new heavy freight-hauler. Traffic was getting too heavy for the class I to handle efficiently so a new 2-8-0 was designed. The new design, class R (H3), retained the 20 x 24" cylinders and 50" drivers, but the wheel base was changed slightly. It also used a Belpaire firebox designed to carry 140 pounds of pressure. The first class R was numbered 400, Altoona Number 983, finished in October, 1885. Locomotive Number 1187 was also built at the Juniata Chops in 1888.

Three locomotives of this type were picked up and washed away by the flood waters at Johnstown, May 31, 1889. These were the heaviest freight haulers on the Pennsylvania Railroad at the time of the flood and a total of 2,289 were made at the Juniata Shops from 1885 to 1898. At this time Number 1187 is the only complete Juniata Shops locomotive known to exist. The last H3 (R) engine in service on the Pennsylvania Railroad system was Number 5079 in June 1939. Number 1187 was restored by the Juniata Shops in 1939 and was exhibited at the New York World's Fair in 1940.

2. Passenger Locomotive #7002 (8063) Class E2 (E-7's) 4-4-2 Atlantic (1902)



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Because of increasing demands for speed in passenger schedules the 4-4-0 were reaching the size and capacity limits at the turn of the century. A new locomotive was developed, the E Class a 4-4-2, to meet this demand. In 1901, standard-styled Atlantics began rolling through Juniata's erecting shop doors. The 4-4-2 in the Pennsylvania Railroad collection was built in 1902, at the Juniata Shops in Altoona. Its original number is Number 8063. However, following the Chicago Railroad Fair in 1948 this locomotive was set aside by the Pennsylvania Railroad to represent the historic Number 7002. The #7002 hauled the Pennsylvania Special on June 12, 1905 at a record rate of 127.2 miles per hour between "AY" Tower and Elida, Ohio, and traversed the 131 miles from Crestline, Ohio to Fort Wayne, Indiana in 1 hour, 54 minutes and 30 seconds. Although locomotive Number 8063 is not the record settler, this locomotive represents the fastest and heaviest motive power hauling the finest passenger trains of the Pennsylvania Railroad at the turn of the Century and is the only known extant example of this class.

3. Consolidation Freight Locomotive #2846 Class H6sb, 2-8-0 (1905)

Built: Baldwin Locomotive Works, Philadelphia, November 1905
Weight: 93 Tons Length: 73'
Cylinders 22" x 28" Steam pressure: 205 lb.
Drivers, diam. 56" Grate area: 49 sq. ft.
Heating surface: 2,844 sq. ft. Weight on drivers: 178,700 lb.
Tractive force: 42,170 lb.

A Lines East design 101 H6's were built by Baldwin and Juniata Shops between 1899 and 1901. The H6's had Belpaire narrow fireboxes, side valves and Stephenson gear. These narrow fireboxes were difficult to fire properly so the H6's were modified to include a wide Belpaire firebox that straddled the rear drivers, increasing the grate area by 47%. This produced the H6a's. So successful was this engine that between the years 1902 and 1905, Baldwin produced 1,017 of them. In 1905, the design was again altered to include piston valve cylinders and Walschaert valve gear, hence Class H6b. A grant total of 1,835 H6a and H6b engines were built by Baldwin, Juniata Shops and Alco between 1901 and 1913. By 1934 most H6a and H6b engines had disappeared from the roster, although superheaters extended their uses longer as Classes H6sa and H6sb.

Locomotive #2846 was one of these Hb class installed with a superheater. This engine was the workhorse of the system and is presently in its work-a-day condition, not overly restored and the only remaining engine of this type, a fine example of its type.

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4. Passenger Locomotive #1223, Class D16sb, 4-4-0 American, (1905)

Built: Juniata Shops on November 28, 1905
Length: 62' 53/8", 5,600 gallons water, 26,000 lb. coal
Tender Class 55 P 55a, June 1904, Juniata Shops
Cylinders 20 1/2" x 26" Drivers, diam. 68"
Steam pressure: 175 lb. Grate area: 33.2 sq. ft.
Water heating surface: 1,404 sq. ft. Superheating surface: 347 sq. ft.
Tractive force: 23,900 lb.
Weight on drivers: 98,500 lb.
Weight on total engine: 141,100 lb.

The 4-4-0 class Americans were best suited to haul a variety of trains including passenger and fast freight. The type's wide-spread popularity earned it the name "American". Although many standard design 4-4-0's were in service during the early years of the twentieth century, the longest-lasting, most-remembered, speediest development of all Pennsylvania Railroad Americans were the D16 class.

Engine #1223 built in 1905 was selected for preservation and was featured in the 1939 film "Broadway Limited". This engine is in working condition and on loan to the Strasburg Railroad.

5. DDI Electric Locomotive No. 36 (4780, 4781) 4-4-0 + 0-4-4- (1911)

Drivers, diam. 72"	Wheelbase, rigid: 7' 5"
Length overall: 64' 11"	Wheelbase, total: 55' 11"
Weight on drivers: 199,000 lb.	Motors, number: 2
Weight total: 313,000 lb.	Motors type: Westinghouse No. 315-A
Voltage: 650 D.C.	Starting tractive force: 66,000 lb.
Maximum horse-power 4,000	

The Pennsylvania Railroad created a classic of electric locomotive design in 1909. This was the DDI which was built for third-rail 600 volt d.c. electrification into Pennsylvania Station in New York. The locomotive was essentially two 4-4-0 electric locomotives permanently coupled back to back. Each unit had its own main frame, running gear, boxcab and leading truck. Each DD unit carried a 2000 horsepower Westinghouse 315-A C.C. communicating pole type series motor. A one piece cab unit construction allowed complete removal for shopping, a feature used on all succeeding electric classes. Westinghouse electrical equipment was used throughout all DDI's with all mechanical construction by Juniata Shops. By 1911, 33 locomotive pairs had been built. The DDI's looked like an electrified steam locomotive and was actually transitional between two competing forms of motive power. Only known example extant.

