UP CLASS F-50-15 FLAT CARS

by *Thornton Waite*

FREIGHT CARS Journal

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FCJ CHANGE OF FORMAT NOTICE

Beginning with FCJ #45, *Freight Cars Journal* changed its format from a magazine to a serial book. The main differences being each issue comprises a single or group of related subjects under a different title for each issue. This also changes the proper bibliographic citation. The appropriate bibliographic citation for this issue is as follows:

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CHANGE OF COVER PAPER TYPE

We've gone back to the 80 lb cover stock. After several issues of using the 12 pt Kromekote, we decided that it would be better to give the readers more interior pages and photos rather than an expensive cover. The "monograph" version of this issue will have the more expensive cover (at a considerably higher cover cost).

ZIP CODE

Please note that contrary to the popular belief that the +4 digits are always the same as the box number (or last four whichever is applicable),that this is NOT true with our address here at *Freight Cars Journal.* Yes, our box number is 2480 and our +4 code is 6480.

U.P. CLASS F-50-15 FLAT CARS

by Thornton Waite

Flatcars have always been a versatile freight car for the railroads. They can handle large, heavy loads, and are easy to load and unload. Some of the first freight cars on the railroads were flat cars, made from a wooden platform placed on a set of railroad wheels. A typical flat car at the middle of the nineteenth century was approximately 27-feet long with a capacity of about 15 tons. This car, of course was fabricated from wood and had steel-tensioned tie rods to control the deflection and bending of the car frame. These cars also had side pockets for stakes to help secure the load or to hold sides and ends to make a gondola car.

As the years passed, the flat car construction material changed to steel, although the deck was still normally made from wood timbers, and the length and capacity of the cars increased. A flat car of the 1900 period had a 40-ton capacity and was 30-feet long. By 1912 there were flat cars that were 70-feet long and had a capacity of 100-tons.

Specialized forms of the flat car appeared over the years, some to carry special containers and others to carry extra-heavy loads. Some of the heavy-duty flat cars today have capacities of up to 200-tons, and may include depressed centers to hold oversized loads. In the 1950's the flat car also grew longer, with lengths of up to 89-feet for piggyback and automobile freight business. The flat car has continued to be adapted over the years for the changing railroad business, carrying all sorts of types of loads.

In 1963, the Association of American Railroads (AAR) reported that there were 49,979 flat cars in service on the United States railroads. By 1986, there were a total of 135,653 flat cars in service. Of this number, 129,187 were owned by car companies and shippers, indicative of the use of flat cars for container and trailer traffic. The 1962 AAR data on the 49,979 flat cars also included the fact that the total capacity of these flat cars was 2,782,513 tons, for an average capacity of 55-tons.

The 'average' flat car, with a capacity of about 50-tons therefore, was not unusual. This capacity flat car was simply a basic run-of-the-mill flat car. The Union Pacific's F-50-15 flat car was one of this type, with a nominal rated capacity of 50-tons. A closer look at this car and how it was constructed shows how the Union Pacific Railroad specified and constructed their own railroad cars following World War II. A unique factor, at least in today's railroad industry, is that the cars were constructed by the Union Pacific Railroad at their Denver, Colorado, shops.

The F-50-15 designation consisted of the following breakdown: "F" for flat car; "50" for the capacity in tons; and "15" for the series designation by the railroad for the flat car design. The car itself, as shown on page 15, was only 42'6" long with a cast-steel frame and a wooden deck. It had the usual side pockets for stakes, and could be utilized for almost any type of load that would fit on the freight car.

The initial series of cars were built by the Denver shops of the Union Pacific Railroad in 1951, at a rate of several cars a day. At this time a total of 500 cars were constructed by the railroad, numbered 51000-51499. An additional 300 F-50-15 flat cars were built by the Denver shops a few years later, numbered 51501 through 51800, using the same design and configuration. As of late 1975, 380 of the initial series of cars were still in service, but by 1989 most of them has been retired or converted to maintenance-of-way service. Some of them apparently have even been converted to log service, requiring some modifications for special supports.

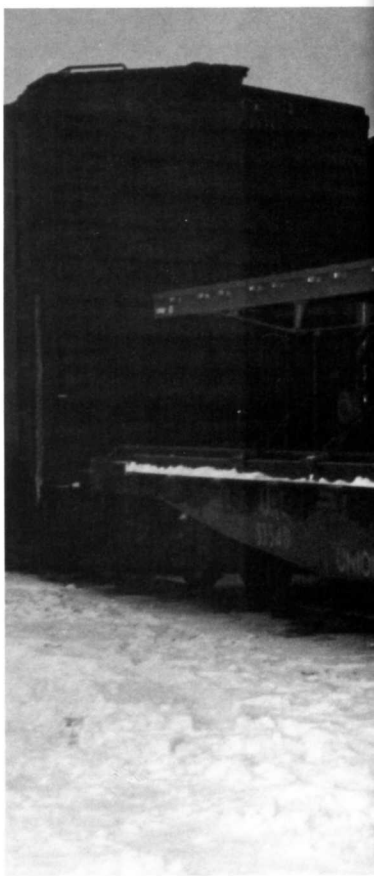
As mentioned previously, the car bodies are only 42'6" long between end sills, with a floor width of 10'6". The floor height off the top of the rails is 3'5-1/2", with a distance between the wheel centers of 32'3". One unique fact relating to the construction of these cars is that the frame castings were obtained from General Steel Castings in Granite City, Illinois.

