COLORADO HISTORICAL SOCIETY

COLORADO STATE REGISTER OF HISTORIC PROPERTIES NOMINATION FORM

SECTION I			
Name of Property			
Historic Name Denver & Rio Grande We	estern Rail	road Baggage-RPO (<u> Car No. 624</u>
Other Names Denver & Rio Grande Rail	Iroad Bagc	gage and Mail Car No	o. 624; Tool Car X3339
Address of Property		[address not for publication
Street Address Railroad and Monroe stre	eets (Uhric	ch Locomotive Works	.)
City Strasburg	_ Cour	nty Arapahoe	Zip <u>80136</u>
Present Owner of Property (for multiple ownership, list the names and ad	dresses o	of each owner on one	or more continuation sheets)
Name Museum of Railway Workers			
Address P.O. Box 3498	Phone <u>303- 579 -1506</u>		
City Boulder	State <u>Co</u>	olorado	Zip <u>80307-3498</u>
Owner Consent for Nomination (attach signed consent from each owner	of property	y - see attached form)
Preparer of Nomination			
Name <u>Daniel Quiat</u>	Date <u>8/14/2008</u>		
Organization Museum of Railway Worke	ers		
Address 825 Meadow Glen Drive		Phone <u>303-</u> 4	494-0531
City Boulder	State <u>C</u> r	olorado	Zip <u>80303</u>
FOR OFFICIAL USE:		Site Number <u>5</u> A	AH.3006
8/29/2008 Nomination Received		Senate #	House #
11/14/2008 Review Board Recommendation		11/20/2008	_ CHS Board State Register Listing ⊠ Approved ☐ Denied
		Listing Criteria	⊠A □B ⊠C □D □E
Cartification of Listing: President Colorado Histor	rical Societ		Date

COLORADO STATE REGISTER OF HISTORIC PROPERTIES

Property Name Denver & Rio Grande Western Railfoad Baggage-RPO Car No. 624
SECTION II
Local Historic Designation
Has the property received local historic designation?
[X] no
[] yes []individually designated [] designated as part of a historic district
Date designated
Designated by (Name of municipality or county)
Use of Property
Historic Transportation: rail related; Government: post office
Current Work in Progress
Original Owner Denver & Rio Grande Railroad
Source of Information Folio sheet
Year of Construction 1914
Source of Information Folio sheet
Architect, Builder, Engineer, Artist or Designer American Car and Foundry using design information from the United States Post Office
Source of Information Folio sheet, article on railway post office
Locational Status
[] Original location of structure(s)
[X] Structure(s) moved to current location
Date of move August 14, 2008
SECTION III

Description and Alterations

(describe the current and original appearance of the property and any alterations on one or more continuation sheets)

COLORADO STATE REGISTER OF HISTORIC PROPERTIES

Property Name Denver & Rio Grande Western Railroad Baggage-RPO Car No. 624				
SECTION IV				
ignificance of Property				
Nomination Criteria				
Nomination Criteria				
[X] A - property is associated with events that have made a significant contribution to history				
[] B - property is connected with persons significant in history				
[X] C - property has distinctive characteristics of a type, period, method of construction or artisan				
[] D - property is of geographic importance				
[] E - property contains the possibility of important discoveries related to prehistory or history				
Areas of Significance				
Agriculture				
ignificance Statement (explain the significance of the property on one or more continuation sheets)				
Bibliography (cite the books, articles, and other sources used in preparing this form on one or more continuation sheets)				
SECTION V				
Locational Information				
ot(s) N/A Block N/A Addition N/A				

Verbal Boundary Description of Nominated Property

(describe the boundaries of the nominated property on a continuation sheet)

USGS Topographic Quad Map Strasburg

COLORADO STATE REGISTER OF HISTORIC PROPERTIES

Property Name Denver & Rio Grande Western Railroad Baggage-RPO Car No. 624

SECTION VI

Photograph Log for Black and White Photographs

(prepare a photograph log on one or more continuation sheets)