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special train on the Pennsylvania Railroad. This train was composed of one passenger coach, and a baggage coach equipped with film processing tanks and pulled by an E6s, Number 460. After the honoring services engine Number 460 pulled out of Washington's Union Station at 12:14 p.m. and arrived in New York in 3 hours and 8 minutes. Today this trip takes 2 hours and 54 minutes. Not only is No. 460 famous for its 1927 run, it is the only known example of this class and type.

7. Consolidation Freight Locomotive #7688, Class H10s, 2-8-0 (1915)

Built: Lima, Ohio	October 1915	Length: 70'
Weight: 127 tons		Bailer, inside diam. 76 3/4"
Cylinders 26" x 28"		Steam pressure: 205 lb.
Drivers, diam. 62"		Tubes, diam. 5 1/2" x 2"
Firebox 110 3/8" x 72"		Grate area: 55.2 sq. ft.
Tubes, number 5 1/2", 36; 2", 265		Water heating surface: 3,066 sq. ft.
length 15'		Wheelbase, driving: 17' 1/2"
Superheating surface: 781 sq. ft.		Wheelbase, total engine: 25' 9 1/2"
Weight on drivers: 223,000 lb.		Wheelbase, total engine
Weight, total engine: 247,500 lb.		and tender 62' 4 7/8"
Weight, total engine and		Tank capacity: 8,000 US gal.
tender: 432,000 lb.		Fuel capacity: 34,600 lb.
Tractive force: 53,200 lb.		

Lines west H10s engines usually remained in the Central and Western regions of Pennsylvania where provided the power needed in the rugged hills of the Allegheny Mountains. The H10 was the last refinement of the H class and the basic freight locomotive in this area from 1915 to the late 1930's. More than 1,200 H10's were made from 1907-1915 in the Juniata Shops, Alco and other shops under contract to the Pennsylvania Railroad.

Locomotive #7688 is the only known extant example of this class.

FHR-8-300A
(11/78)

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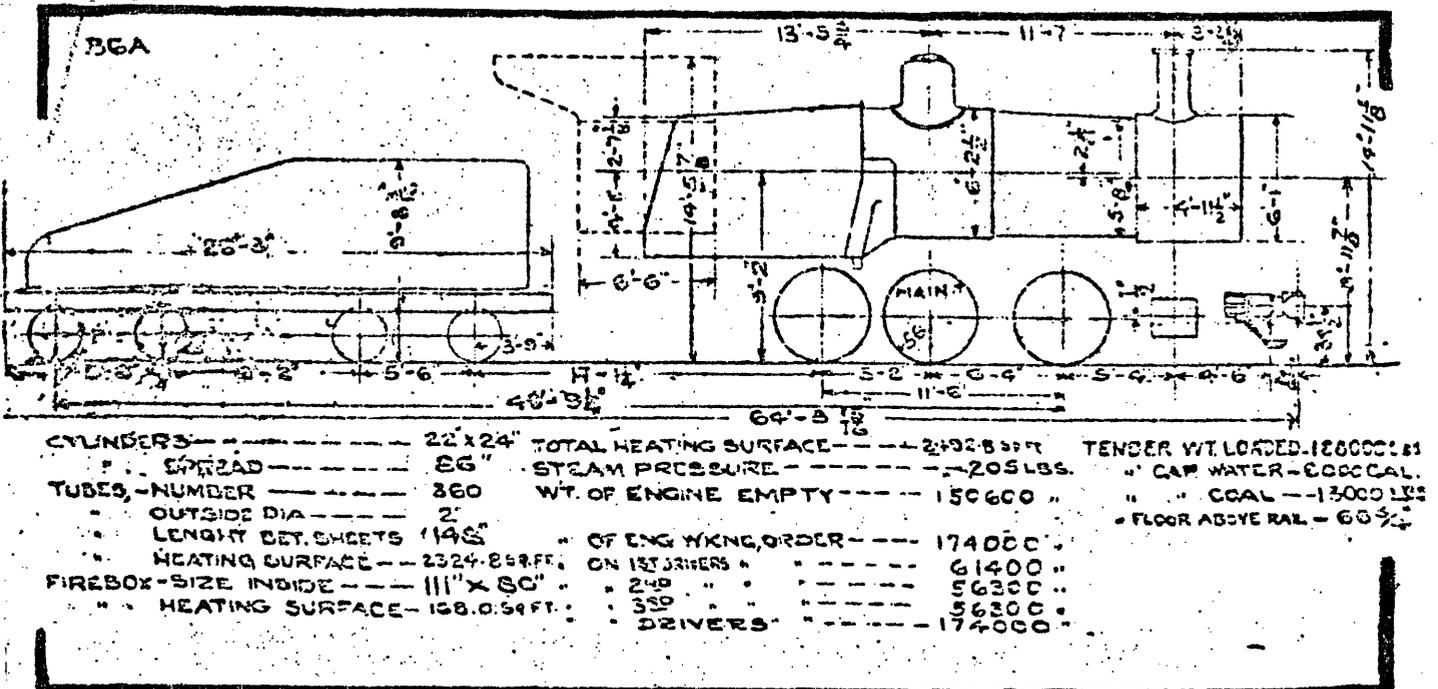
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8. Switcher #1670, B6sb, 0-6-0 (1916)



Built: Juniata Shops February 1916

The Class B6 six wheel switcher is a representative of the most common style of twentieth century American yard engines. Over 238 B6sb's, an updated B6, were built at the Juniata Shops from 1916 to 1926. The B6's were the workhorse of the yards, the last working engine was removed from the roster in 1957.