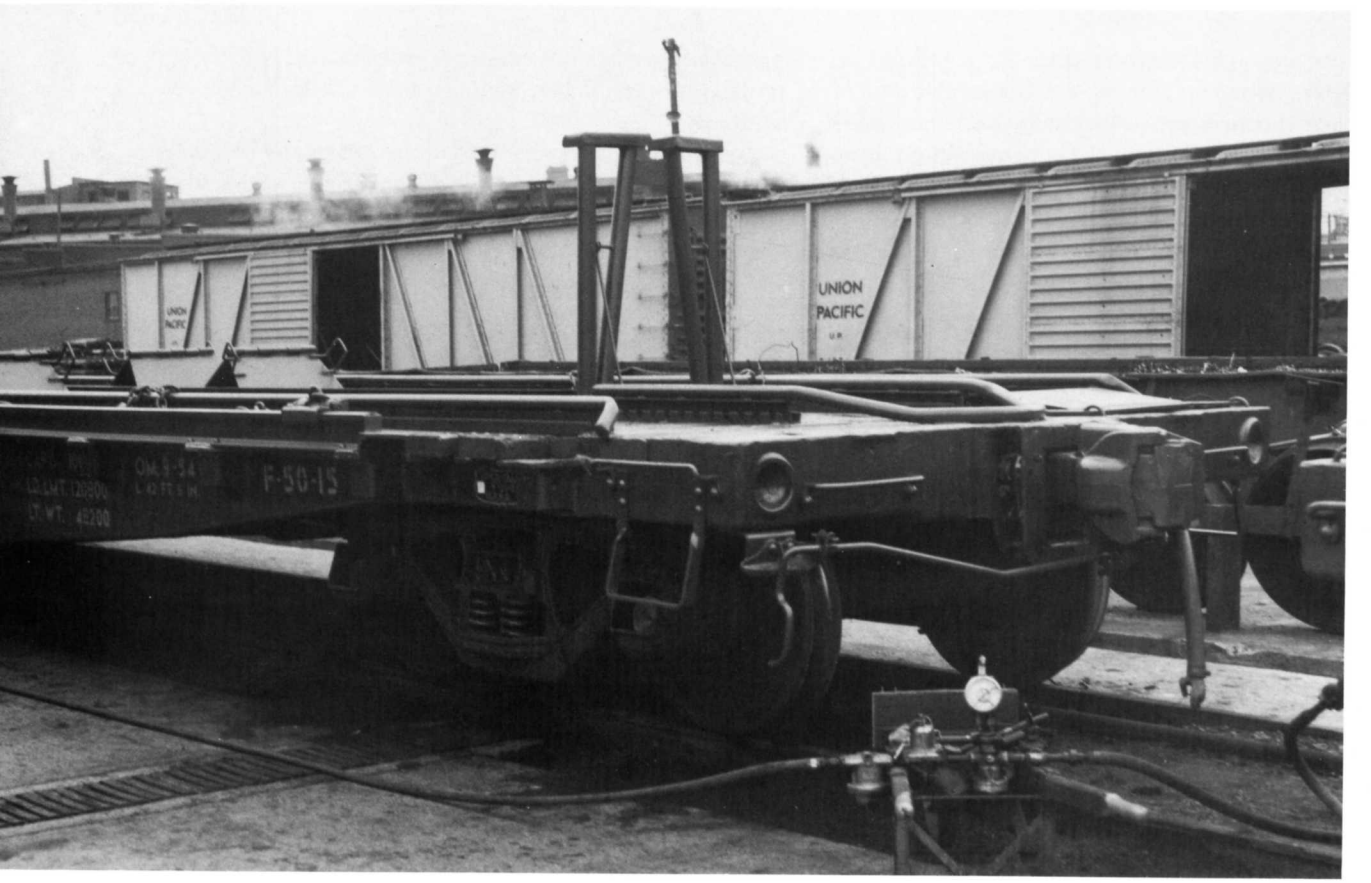
General Steel Castings had previously been named Commonwealth Steel, and was later known under the name of General Steel Industries, or GSI. It was one of the largest foundries serving the railroad industry, producing their "Commonwealth" trucks for passenger, tender and locomotives, as well as steam locomotive frames. They also made underframe castings for heavyweight passenger cars, heavyduty flat cars, and other types of freight cars. Their castings had numerous advantages over the riveted or welded cars that were then on the market. The castings, although complicated and expensive to manufacture, included many features that reduced the cost of assembling of the cars. Mountings for equipment such as the brake system components were cast in place, as were other items such as

Union Pacific flat car 53526, originally built as flat car 51061 in March 1951, at the Denver shops of the railroad, was converted to this configuration in September 1954, at the Omaha shops of the Union Pacific. This was one of the first Trailer-on-Flat-Car (TOFC) designs, with an awkward hitch in the foreground and wheel chocks that had to be moved to block the wheels in place.

Metal shapes were used to both guide the trailer into the proper position and to secure it for shipment. This particular car was rebuilt in April 1965, when this design became obsolete, and renumbered car #53427, which was a more modern design for Trailer-on-Flat-Car service, with an ACF retractable hitch. This car in turn was converted back to #51061 in October, 1974. Union Pacific Museum, M1302)

A photo of newly built Trailer-on-Flat-Car #53450, showing a trailer loaded and secured on the car. It took time to load and secure this trailer, judging from the wheelchocks and the tiedown chains used to hold it in place. This car was originally numbered 51236, and was built in May 1951. It was rebuilt to this configuration in January, 1955, at the Omaha shops of the railroad. In May, 1965, it was converted to TOFC car #53466, with the new ACF retractable trailer hitch and bridge plates on the ends. In August, 1974, the car was again rebuilt back to a conventional flat car and renumbered back to its original car number, 51236. These cars had a long, varied service life. Union Pacific Museum, M1401.




UNION
PACIFIC
F-50-15


F-50-15

the stake pockets. This made it easy for a railroad to purchase the frame and quickly and easily assemble a car in their own shops. Assembly was basically putting the parts of a "kit" together. In addition, the castings did not have fasteners that might loosen and were more durable, with no joints that might fail or corrode.