SECTION VII

ADDITIONAL MATERIALS TO ACCOMPANY NOMINATION

Owner Consent Form

Black and White Photographs

Color Prints or Digital Images

Sketch Map(s)

Photocopy of USGS Map Section

Optional Materials

Use of Nomination Materials

Upon submission to the Office of Archaeology and Historic Preservation, all nomination forms and supporting materials become public records pursuant to CRS Title 24, and may be accessed, copied, and used for personal or commercial purposes in accordance with state law unless otherwise specifically exempted. The Colorado Historical Society may reproduce, publish, display, perform, prepare derivative works or otherwise use the nomination materials for Society and/or State Register purposes.

For Office Use Only			
Property Type: [] building(s) [] district [] site [X] structure [] object [] area			
Architectural Style/Engineering Type: <u>Baggage and Mail Car, Standard Gauge</u>			
Period of Significance: 1914-1967			
Level of Significance: [X] Local [] State [] National			
Multiple Property Submission: N/A			
Acreage <u>less than one</u>			
P.M. 6th Township 4S Range 62W Section 4 Quarter Sections SE NE NE NE			
UTM Reference: Zone 13 Easting 558128 Northing 4398569 NAD27			

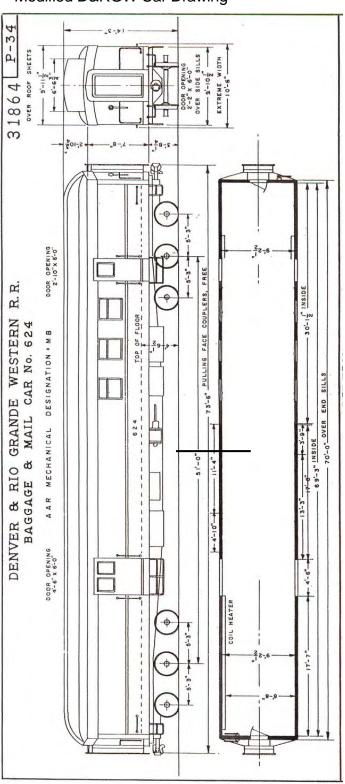
DESCRIPTION

Denver & Rio Grande Western Railroad Baggage-Railway Post Office Car No. 624 is a combination baggage-express-Railway Post Office (RPO) car built by American Car and Foundry (ACF) in 1914 as one of ten built for the railroad in the 620-629 series. (For ease of reading, Denver & Rio Grande, Denver & Rio Grande Western, and Rio Grande are used interchangeably.) The total cost for the car was \$9,760. The car is 73.5' long, 10.5' wide and 14.25' tall, rides on two three-axle trucks, and has an empty weight of 130,500 lbs. (65 tons). The all-steel car has a steel frame supporting a riveted steel exterior with interior walls covered with corrugated steel. Wood covers the concrete floor. The roof has a blind monitor with metal vents replacing former clerestory windows. The car retains its braking equipment and other under-car running gear. Original wood sash windows remain on the car.

The car consists of two unequal length sections. (See Figure 1) About two-thirds of the car (approximately 39´ long), formerly served as the baggage-express section, and most recently carried tools for maintenance-of-way service. A sliding door 4´-6″ wide accesses the area on each side of the car. A pedestrian door also opened into the end of the car.

The last one-third of the car originally functioned as a Railway Post Office. The RPO section was accessible on each side via a 3´ door on each side, from the end of the car through a similar door, and from the baggage area by a "dog door" of less than 3´ in size. Three windows on each side of the car illuminate the former RPO mail sorting area. For customers wanting to mail a letter while the train was standing in a station, little letter slots dropped into the RPO section from each side. This space currently contains a stove and a connected tank for hot water. Across from the stove are some storage bins.