Switcher #1670 is only known example of this class.

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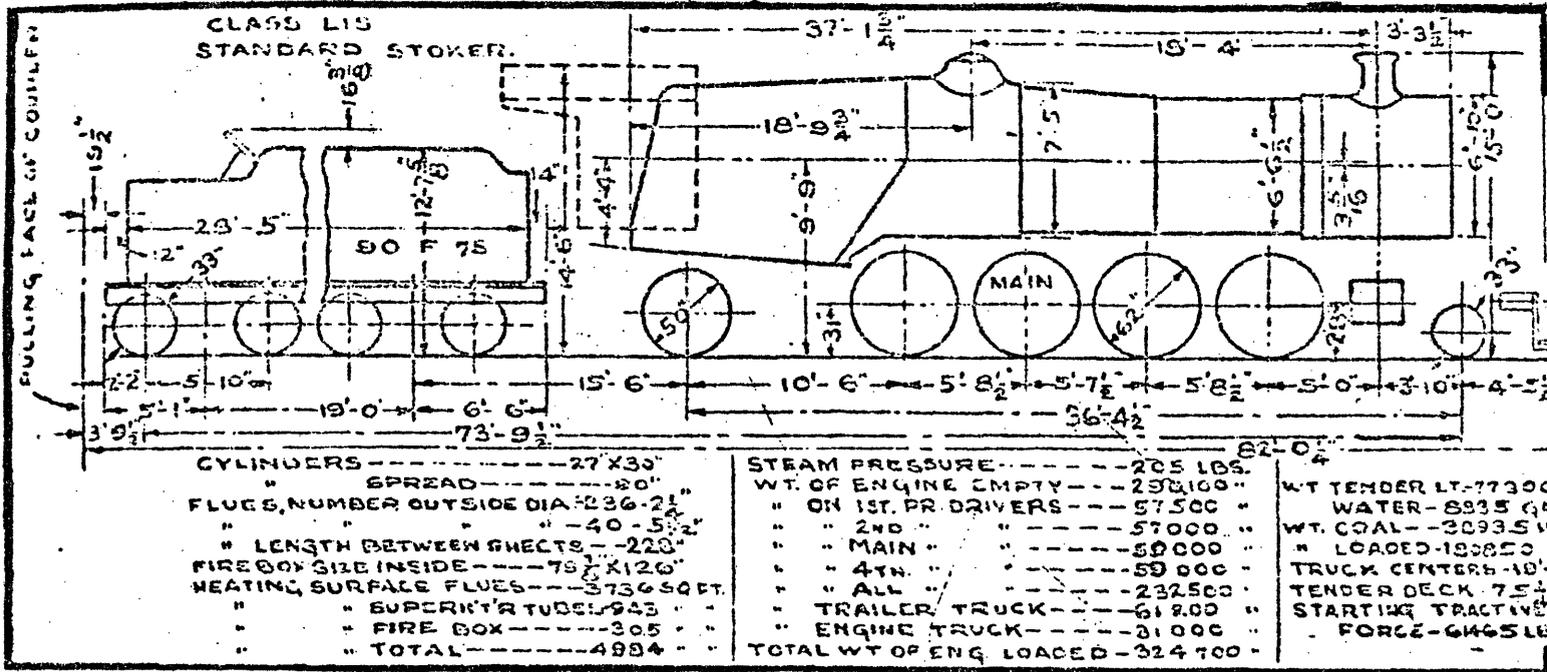
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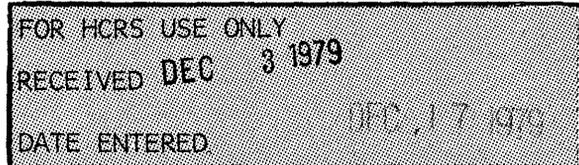
9. Mikado Freight Locomotive #520, Class L1, 2-8-2, (1916)



Built: Baldwin Locomotive Works, Philadelphia in December 1916

This medium-sized freight-hauler and twin to the famed K-4s class Pacifics was built to replace the 2-8-0's in main line freight work. There were 579 Mikados built of which 574 were of the L1 class. The L1 boilers were identical to the boilers used on the 425 class K-4s locomotives being built at the same time. This gave the Pennsylvania Railroad a grand total of 999 engines with similar boilers, plus other common parts. Most 2-8-2's stayed in the Central Region of Pennsylvania until replaced by Decapods in 1924. This released a number of L1's to the Eastern Region.

Engine #520 is a fine example of this class and was involved in a rare accident near Cresson. On November 14, 1942, locomotive #520 was dispatched from East Altoona with a westbound freight train enroute to Conway, Pennsylvania. As the train approached Cresson at an estimated speed of 15 to 18 miles per hour, the boiler exploded killing the engineer, fireman and brakemen as well as injuring several others. Engine #520, however, was repaired and continued in service until 1957 when it carried a train of railfans from Baltimore to Enola, Pennsylvania.