The Union Pacific Railroad assembled their class F-50-15 flat cars using the frames cast by General Steel. These frames are easy to distinguish and identify, since they have a "G" logo on their side. The Union Pacific Railroad, in fact, was one of the largest users of the General Steel underframe castings, building most of their cars in their Omaha shops. These cars, however, were built in their Denver shops. The railroad's flat cars were in three standard lengths, 42'6", 53'6", and 60'0". The class F-50-15's were the shorter flat cars, being 42'6" long. The decking on the cars made from wood boards, a standard construction method and material of the time. Although the wood splintered and disintegrated with time, it was cheap and easy to replace, and it was also easy to secure loads to the wood. The wood construction also made flat cars cheaper to construct.

The cars had an average light weight of 43,400 pounds, including a casting weight of 22,160 pounds. There were twelve stake pockets on each side of the flat car for the stakes that might be used to secure shipments. There was a standard Equipco hand brake wheel on one end in a horizontal attitude, which had an overall height of 5'1-7/16" above the rails. Interestingly enough, since the flat cars were relatively short, they did not have any of the slogans such as "Road of the Streamliners" on their sides. Instead, they had the basic information with the car number and load data on the frame side. Placing the ACI (Automatic Car Identification) indicator on some of these cars in the 1960's was also a challenge, since the side frame was so narrow. The label holding the bar code readout information had to hang below the side sill, making it vulnerable to bending and other damage.

The painting of the car is outlined on pages 8-9. As mentioned previously, the narrow side sill made it necessary to minimize the amount of data stencilled on the sides of the car. Only the weight and load capabilities were noted, since the flat car did not have the height and other dimensional data common to other freight cars. The sides and ends of the car frame, as well as the truck bolsters and side frames, were given a chromate primer and two coats of approved red freight car paint. The letters were stencilled on using the standard Union Pacific Armour yellow paint. The rest of the car frame was primed and coated with black car cement.

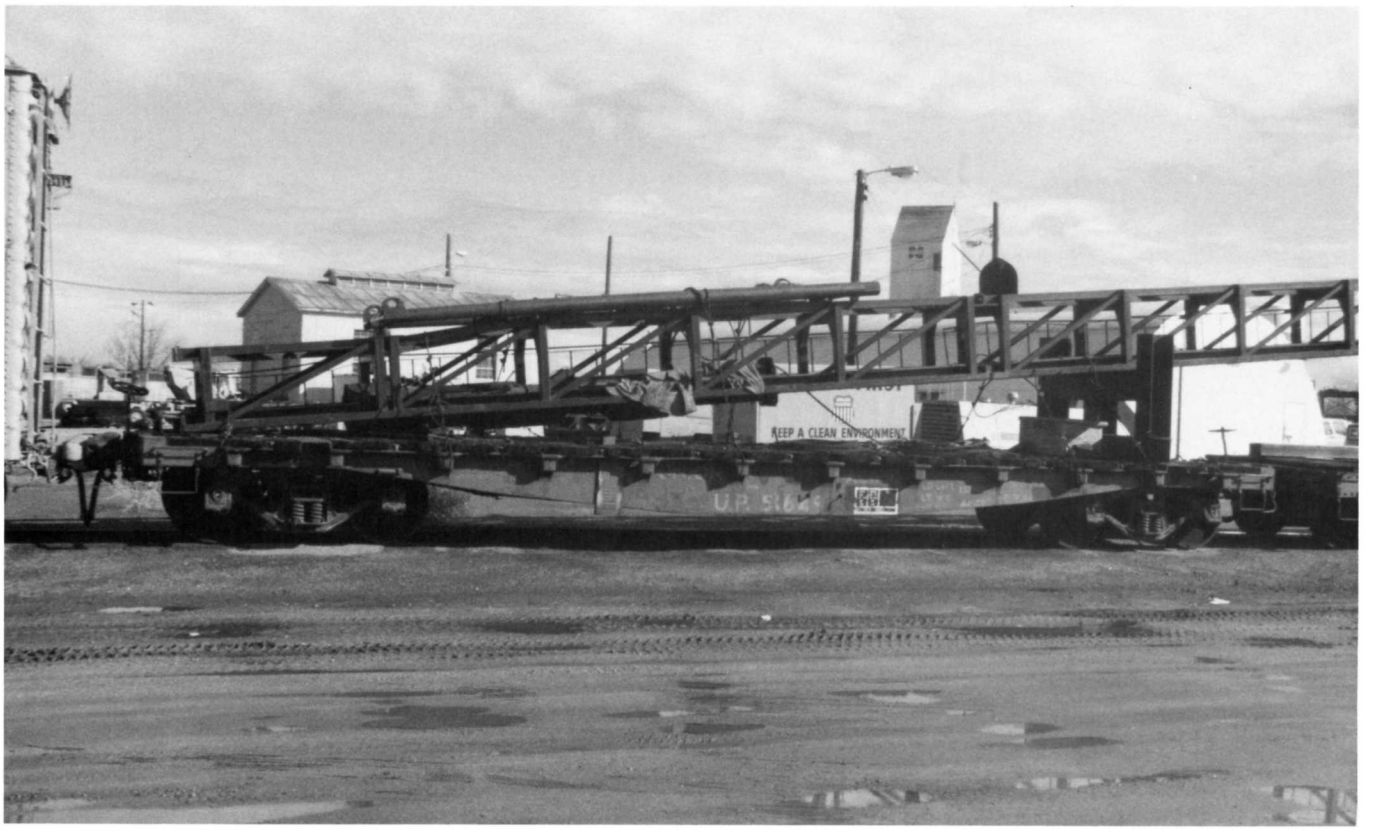
The "Union Pacific" letters were 7 inches high, the car designations of F-50-15 used 4 inch letters, and the weight data used 3 inch letters. The size of the letters ranged on downward to one inch high for the painting information and the even smaller "Repkd" stencil. There wasn't much room on the car's side for all of the necessary data, and it all had to be carefully laid out to fit between the side stake pockets. Even the truck bolsters were stencilled with the car initials and car number, on the bolster side facing the end of the car.