Figure 1 Current Condition Modified D&RGW Car Drawing



¹ The D&RGW officially classified this and similar designs as baggage and mail cars. However, railroad personnel commonly referred to them as baggage-RPO cars, a practice repeated in this nomination.

Page 2 Section III

ALTERATIONS

When American Car and Foundry manufactured the car in 1914, it left the factory painted Pullman green with yellow lettering noting the owner, the Denver & Rio Grande Railroad, and the fact it was a combination baggage-express and RPO car.² (See Figure 2) The last one-third of the car (approximately 30′) served a Railway Post Office. The RPO portion contained bins for towns along the route. Below the pockets hung a sorting deck and large canvas bags. Pigeon-hole racks across the car's interior partition permitted mail to be sorted for each town on the route. Rotating name plates allowed the racks to handle multiple routes. Pole frames at the end of the car near the side doors held additional mail bags. For customers wanting to mail a letter while the train was in the station little letter slots were accessible into the RPO section from each side. Most mail entered and left the car in bags via the two side doors. As constructed, the baggage area consisted of little more than a largely empty room for the storage of passengers' baggage. "Fish racks" at one end consisted of shelves with protective netting.

The original lights were gas fueled. Heating came through steam lines from the locomotive backed up by a Spear stove in the car.³ The car had no mechanical air conditioning. An ice filled water cooler and a hopper-type toilet completed the interior furnishings. Original wood sash windows remain in place on car 624, a rarity given the fact that they were often replaced on cars as repairs and improvements were constantly made.

During the 1920s, the railroad installed several improvements, such as a new steel diaphragm for \$46.50 and stretchers. The first major expenditure was the installation of electric lighting in 1933. The system included a generator and batteries. The batteries powered the lighting and the generator recharged the batteries while in motion using a device connected to the car's wheel assembly (trucks).

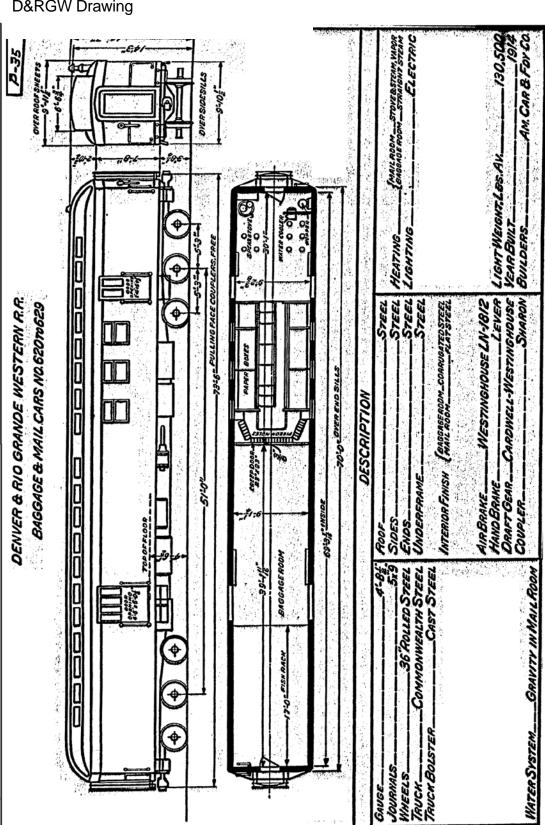
In the late 1930s the railroad applied new steam heating to the car and a new electrical system was installed in the 1940s. About the same time the D&RGW added Spartan interior furnishings to the baggage section to permit an express agent to ride in the car. (See Figure 3) The additions included a small desk attached to the wall, a locker and a toilet. During this later period the small windows in the clerestory roof were covered over and vents installed. This was quite likely an inexpensive repair for leaking windows.