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10. Switcher #94, Class A5, 0-4-0, (1917)

Built: Juniata Shops in January 1917

Weight: 30,192 lbs.

Cylinders 20" x 24"

Steam pressure: 185 lb.

Water heating surface: 1,009
sq. ft.

Tractive force: 30,190 lb.

Drivers, diam. 50"

Grate area: 38.3 sq. ft.

Superheating surface: 219 sq. ft.

Steam switching locomotives, known as shifters first appeared on the roster of the Pennsylvania Railroad around the time of the Pennsylvania Railroad around the time of the Civil War. A number of designs were used culminating in 47 Class A5's all built in the Juniata Shops. An initial group of 41 was built in 1916-17 and 6 more in 1924. A5's were equipped with specially designed tenders, sloped to provide good visibility to the rear. But this proved to be uneconomical due to a cut in water supply. They carried 7 tons of coal but only 5700 gallons of water. Most of these engines were used along the eastern waterfronts especially Philadelphia.

Switcher #94 is a fine and only extant example of this class.

11. Passenger Locomotive #1737, Class K-4, Pacific type, 4-6-2, (1918)

Cylinders 27" x 28"

Boiler, inside diam. 76 5/8"

Firebox 126" x 80"

Tubes, diam. 5½" & 2¼"

Tubes, number 5½", 40; 2¼", 236

Wheel base, driving: 13' 10"

Wheelbase, total engine: 36' 2"

Wheelbase, total engine

and tender: 71' 10"

Tank capacity: 7,000 US gal.

Fuel: 25,000 lb.

Drivers, diam. 80"

Steam pressure: 205 lb.

Grate area: 70 sq. ft.

Water heating surface: 4,050 sq. ft.

Superheating surface: 1,215 sq. ft.

Weight on drivers: 201,830 lb.

Weight, total engine: 308,890 lb.

Weight, total engine

and tender: 468,000 lb.

Tractive force: 44,460 lb.

Locomotive #1737 was the first Class K4 locomotive built at the Juniata works in 1914. The Class K4's became the principal hauler of the Pennsylvania Railroads passenger trains from 1914 to the early 1950's. This design was so successful that 425 were built, most by the Juniata Shops. The original K4, #1737 deteriorated past preservation. Engine #3750 was selected as a stand-in and was fitted with the original tender and number plates. The K4 engine was America's most famous Pacific type and perhaps the most successful passenger engine built by the Pennsylvania Railroad Company.

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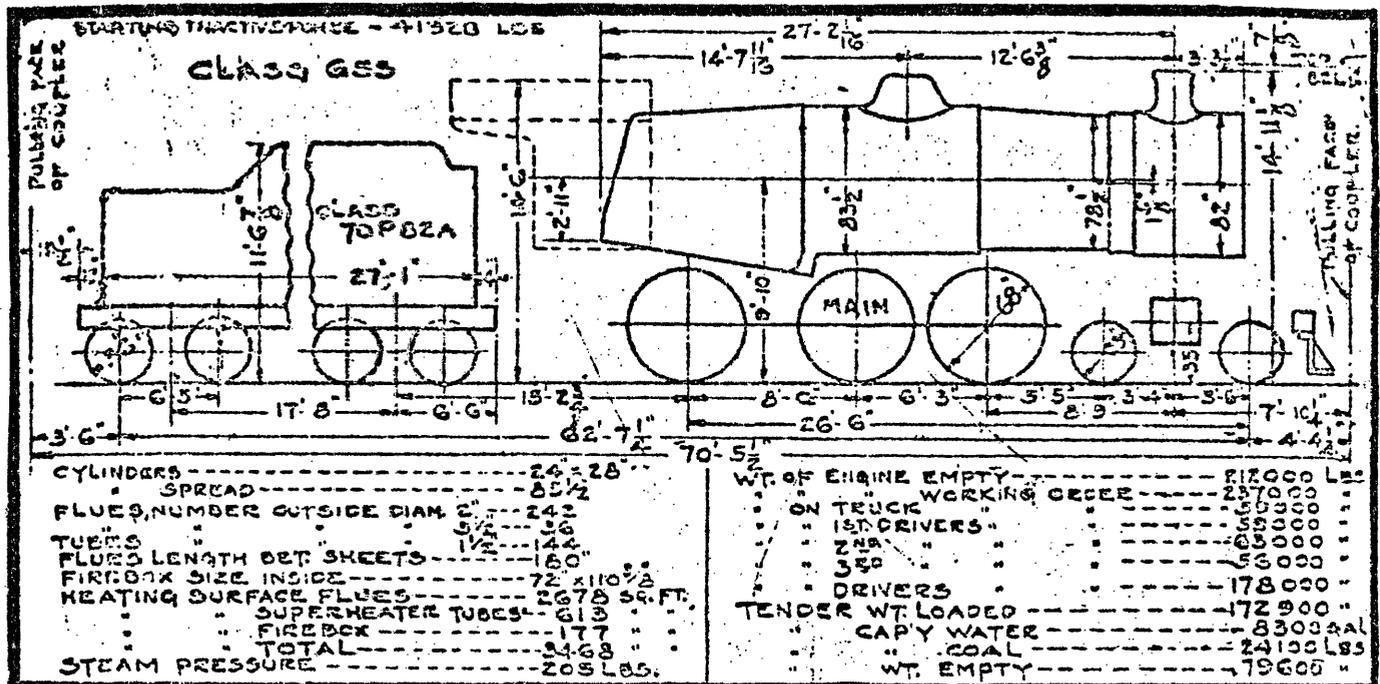
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12. Freight Locomotive #5741, Class G5s, 4-6-0- (1924)



Built for both fast and slow service, freight and passenger trains, the ten wheelers were used only in small to moderate numbers. Their design was powerful, capable of rapid starts on local runs with short trains. The G5s was the heaviest and most powerful 4-6-0 ever built. Between 1923 and 1925, 90 of them were built at the Juniata Shops. The G5s were scattered all over the Pennsylvania Railroad system although they were used primarily in the Western Region to handle the heavy Pittsburgh area commuter train volume. This freight locomotive is only extant example of its class.