The flat cars served the railroad in many functions over the years. Some of the flat cars in this series were converted to car numbers 53500-53634 in the mid-1950's for use as some of the initial flat cars used for trailer-on-flatcar (TOFC) service. New hitches were added to one end of the car, wheel chocks were included, and the car deck was modified to help guide and hold the trailer wheels in place. These cars did not remain in service for very many years. The reason is fairly obvious if one looks at pictures of the cars. The hitches were awkward to use, and the wheel chocks had to be adjusted after the trailer was loaded. In addition, the trailers required several tiedowns, so loading was a time-consuming operation.

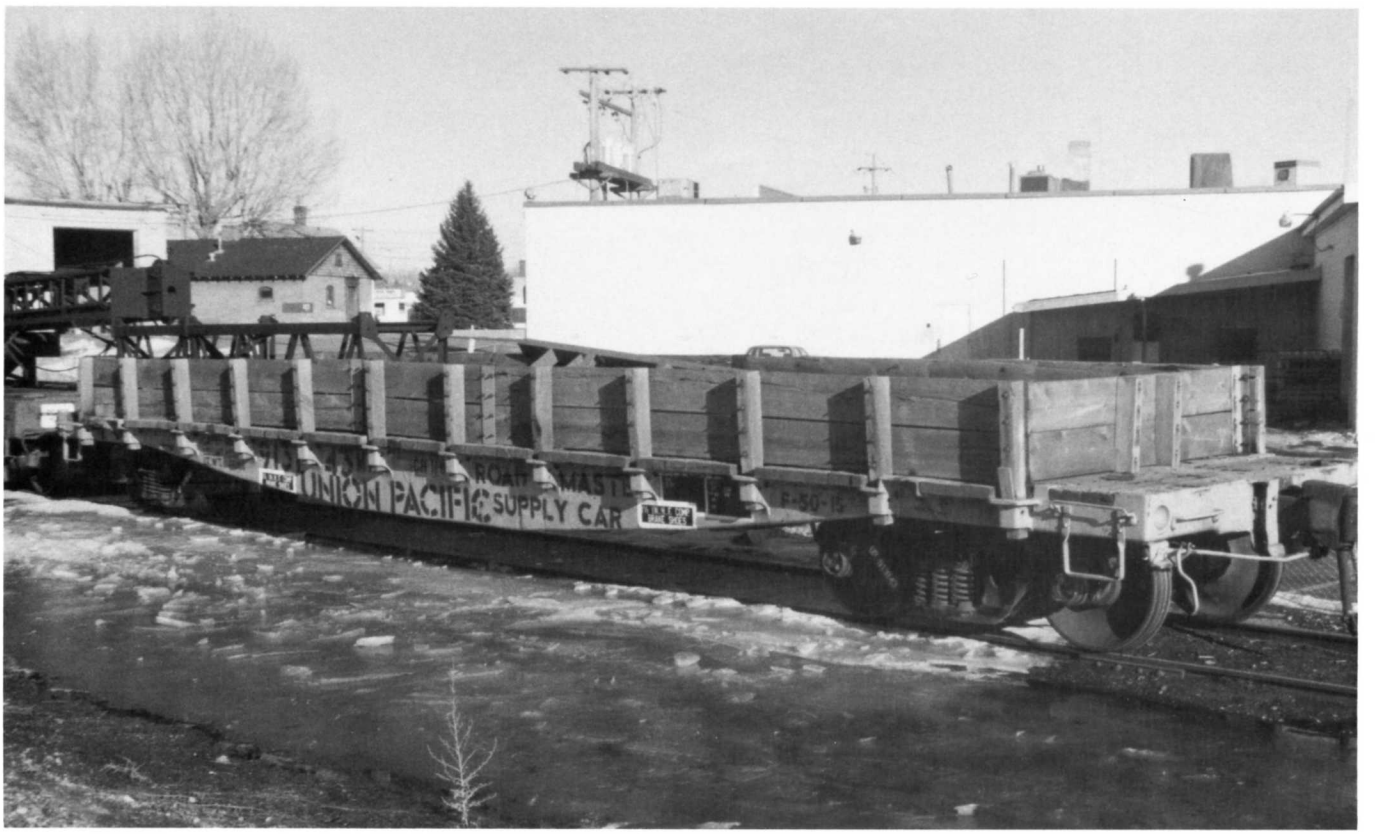
In 1964-65 many of these cars were rebuilt to a new design for TOFC service and renumbered to 53400-53484, as shown on page 16. Cars that were not converted were returned back to their original car number. The new series of cars had an improved ACF trailer hitch that was collapsible so that the car was easier to load and unload. This modification allowed the cars to carry one 40-foot trailer each. The retractable hitch was on the "A" end of the car, and there were bridge plates on each end of the car, one each on diagonal ends for ramp loading. In 1974 many of these cars were retired or converted back to their original number when the trailer hitches were removed.