In 1960 the railroad assessed its entire passenger car fleet. Of the 620 series cars, only two remained (624 and 627). The mechanical department report rated the cars in fair to poor condition and suggested that due to age and condition the railroad consider scrapping these cars in the future. In the interim, the cars would require the installation of heavier couplers for larger trains if they were to remain in service (1960 Report). Despite the unfavorable report, the car remained in service until the end of rail postal service in 1967, and it was not until December 1969 that the D&RGW retired the car from revenue service.

² The Denver & Rio Grande Railroad reorganized in 1921 as the Denver & Rio Grande Western Railroad.

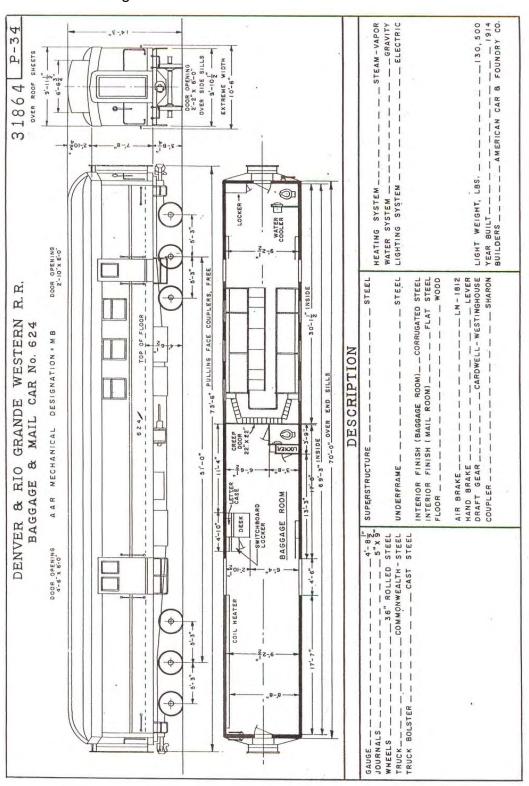
³ Invented in 1857, the Spear stove drew air through a scoop mounted on the car roof that forced air (as the car moved) through a duct to the bottom of the stove, then around the firebox, and into a floor-mounted car-length (or in this case compartment-length) duct with heat disbursing registers.

Figure 2 Operational Appearance in 1953 D&RGW Drawing



Property Name Denver & Rio Grande Western Railroad Baggage-RPO Car No. 624

Operational Appearance in circa mid 1960s D&RGW Drawing



Page <u>5</u> Section <u>III</u>

Property Name Denver & Rio Grande Western Railroad Baggage-RPO Car No. 624

With its retirement, the D&RGW sent the car to Pueblo for a major rehabilitation. The railroad modified the interior so that the baggage area could hold derrick tools and supplies while the RPO section was rebuilt into a locker/bathroom facility. The car received a coat of grey and later silver paint. The cost of conversion amounted to \$1,757.28. Once the conversion to work service was complete the car was sent to Salt Lake City for derrick service as "Tool Car X-3339."

While in work service the car received only critical operating repairs and probably very little capital improvements. By the time the railroad retired the car from work service in 1997, it needed significant roof repairs and the exterior riveted steel, while intact, had areas that experienced buckling due the effects of rust and weather. Sadly, while stored in Salt Lake for sale, the car suffered an interior fire in the baggage section. The fire destroyed many items in the car, but did not affect the car's structural integrity.

Royal Gorge Industries purchased the car in January 1998 and had the body transported by flatcar from Salt Lake City to Strasburg, Colorado. A gondola carried the trucks. The car was unloaded on the leased siding at Strasburg where it remained for 10 years. During the interim the car changed hands many times; first being donated in 2002 to the Comanche Crossing Historical Museum. In 2006, the car was given to Marcus Rail who donated it in 2008 to the Museum of Railway Workers.

Beginning in mid-2008, No. 624 began undergoing restoration efforts. The non-original contents of the car were taken out, the baggage section was cleaned up and the damaged wood was removed. On August 14, 2008, the car made its last move from the siding into the Uhrich Locomotive Works facility for future exterior and interior work. While the exterior is to be restored to near as-built condition, the interior is to be refurbished for interpretive use in a pilot project for the Museum of Railway Workers.