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NR Ref # 01000519

13. Locomotive #6755, Class Mlb, Mountain type, 4-8-2 (1930)

Cylinders 27" x 30"	Drivers, diam. 72"
Boiler, inside diam. 82"	Steam pressure: 250 lb.
Firebox 126" x 79 7/8"	Grate area: 70 sq. ft.
Tubes, diam. 3 1/4" & 2 1/4"	Water heating surface: 4,499 sq. ft.
Tubes, number 3 1/4", 200; 2 1/4", 114	Superheating surface: 2,283 sq. ft.
Tubes, length 19'	Weight on drivers: 273,500 lb.
Wheelbase, driving: 18' 10"	Weight, total engine: 383,100 lb.
Wheelbase, total engine: 41' 1/2"	Weight, total engine and tender: 560,000 lb.
Wheelbase, total engine and tender: 76' 7"	Tank capacity: 7,700 US gal.
Tractive force: 64,550 lb.	Fuel capacity: 31,700 lb.

The Class 4-8-2- Mountain type was a dual service engine, hauling both freight and passenger trains. The first Ml's were built in 1923 culminating in the construction of 100, Mla is 1930. Mountains were the first class of superheated power to drop the suffix letter "s" from the class designation, since all new engines were superheated by 1930. Beginning in the year 1946, a number of class Mla locomotives were upgraded and reclassified Mlb. Important changes included a twenty pound increase in steam. Although the Ml was built for dual work its greatest value proved to be in freight work. During their last years of service they were given increasingly heavy tonnage to pull while diesels were assigned to the faster runs.

Locomotive #6755 is the only example of this class extant.

Inventory of Cars: Passenger

1. 1855 The Cumberland Valley Car

Built: Chambersburg Shops 1855
Length: 49' 0" Height Rail to eaves: 10' 4"
Outside Length: 47' 10"
Width: 9' 2"
Wheelbase: 45' 3/4"

This combination passenger and baggage car was built in 1855 in the Chambersburg Shops and used on the Cumberland Valley Railroad until 1888. It was then assigned maintenance of way service until August 1909 when it was placed in storage. The Cumberland Valley car is the second oldest piece of rolling stock extant in the United States today.

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2. 1886 Passenger Coach #3556, Class PF (Platform end)

This wooden passenger coach was built at the Juniata Shops in August 1886. This wooden car had an outside length of 46' 7½" and width of 9' 10". It has a metal roof and four cast iron wheels. Its seating capacity is 58 with 24 reversible seats and 5 stationary. Car #3556 is currently on loan to the Strasburg Railroad.

The Class PF car was the first Pennsylvania car to use steam from the locomotive for heat. This car was able to accommodate four extra passengers with the elimination of the coal stove. This system of heating was used until 1912 when steam vapor heating was introduced.

3. 1896 Passenger Day Coach #8177, Class PH

Built by the Juniata Shops in 1896, this wooden beam car seats 48. It has a body length of 30', height (wheels to deck) 10' 4" and wheelbase of 19' 11". It has a semi-closed vestibule the forerunner of the closed vestibule enabling passengers to walk from one car to another without exposure on an open platform.

"Many attempts had been made to provide a safe covered passageway between cars. Patents were granted on a number of devices to accomplish this as early as 1852. The use of canvas curtains proved impractical in 1857, and it was not until 1887 when the Pullman Company patented the 'vestibule', that the problem was satisfactorily met. This 'narrow vestibule', as it was later called, consisted of elastic diaphragms on steel frames attached to the ends of cars, the faces of the diaphragms of coupled cars being pressed firmly against each other by strong spiral springs. Folding doors on each side of this vestibule gave access to the car steps, thus providing a closed passageway between cars while the train was in motion. The first complete train so equipped was tested on the Illinois Central Railroad on April 11, 1887, and placed in regular service on the Pennsylvania Railroad a few days later." The Pennsylvania Railroad Company 1846-1946, p. 757-58.

The PH Class was a transition between the open-ended car and the Pullman Company's narrow vestibule.

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4. 1905 Steel Passenger Coach #1651, Class P58

In 1905 the Pennsylvania Railroad built this experimental steel coach in the Juniata Shops. Car #1651 had an outside length of 79' 10½". The car was constructed entirely of fireproof materials except for the armrests of the seats. Even the upholstery was fireproof. Only electric lighting was provided. Coach Number 1651 remained in service until 1930.

"Two important new phases of passenger transportation were ushered in at about the turn of the century: the introduction of electric operation and the use of steel in car construction. . . By 1908, steel cars became a prominent part of the ownership." (Pa. RR Co, 1846-1946, p. 750-51). "The first all-steel passenger cars built by the Pennsylvania Railroad were one Class P58 for 72 passengers in 1905 and one Class P53 for 64 passengers in 1906. These two cars were essentially the same, in general arrangement, as the earlier wooden cars except for the substitution of steel for wood.