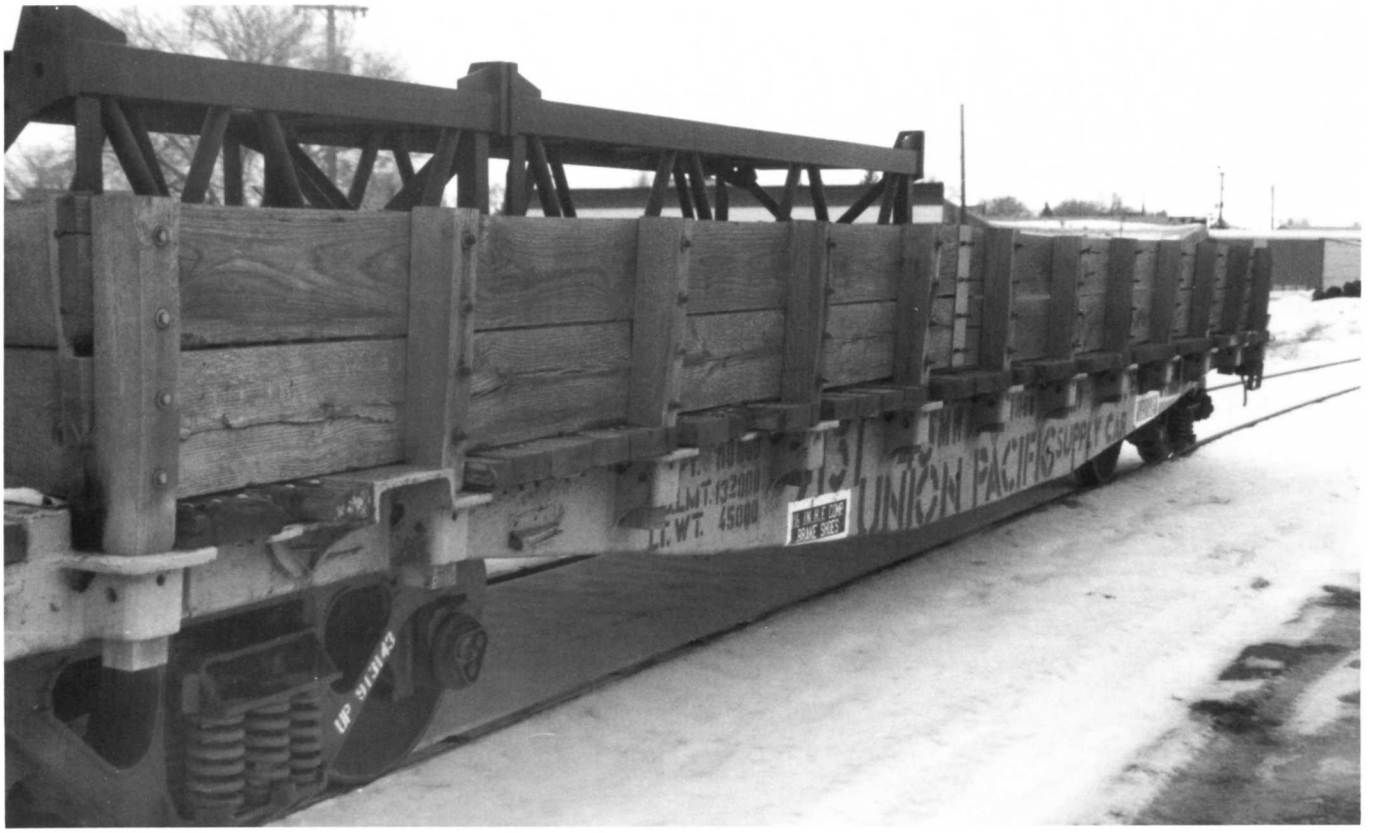
Although many of the cars were scrapped, many others were converted to maintenance-of-way service, where they were renumbered into the 900000-series for maintenance-of-way service. They are now being used as wheel cars, to transport maintenance equipment, or to hold supplies and materials. The maintenance-of-way cars are now typically painted green with black lettering for maintenance service or red with white for the wheel cars. However, the designation F-50-15 can still be seen stencilled on their sides. The maintenance cars can be found in the railroad yards on obscure sidings or on work trains. The wheels cars can be found on freight trains, carrying wheelsets to and from the Pocatello, Idaho, wheelshops. These cars, of course, have been extensively modified, and the top deck on the car for the wheel cars, for instance, is now a steel plate instead of wood, due to the nature of the load being carried. Other cars can be seen along the right-of-way, where they have been converted into short bridges for the rough truck road that may parallel the railroad tracks.

These cars are a short flat car that can be used for most types of work. A few of these cars fit in on any layout, whether in regular service transporting freight or being used in maintenance-of-way service. These pictures show some of the flat cars as they look and are used today. They have not changed much of the years, of course, since minimal modification or maintenance have been necessary on them. The pictures also show some of the uses the railroad puts them to in regular service and operation.