Page 6 Section IV

Property Name Denver & Rio Grande Western Railroad Baggage-RPO Car No. 624

SIGNIFICANCE STATEMENT

Denver & Rio Grande Western Railroad (D&RGW) Baggage-RPO Car No. 624 is eligible for the State Register under Criterion C in the area of *Engineering* as an important example of an early twentieth century railroad car type. The 1914 car is one of a type designed specifically to accommodate the collection and distribution of mail in regular passenger train service while also providing passenger baggage handling and express freight shipments. Its layout and design clearly convey its function for the railroad. D&RGW RPO Car No. 624 is also important for its role on the Denver & Rio Grande (D&RG) as an example of period technology. Structurally, the 624 is little modified and easily retains the technology of 1910s railroad cars. The 624 was in service on the railroad as a passenger car for 55 years and in service as a work car for another 28 years.

The car is also eligible under Criterion A in the areas of *Transportation* and *Politics/Government* for its role in the important partnership of railroads and the U.S. government in the delivery of the mail in the first half of the twentieth century. The railroads provided a fast, reliable and efficient means of moving mail across the country. The extensive transportation network operated by the nation's railroads provided the means for distributing mail and the mail cars of the Railway Post Offices provided the method. The mail contracts allowed railroads to supplement the faregenerated revenues on their passenger trains. In fact, the mail contracts proved so important that many passenger trains, particularly after the 1950s, survived only because of the contract revenue. With the cancellation of most mail contracts in 1967, many passenger trains quickly disappeared from service. The role of D&RGW No. 624 on the *Yampa Valley* train vividly illustrates this relationship.

Historical Background

While RPO cars were present everywhere and every railroad, the Post Office attempted to standardize the whole system. In 1910 the Post Office created a board to design standard rules and regulation relating to the Railway Post Office in a passenger car. Charles Seley, chief mechanical officer of the Rock Island Railroad at the time, led the board. The other board members, consisting exclusively of railroad passenger car builders, spent three years determining RPO car designs and construction practices. They concluded that RPO cars needed to be able to withstand an impact force of 400,000 lbs. on the floor and end frames. This necessitated an all-steel car (White, pp. 483-84).

Since few railroads had many steel cars at the time, it meant they had to purchase new equipment. Certain actions by the board allowed the limited continued use of other types of cars. The subsequent Federal law enacted in 1912 required the retirement of older cars beginning with wood cars. Theoretically, wood RPO cars should have disappeared by 1916 (White pp. 484-85).

In addition, a new law, the Parcel Post law changed everything. The Parcel Post law attempted to create a rate based on distance and open the shipment of other items with certain rates. While the U.S. Post Office did not move express mail and really had limited usage before, the new law allowed the Post Office to transport just about everything, and it almost always went by rail. This

Page <u>7</u> Section IV

Property Name Denver & Rio Grande Western Railroad Baggage-RPO Car No. 624

increased the demand for larger railway post office quarters (*New York Times*, December 8, 1912). There was so much increased traffic in fact that the railroads, including the Rio Grande, specifically asked for higher compensation (*New York Times*, August 17, 1913, p. 3).

Given the new regulation and the increase in traffic, the D&RG responded by purchasing 10 all-steel cars from American Car and Foundry. While the Rio Grande might have wanted more RPO equipment, it was financially unable to do so. During the 1920s, however, other railroads purchased many passenger cars. During this period, technology greatly advanced. The Denver & Rio Grande also became the Denver & Rio Grande Western Railroad (D&RGW) in 1920.