5. 1906 Steel Passenger Coach #1650, Class P53

Built in 1906 at the Juniata Shops, the P53 was an experimental prototype for the Class P54 suburban coach. While the P54 was built in large numbers only one P53 (#1650) was built.

Its length is 70 feet.

Inventory Cars: Service/Combination Cars

6. 1882 Class BA Wooden Baggage Express Car #6

This wooden framed baggage express car was built at the Juniata Shops in 1882. It is 46' 6" long.

7. 1893 Combination Baggage and Mail Car #5403, Class BC, platform end

This combination wooden car was built at the Juniata Shops in 1893. Its total length is 61' 3" and it has a wooden underframe. This car is actual post office on wheels, the clerks processing mail enroute following pick up and delivery of pouches at Railroad Stations. A drop letter box slot is located in the door so patrons could utilize this mobile letter box during station stops.

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8. 1895 Passenger and Baggage Car #4639, Class OG, platform end

Built at Juniata Shops in March 1895, this combination car had a capacity of 50 people. Its outside length is 60' 14" and width 9' 10". It has 6 cast iron wheels and a weight of 71,200 pounds. The heating system is coal stove with oil and candle lighting. It was built for express passenger service.

9. 1899 Wooden Express Baggage Car #6076, Class BD

Built by the Juniata Shops in 1899 this baggage car has a wooden frame with a length of 49' 9". Car #6076 was used on Main Line trains by the Adams Express Company at the turn of the century.

Inventory Cars: Freight

The Pennsylvania Railroad Company started its freight service in 1849 and soon possessed three kinds of freight cars: box, stock and flat cars. Through the years, it was necessary to add many other kinds including gondola, hopper, tank, refrigerator, cabin and cars for special purposes.

10. 1895 Wooden Hopper Gondola #1818, Class GG

This wooden hopper car is typical of the wooden age of the railroad freight car that lasted from 1830 to 1897. Car #1818 was built in 1895 for the Pittsburgh, Youngstown and Astabula Railroad. Thousands of these cars moved coal and other bulk commodities across America now only a few of these remain.

"The Class GG, adopted in 1895, was the first self-cleaning hopper car. This car was of wooden construction, with an inside length of 27 feet 7 inches and a nominal capacity of 70,000 pounds. The floors of the hoppers were constructed on a 30 degree angle which is the present slope for coal hoppers." (Pa. RR Co, 1846-1946, p. 775).

11. 1898 Steel Hopper Car #33164, Class GL

This is a fine example of a first generation steel gondola which replaced cars such as #1818.

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"Class GL cars soon followed the Class GG. These were the first all-steel hopper cars and were built in 1898. They were 31 feet 6¼ inches long inside length and had a rated capacity of 100,000 pounds." (Pa. RR Co, 1846-1946, p. 775)

12. Flat Car #473567

This typical modern flat car measures 61' 3" and is a fine example of a type which began in 1881 with the Class FA, a length of 34 feet and load capacity of 15 to 20 tons. Modern flat cars measure 50 to 70 feet long with capacities of 70 tons or more.

The development in size and class of locomotive and railroad car is as important as the development of the Pennsylvania Railroad system. New functions as well as demand for greater speed and heavier loads forced the constant development and refinement of rolling stock. The engines and cars nominated here represent important stages in this development and are not only important as rare survivals but as important examples in the development of motive power and railroad cars.

For a more in-depth look at rolling stock development in the Pennsylvania Railroad Company see enclosed excerpts from The Centennial History of The Pennsylvania Railroad Company, 1846-1946 by George H. Burgess and Miles C. Kennedy. Philadelphia: The Pennsylvania Railroad Company, 1949.

8. Significance

Period	Areas of Significance—Check and justify below			
<input type="checkbox"/> prehistoric	<input type="checkbox"/> archeology-prehistoric	<input type="checkbox"/> community planning	<input type="checkbox"/> landscape architecture	<input type="checkbox"/> religion
<input type="checkbox"/> 1400-1499	<input type="checkbox"/> archeology-historic	<input type="checkbox"/> conservation	<input type="checkbox"/> law	<input type="checkbox"/> science
<input type="checkbox"/> 1500-1599	<input type="checkbox"/> agriculture	<input type="checkbox"/> economics	<input type="checkbox"/> literature	<input type="checkbox"/> sculpture
<input type="checkbox"/> 1600-1699	<input type="checkbox"/> architecture	<input type="checkbox"/> education	<input type="checkbox"/> military	<input type="checkbox"/> social/
<input type="checkbox"/> 1700-1799	<input type="checkbox"/> art	<input type="checkbox"/> engineering	<input type="checkbox"/> music	<input type="checkbox"/> humanitarian
<input checked="" type="checkbox"/> 1800-1899	<input checked="" type="checkbox"/> commerce	<input type="checkbox"/> exploration/settlement	<input type="checkbox"/> philosophy	<input type="checkbox"/> theater
<input checked="" type="checkbox"/> 1900-	<input type="checkbox"/> communications	<input checked="" type="checkbox"/> industry	<input type="checkbox"/> politics/government	<input checked="" type="checkbox"/> transportation
		<input type="checkbox"/> invention		<input type="checkbox"/> other (specify)

Specific dates

Builder/Architect

Statement of Significance (in one paragraph)

The Pennsylvania Railroad Company was chartered in 1846 but its origins can be traced back to 1828. During the early nineteenth century as the west was in the process of being opened the development of transportation and communications between the west and the Atlantic seaboard was soon recognized as vital. Philadelphia had the location and natural harbor facilities necessary to compete for traffic to and from the west, but needed to develop its transportation lines through or over the Appalachian Mountains. The State of Pennsylvania hoped to connect Philadelphia with Pittsburgh through a combination of canals and railroads. So on March 24, 1828, the Governor approved an Act of the State Legislature to build a railroad from Philadelphia to York. This was the origin of the Pennsylvania Railroad.