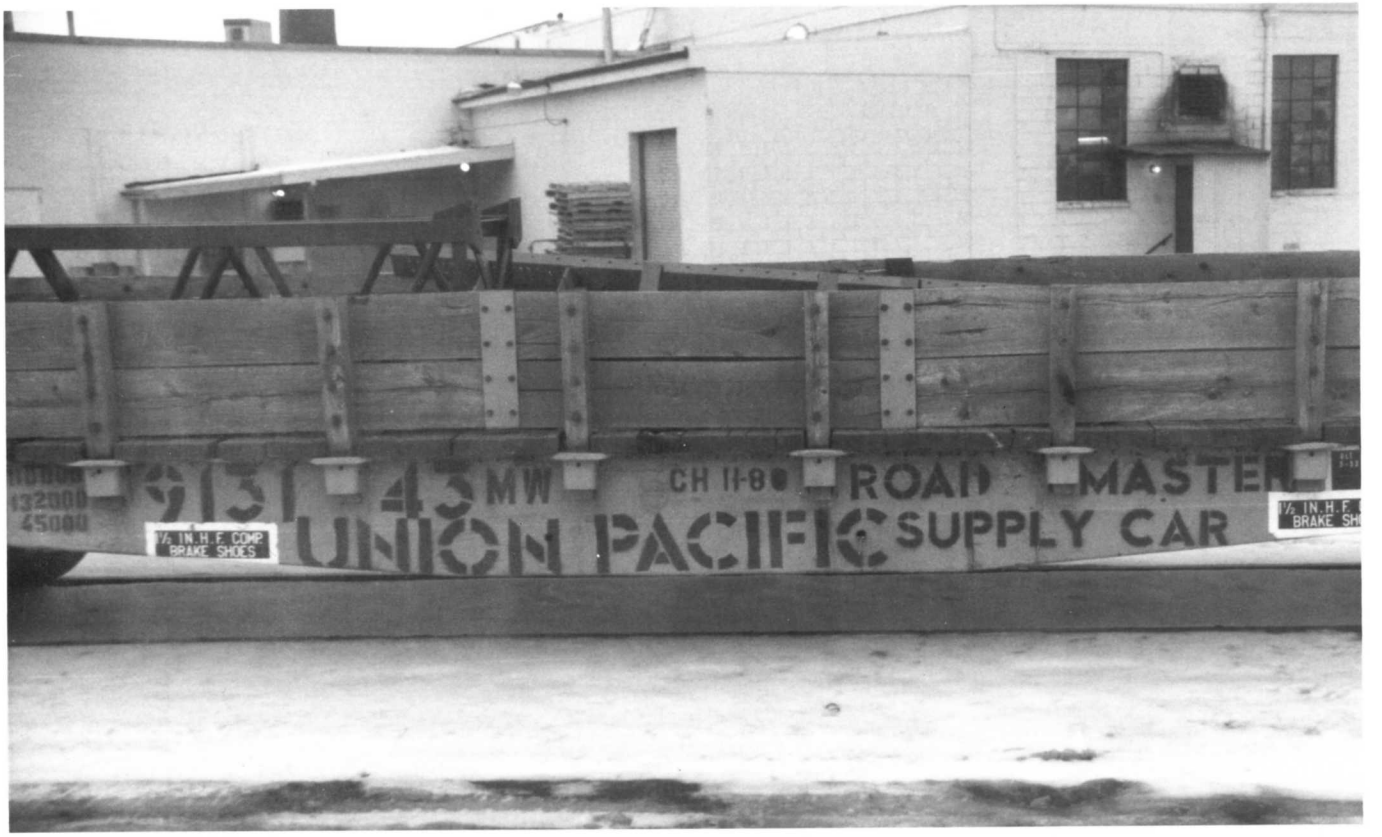


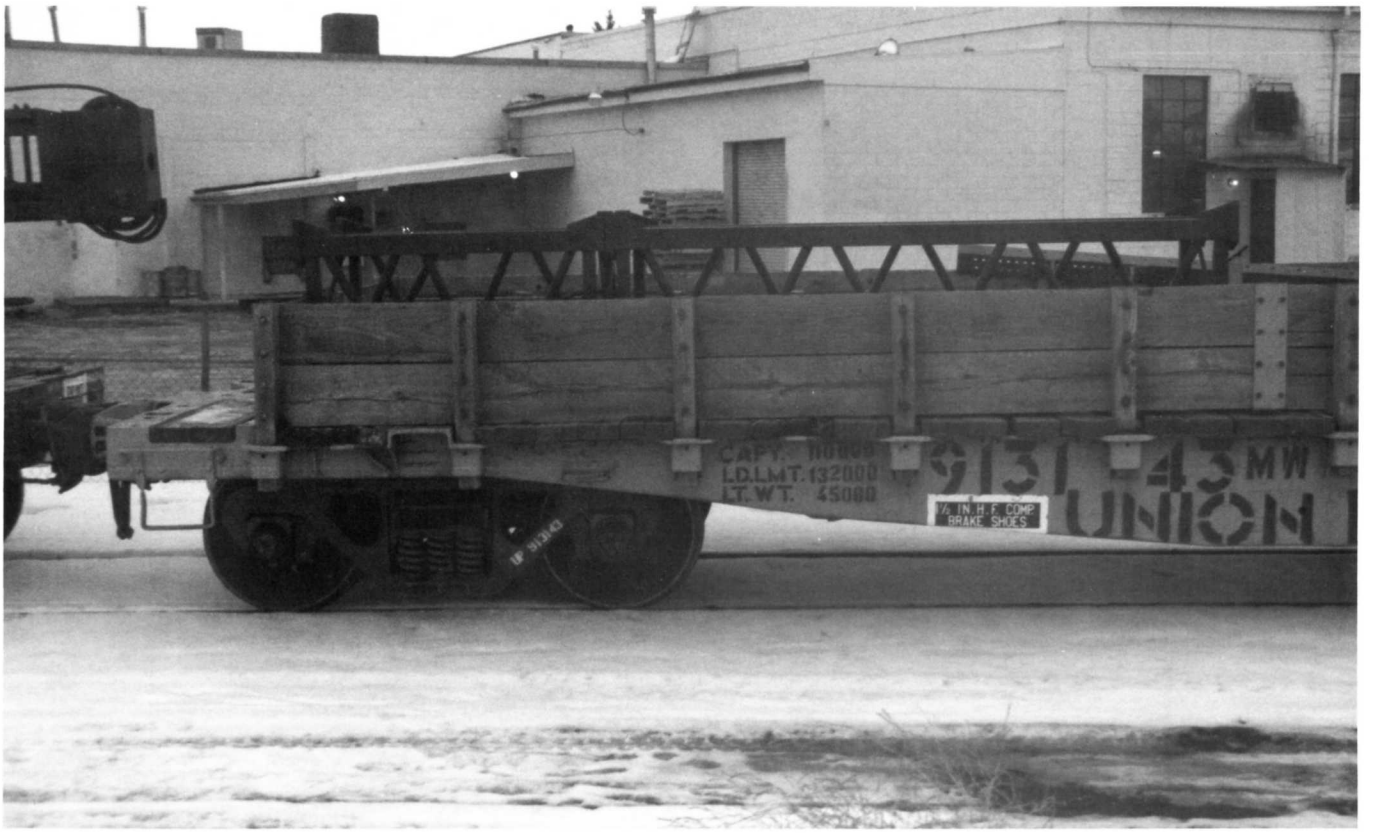
UP 51649 at Nampa, ID in February 1991 where it was being used in MoW service. Painted freight car red with Armour yellow paint. Note the ACI label, installed in the 1960's is still on the side of the car. (Below) **UP 913143. This car is painted with the standard MoW green, and sturdy wood sides have been added to form a gondola to hold miscellaneous parts and pieces. Idaho Fall, ID, February 1991.**