In 1926 and 1928, Congress convened hearings to review the railroads' response to the 1912 law. While the railroads did purchase all-steel RPO cars, most still operated banned wood cars. The hearings did not create any form of punishment for disobeying the law, but it did scare the railroads into purchasing more all-steel RPO equipment (White, pp. 485, 487). It is likely that the Rio Grande's purchase of two RPO cars in 1930, car nos. 630 and 631, was in response to those hearings. The 620 series cars along with nos. 630 and 631 made up the D&RGW's RPO fleet, although they later inherited one mail car from the Denver & Salt Lake.

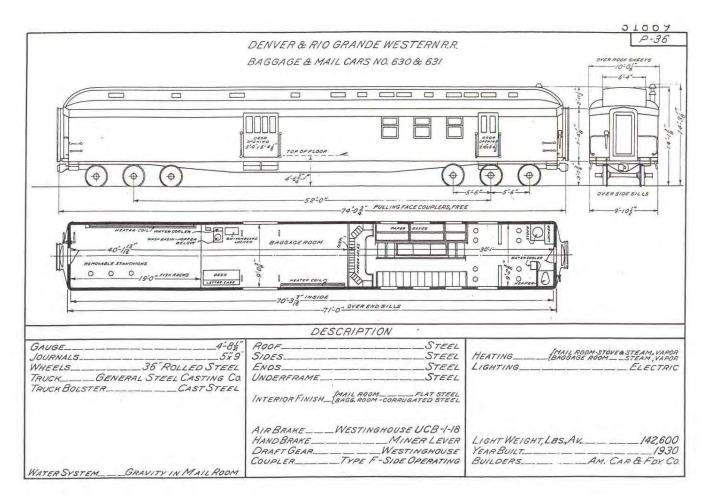
The Colorado Historical Society added D&RGW No. 631 to the State Register for its history as a baggage-express-RPO car. American Car and Foundry built car #631 in 1930 and it was in revenue service until 1967. While the #631 had a similar purpose as the #624, the two cars were built for different owners at significantly different times and hence have major differences. This is largely due to the different periods when each car was made. Principally there were changes in technology due to federal requirements and postal requirements.

When reviewing the folio sheets of the two cars, one aspect easily noticeable is the difference in size. D&RGW No. 624 is simply smaller. The car weighed a little over 65 tons while in service, whereas #631 weighed 71 tons, essentially 10% more. The weight does not lie in the length, since the two cars are quite similar. The 631 is only 4.5 feet longer. By examining the center-sill of the two cars, however, there is a significant difference.

Probably the greatest reason for a stronger car was the ability to pull a train. Since the RPO car is almost always located right after the engine for security and protection this meant the RPO car had, in essence, to pull the entire train. The 624 was built at a time when the trains were smaller and the cars were lighter. Indeed, the Rio Grande's appraisal in 1960 highlighted the problems with the couplers and center sills, which structurally take the most abuse in train service. In addition, the appraisal focused on the inability to put a larger coupler in the car to handle larger trains. One of the reasons the mechanical department recommended scrapping the 624 was because the car could not be modified for use in larger trains.

In comparison, the 631 was built with a heavier frame and also a heavier coupler. The car was also made to take a larger coupler if necessary. The car department recommended doing some repairs and keeping it operating. Regardless of the RPO car, the car department did not have a glowing review of the car's appearances.

Property Name Denver & Rio Grande Western Railroad Baggage-RPO Car No. 624



Besides the size of the cars, the truck technology is also completely different. In 1914, when car 624 was made, the trucks were a substantial part of the car's weight sometimes taking up as much as 1/3 of the car's weight (White, pp. 505-06). The reason was based on the truck's design which used multiple castings to make it. This made the truck heavy and the multiple castings made the truck weak since many points could fail. Worse yet, it also required a great deal of repair work.

On the other hand, the truck technology utilized by car # 631 in 1930, had a single cast truck. This made the truck stronger, yet lighter than its predecessor and required less repair. The truck also spaced the wheels better and had longer axles making the larger weight better dispersed on the rail (folio sheet). The better separation of weight also helped the longevity of the truck.