On April 13, 1846, the act incorporating the Pennsylvania Railroad was signed by the Governor. This company was to build a railroad from Harrisburg to Pittsburgh, with a continuation to Erie.

With this charter began the development one of the largest railroad systems in the world. The mileage operated on the Pennsylvania Railroad system extended into 57 of the 67 counties in Pennsylvania, 13 states, the District of Columbia and one Canadian Province. In its heyday the Pennsylvania Railroad was the busiest American carrier in passengers, freight and mail. In passengers alone, the Pennsylvania Railroad carried more people than any other railroad in the country.

At its peak 1923-1929, the Pennsylvania Railroad hauled 49 billion ton-miles of revenue freight and 4.8 billion revenue passenger miles making it one of the commercial giants of the early twentieth century.

As the system expanded there was an ever increasing demand for efficient and powerful equipment. The Pennsylvania Railroad has drawn some of the most innovative inventors in the railroad industry. At its famous Juniata Shops in Altoona, Pennsylvania (later known as the Altoona Works) the Pennsylvania Railroad Company designed and built over 10,000 engines. Including home-built locomotives plus those contracted through other locomotive works, the grand total built for the Pennsylvania Railroad approaches 25,000.

During this creative and expansion period 1846 to 1930, the heyday of the Pennsylvania Railroad, the keystone of the system was the steam engine. Its development and refinement was the major goal of the industry. The successive classes and models developed at the Altoona Shops reads like a history of the development of the steam locomotive.

Just as fast as this giant of transportation grew it declined. Following total dieselization in 1957 and the increased importance of road transportation, the Pennsylvania Railroad like all other American rail systems has steadily declined in freight and passenger volume. And as the volume decreased so did the rolling stock. Of the total 25,000 locomotives and cars owned by the Pennsylvania Railroad during its heyday only a small number remain. The Pennsylvania Railroad Company did have the foresight to preserve some of these classics. This Pennsylvania Railroad rolling stock is the best collection of motive power and equipment of any one railroad in the country.

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The thirteen engines and twelve cars of the Pennsylvania Railroad rolling stock represent the best cross-section of locomotives and cars used on the Pennsylvania Railroad system during the period 1888 to 1930. In all cases but one, the K4s, the pieces in this stock are the only existing examples. It contains examples representative of the standard classes of the Pennsylvania Railroad stock used and produced in large numbers. They also afford a cross-section of the steam power of the Pennsylvania Railroad in freight, yard and passenger service.

This rolling stock demonstrates the development and increase in weight, size and power of locomotives during this expansion period as well as an improvement in design.

Within the rolling stock the development of a distinctive Pennsylvania locomotive type can be seen. Designed for use on the Lehigh Railroad the consolidation class 2-8-0 engines were made in classes H3's to H10's. The Pennsylvania Railroad stock has three consolidation locomotives, an H3, an H6, and an H10. These are fine examples of a Pennsylvania designed, built and operated steam engine.

The importance of the Pennsylvania Railroad to the development of Pennsylvania cannot be measured especially during the development years of 1825 to 1930. A collection of the engines and cars of this period is an important document of development of steam locomotion in Pennsylvania and in important resource to Pennsylvania. The Pennsylvania Railroad rolling stock nominated here is the best example of motive power designed, constructed and operated on all parts of the Pennsylvania Railroad system still in existence.

9. Major Bibliographical References

Archives of the Pa. Historical & Museum Commission, Railroad Museum of Pennsylvania

Mencken, August. Railroad Passenger Car. Baltimore: The John Hopkins Press, 1957.

Saylor, Roger B. Railroads of Pennsylvania, University Park, the Pa. State University, 1964, p. 120-45

10. Geographical Data

Acreage of nominated property _____ .323 *combined acreage of all rolling stock

Quadrangle name _____

Quadrangle scale _____

UMT References

UTM NOT VERIFIED

ACREAGE NOT VERIFIED

A

1	8	4	0	0	8	6	0	4	4	2	6	2	3	0
Zone		Easting				Northing								

B

Zone		Easting				Northing								

C

Zone		Easting				Northing								

D

Zone		Easting				Northing								

E

Zone		Easting				Northing								

F

Zone		Easting				Northing								

G

Zone		Easting				Northing								

H

Zone		Easting				Northing								

Verbal boundary description and justification

See cont. sheet

List all states and counties for properties overlapping state or county boundaries

state _____ code _____ county _____ code _____

state _____ code _____ county _____ code _____

11. Form Prepared By

name/title Susan M. Zacher/ George M. Hart

organization Pennsylvania Historical & Museum Commission date March 1978

street & number _____ telephone 717-787-4363

city or town Harrisburg state Pennsylvania

12. State Historic Preservation Officer Certification

The evaluated significance of this property within the state is:

national state local

As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the Heritage Conservation and Recreation Service.