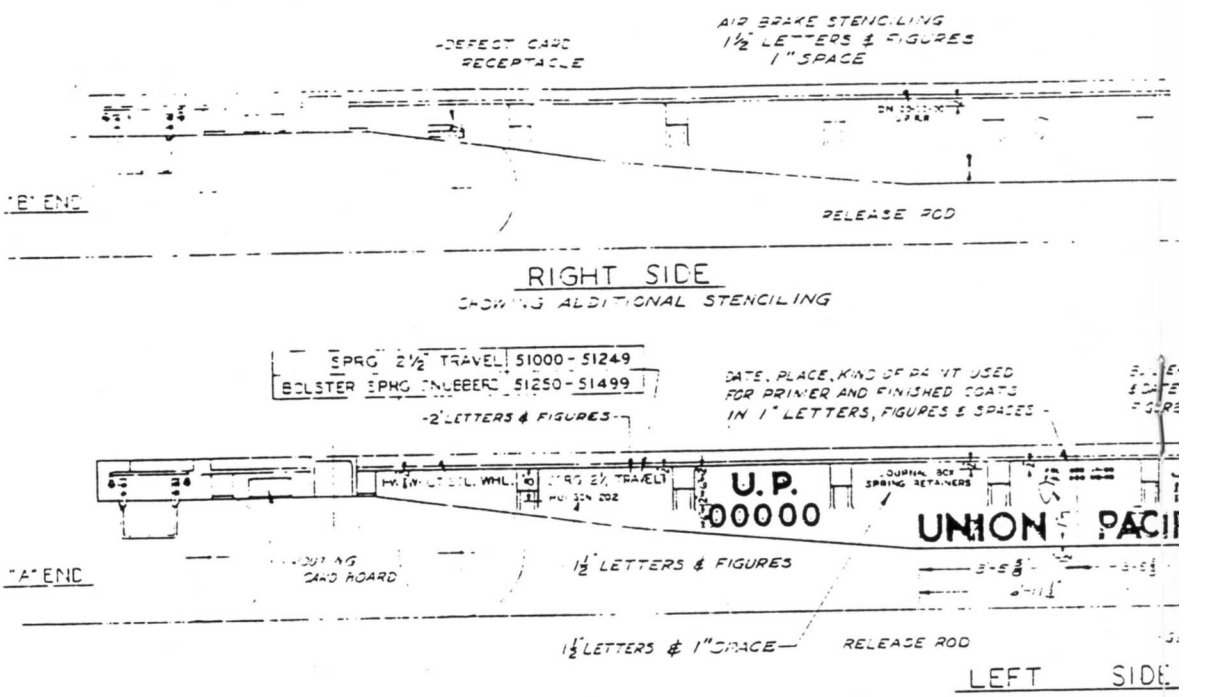


(Above) **Close-up #913143. Tapered wood pieces have been hammered into the side stake pockets, and then the wooden board slats bolted onto the side pieces to form a gondola. Note car number on trucks. Wooden boards for deck and sides have not been painted.** (Below) **Close-up of middle of 913143. This car has been stencilled as a supply car for the roadmaster. Note how stencilling has been crammed into available space. The wood sides that form the sides to make the gondola enclosure have been spliced together with metal plates.**





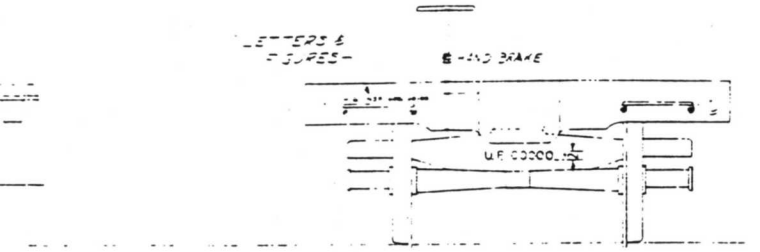
(Above) **View of the end of the car. The brake shoe information is in white letters on a black background. Note the gondola side enclosure does not extend all the way to the end of the car.** (Below) **Note the "G" casting logo of General Steel Castings. Also, note how the frame castings included the stake pockets, minimizing the time required to put the car together and lessening the chances of the pocket loosening or corroding.**