Small simple changes also exist. The 631 has a small gutter to prevent rain from falling off the side of the car. The 631 was able to take advantage of electrical lighting technology whereas the 624 had to be converted from oil.

Page 9 Section IV

Property Name Denver & Rio Grande Western Railroad Baggage-RPO Car No. 624

The 624 was an RPO designed in 1914 and using the technology of the time. The 631 was built in 1930 using technology from that time. Though the 631 is already on the State Register as an example of a Baggage-RPO, it does not diminish the significance of # 624. Since the car was hardly modified from a structural standpoint it maintains the technology of that time period in railroad history.

On the Rio Grande, the car probably saw service on the whole system, but the car is most known for being on the *Yampa Valley* line during that passenger train's last years. The train ran from Denver to Craig along the former Moffat Road line. Indeed during the 1960s it was a staple of the line and was very often photographed as part of the typical two-car, one-locomotive train. The car was common on the *Royal Gorge* line as well during an earlier period.

Ironically, as the railroad began to end passenger trains, it decided to sell the newer equipment it owned and keep the older equipment. The newer equipment provided a premium price, whereas the older equipment would only be saleable as scrap. This meant despite its condition, car #624 remained in service until the end. While postal service on railroads ended in 1967, the 624 was not retired until December 1969.

The 624 was quite possibly the last heavyweight car to be retired by the railroad and certainly the last with respect to its baggage-RPO series. While the car has unusual characteristics, there are two similar cars still in existence. Car #629, part of the same series, was retired in 1952 and placed into work service as RGAX #3327 (5DV.6003). The car was completely rebuilt for that purpose and was used as a work car until its retirement in 1995. This car was added to the State Register in 1998 for its work service with the Denver Derrick. D&RGW car #631 was discussed above and added to the State Register in 1999 for its transportation significance.