State Historic Preservation Officer signature Ed Weindraub

ED WEINTRAUB

title STATE HISTORIC PRESERVATION OFFICER date 11-28-79

For HCPS use only
I hereby certify that this property is included in the National Register
Carol D. Skell date 12-17-79
Keeper of the National Register
Attest: Kristen O'Connell date 1/1/80
Chief of Registration

FHR-8-300A
(11/78)

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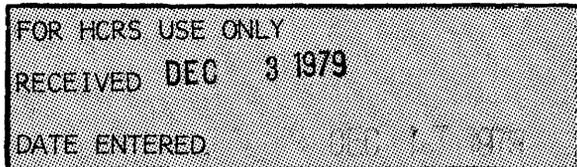
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The Centennial History of the Pennsylvania Railroad Company, 1846-1946.
Phila: Pa. RR Co, 1949, p. 709-778.

Warner, Paul T. Locomotives of the Pennsylvania Railroad 1834-1924. Chicago: Owen David Publishers, 1959.



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By 1940 the change to diesel was complete on the Pennsylvania Railroad system making the steam engine obsolete. With the loss of work these steam locomotives quickly disappeared. Only through the foresight of the Pennsylvania Railroad were any examples of this developmental period in the history of the railroad retained. The rolling stock nominated here are an important historic resource not only for Pennsylvania but the history of the railroad in the United States. Original integrity of location for rolling stock can only be maintained while the engines and cars are still in service. However, if this stock had remained on the open track they would have long since disappeared. So realistically, the only integrity of location for these rare survivals can be location on standard Pennsylvania Railroad track within the commonwealth where they were developed and gained their importance.

The 13 engines and 12 cars of the Pennsylvania Railroad rolling stock are currently housed on 1300 feet of parallel sheltered track and outside track, yard and turntable. None of the track system on which the rolling stock is housed was ever in the Pennsylvania Railroad system. This track is adjacent and has access to the historic short-line, the Strasburg Railroad and Conrail (formerly Pennsylvania Railroad) open line.

Verbal boundary description: Each locomotive and car will be nominated on its own, so that the acreage will be calculated by the square feet of each piece of stock width and length. Total acreage is the sum of acreage of each piece of rolling stock.

Width is not usually a dimension recorded for rolling stock, although each must be as wide a standard gage 4 ft. 8½ inch track and in relation to function, width of tunnels, and bridge structures would not permit excessive width. The result is that although driving-axle loading at the rail has increased from about 43,000 lbs. in 1900 to between 70,000 and 80,000 lbs. in 1950, the maximum height permitted has increased on some roads only from 15 ft. to 15 ft. 3 inch., and the width from 10 ft. to 10 ft. 3 inch during the same period. The upper limits in extreme cases are perhaps 16 ft. in height and 12 ft. in width. Because of this 12 ft. 3 in. width will be assumed for the calculation of verbal boundary description.

Locomotives:

Total: .161

1. Construction Freight #1187
24.54' x 12.25' = 300.62 ÷ 43,560 = .007
2. Passenger Loco #7002
45.35' x 12.25' = 555.54 ÷ 43,560 = .013
3. Consolidation Freight #2846
73' x 12.25' = 894.25 ÷ 43,560 = .021

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4. Passenger Loco #1223 62.43' x 12.25' = 764.77 ÷ 43,560 =	.018
5. DDI Electric Loco #36 64.91' x 12.25' = 795.15 ÷ 43,560 =	.018
6. Passenger Loco #460 29.63' x 12.25' = 362.97 ÷ 43,560 =	.008
7. Consolidation Freight #7688 70' x 12.25' = 857.5 ÷ 43,560 =	.020
8. Switcher #1670 38.65' x 12.25' = 473.46 ÷ 43,560 =	.011
9. Mikado Freight #520 25' x 12.25' = 306.25 ÷ 43,560 =	.007
10. Switcher #94 30.64' x 12.25' = 375.34 ÷ 43,560 =	.009
11. Passenger Loco #1737 36.17' x 12.25' = 443.08 ÷ 43,560 =	.010
12. Freight Loco #5741 26.5' x 12.25' = 324.63 ÷ 43,560 =	.007
13. Locomotive #6755 41.04' x 12.25' = 502.74 ÷ 43,560 =	.012

Cars:

Total: .162

1. 1855 Cumberland Car 47.83' x 12.25' = 585.92 ÷ 43,560 =	.013
2. 1882 Class BA, #6 46.5' x 12.25' = 569.63 ÷ 43,560 =	.013
3. 1886 Coach #3556 46.62' x 9.83' = 458.27 ÷ 43,560 =	.011

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- | | | |
|-----|--|------|
| 4. | 1893, Car #5403
61.25' x 12.25' = 750.31 ÷ 43,560 = | .017 |
| 5. | 1895 Car #4639
61.16' x 9.83' = 601.20 ÷ 43,560 = | .014 |
| 6. | 1895 Gondola #1818
27.58' x 9.83' = 271.11 ÷ 43,560 = | .006 |
| 7. | 1896 Coach #8177
30' x 12.25' = 367.5 ÷ 43,560 = | .008 |
| 8. | 1898 Car #33164
31.525' x 12.25' = 309.89 ÷ 43,560 = | .007 |
| 9. | 1899 Car #6076
49.75' x 12.25' = 609.44 ÷ 43,560 = | .014 |
| 10. | 1906 Coach #1651
79.88' x 12.25' = 978.53 ÷ 43,560 = | .022 |
| 11. | 1908 Coach #1650
70' x 12.25' = 857.5 ÷ 43,560 = | .020 |
| 12. | Flat Car #473567
61.25' x 12.25' = 750.31 ÷ 43,560 = | .017 |