Page 10 Section IV

Property Name Denver & Rio Grande Western Railroad Baggage-RPO Car No. 624

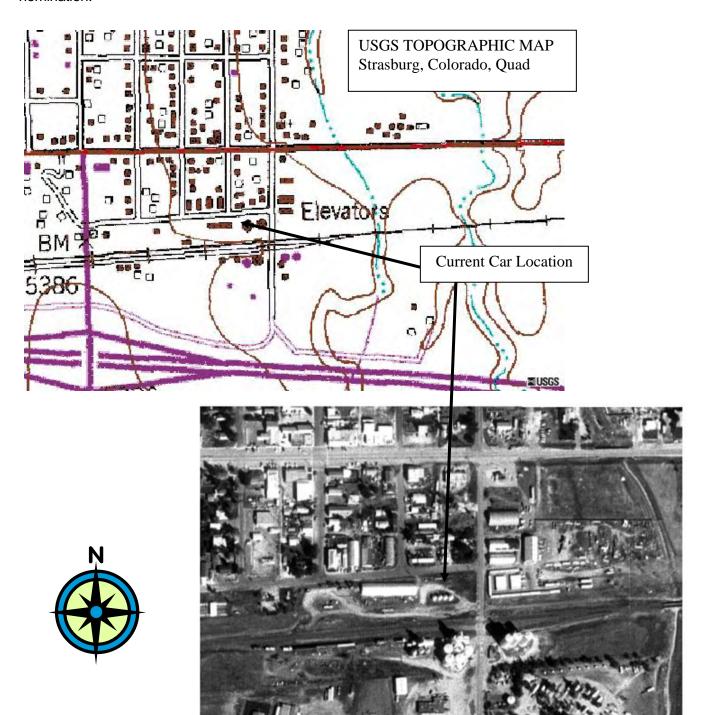
BIBLIOGRAPHY

- Bianculli, Anthony J. *Trains and Technology: The American Railroad in the Nineteenth Century.* Newark, DE: University of Delaware Press, 2001
- D&RGW Equipment card, folio sheets, and accounting information, these are part of the Richardson Library at the Colorado Railroad Museum, Golden.
- "Denver & Rio Grande Western Passenger Car Survey 1960," work was done by the railroad's mechanical department. This survey is located and copies for sale at the Colorado Railroad Museum, Golden.
- "Morgan Preparing For Parcels Post," New York Times, December 8, 1912, p. 18.
- Quiat, Daniel P. *Denver & Rio Grande Western Railroad Baggage-Railway Post Office Car No.* 631 State Register nomination form. On file with the Office of Archaeology and Historic Preservation, Colorado Historical Society, 1999.
- Quiat, Daniel P. *Denver & Rio Grande Western Railroad Baggage-RPO Car No. 629* State Register nomination. On file with the Office of Archaeology and Historic Preservation, Colorado Historical Society, 1999.
- "Roads Ask More Pay For Carrying Mails," New York Times, August 17, 1913, p. 3.
- White, John H. Jr. *The American Railroad Passenger Car.* Baltimore, MD: John Hopkins University Press, 1978.

GEOGRAPHICAL DATA

VERBAL BOUNDARY DESCRIPTION

The State Register nomination includes only the structure of the rail car as it sits within the boundaries of the Uhrich Locomotive Works at Railroad and Monroe streets in Strasburg. No land is included with this nomination.



Page 12 Section VII

PHOTOGRAPH LOG

The following information pertains to photograph numbers 1-4:

Photographer: Daniel Quiat Date of Photographs: 8/14/2008

Negatives or Digital Files: Possession of the photographer

No. Photographic Information 1 Car body being lifted by Hulcher Services for loading onto truck trailer Digital photo 8/14/2008 2 Car body moving by truck to Uhrich Locomotive Works in Strasburg, Colorado Digital photo taken 8/14/2008 3 One of the car's wheel assemblies (truck) in Strasburg Digital Photo on 8/14/2008 4 Car placed back on its trucks for restoration at the Uhrich track Digital Photo on 8/14/2008

PHOTOGRAPH LOG - HISTORIC

These photographs below may not be included in Internet posted documents and other publishing venues due to copyright restrictions.

The following information pertains to photograph numbers H1-H11, except as noted:

Location: Strasburg, Colorado

Photographer: Daniel Quiat

Negatives or Digital Files: Possession of photographer

No.	Photographic Information
H1	C&O RPO car showing typical mail processing fixtures
	Copy of photo taken by Bethlehem car Company
	October 1926; photo owned by Daniel Quiat
H2	Car in route on the Yampa Valley
	Photo by George Melvin; circa late 1950s
H3	Photo of car at Denver Union Station
	Unknown Photographer; photo taken 8/31/1963; negative owned by Daniel Quiat
H4	Salt Lake City, Utah (car for sale by Union Pacific)
	Photographed by Bob Geier, curator of the Utah State Railroad Museum
	Taken during October 1997
H5	Salt Lake City, Utah (car for Sale by Union Pacific)
	Photographed by Bob Geier, curator of the Utah State Railroad Museum
	Taken during October 1997
H6	Salt Lake City, Utah (after purchase of car by Royal Gorge Industries)

Page 13 Section VII

	Car body loaded on a flatcar and the trucks in a gondola
	Photo by Daniel Quiat; photo taken during March 25, 1998
H7	Salt Lake City, Utah
	Car body loaded on UP 659407 and being tied down for movement
	Photo by Daniel Quiat; photo taken on March 25, 1998
H8	Car body being unloaded on the siding in Strasburg Colorado
	Photo by Daniel Quiat; photo taken April 22, 1998
H9	Car body in the air as its being unloaded by two cranes
	Photo by Daniel Quiat; photo taken April 22, 1998
H10	Car sitting in Strasburg during the winter of 2000
	Photo by Daniel Quiat
H11	Car sitting in Strasburg during the winter of 2000
	Photo by Daniel Quiat