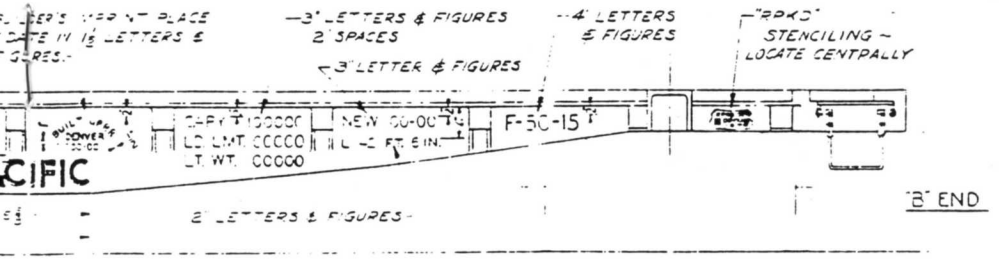
DRAWING OF LETTERS & FIGURES	SEE TABLE FOR DRAWING NUMBERS.
COLOR OF LETTERS & FIGURES	STENCIL ALL LETTERS & FIGURES WITH APPROVED ARMOUR Y
SIDES & ENDS OF UNDERFRAME	PAINT WITH A PRIMING COAT OF APPROVED CHROMA FREIGHT CAR PAINT.
ALL OTHER PARTS OF UNDERFRAME	PAINT WITH A PRIMING COAT OF APPROVED CHROMATE PRIMER CARE SHOULD BE TAKEN IN SPRAYING AIR BRAKE PARTS SO
TRUCKS	PAINT TRUCK BOLSTERS & SIDE FRAMES WITH A LIGHT COAT OF FREIGHT CAR PAINT. DO NOT PAINT WHEELS & AXLE
ROUTING CARD RECEPTACLE	PAINT SAME COLOR AS SIDES OF UNDERFRAME.
DEFECT CARD RECEPTACLE	PAINT SAME COLOR AS SIDES OF UNDERFRAME.
AIR BRAKE	WHEN CYLINDER, AB VALVE, & DIRT COLLECTOR ARE CLEANED, DATE ON SIDE SILL, RIGHT SIDE OF CAR, NEAR RELEASE R
DATE BUILT & CLASSIFICATION	STENCIL AS SHOWN, BOTH SIDES OF CAR.
OIL BOXES REPACKED	STENCIL INITIALS OF ROAD, PLACE, & DATE AT DIAGONAL
HAND BRAKE	WHEN POWER HAND BRAKES ARE INSPECTED ON EXISTING C
TRUCK BOLSTERS	STENCIL EACH TRUCK BOLSTER ON SIDE FACING END OF CA
DRAFT GEARS	WHEN NEW GEARS ARE APPLIED OR INSPECTED O E STING DIAGONALLY OPPOSITE ON RIGHT SIDE OF CAR AS FOLLOW NAME & TYPE OF GEAR, NAME OF STATION, MONTH, A ON NEW GEARS STENCIL NAME AND TYPE OF GEAR O
STEEL WHEELS	STENCIL ON LEFT SIDE OF CAR AS SHOWN AND DIAGONAL
SPRINGS - "SPRG. 2½" TRAVEL"	STENCIL ON LEFT SIDE OF CAR AS SHOWN AND DIAGONAL THIS STENCILING APPLIES ONLY TO CARS WITH A
JOURNAL BOX PACKING RETAINER DEVICES	STENCIL A WHITE 1½" SQUARE WITHIN MEDALLION ALSO STENCIL "JOURNAL BOX SPRING RETAINERS" ON LEFT SIDE
SPECIAL NOTE	ALL LETTERS & FIGURES TO BE DISTINCT AND OF SUFFICIENT CONSISTENCY TO COMPLETELY
"BOLSTER SPRG SNUBBERS"	STENCIL ON LEFT SIDE OF CAR IN PLACE OF "SPRG RIGHT SIDE OF CAR. THIS STENCILING APPL

CLASS	USED ON			
F-50-15	51000-51499			

ISSUE	DATE	REVISION
A	1-31-51	ADDED "BOLSTER SPRG SNUBBERS STENCILING. FOR 250 CARS. ALSO ADDED STENCILING — "JOURNAL BOX SPRING RETAINERS" FOR 500 CARS.



"B" END OF CAR



DE:

UR YELLOW STENCIL PASTE.

OMATE PRIMER & TWO COATS OF APPROVED RED

MER & ONE COAT OF APPROVED MEDIUM BLACK CAR CEMENT.
E SO THAT CAR CEMENT IS NOT TOO HEAVILY APPLIED.

T OF PRIMER FOLLOWED BY A LIGHT COAT OF APPROVED RED
XLES.

NED, OILED, & TESTED. STENCIL INITIALS OF ROAD, PLACE, &
BE ROD.

AL CORNERS OF CAR WITHIN MEDALLION AS SHOWN.

G CARS, STENCIL PLACE, & DATE ON END SILL, NEAR HAND BRAKE.

F CAR WITH INITIALS & CAR NUMBER.

NG CARS, STENCIL ON LEFT SIDE OF CAR AS SHOWN, AND
LOWS: "NEW GEAR APPLIED" OR "GEAR INSPECTED" WITH
, AND YEAR.
R ONLY.

NALLY OPPOSITE ON RIGHT SIDE OF CAR.

NALLY OPPOSITE ON RIGHT SIDE OF CAR.
H A-3 TRUCKS, SERIES 51000-51249.

AS SHOWN ON "RPKD STENCILING" DRAWING.
OF CAR AS SHOWN & DIAGONALLY OPPOSITE ON RIGIT SIDE OF CAR.

D CLEAN CUT AND STENCILING PAINT MUST BE
LY COVER COLOR ON WHICH STENCILING IS APPLIED.

PRS. 2½ TRAVEL" AND DIAGONALLY OPPOSITE ON
PLIES ONLY TO CARS, SERIES 51:50-51499.

DRWG. NO	DESCRIPTION
304-C-8497	7" UNION PACIFIC
304-C-7023	6" LETTERS
303-C-7449	6" FIGURES
304-C-7014	4" LETTERS & FIGURES
303-C-7015	3" " " "
303-C-7016	2" " " "
303-C-7017	1½" " " "
303-C-1018	1" " " "
302-C-10796	"RPKD" STENCILING

UNION PACIFIC RAILROAD CO.

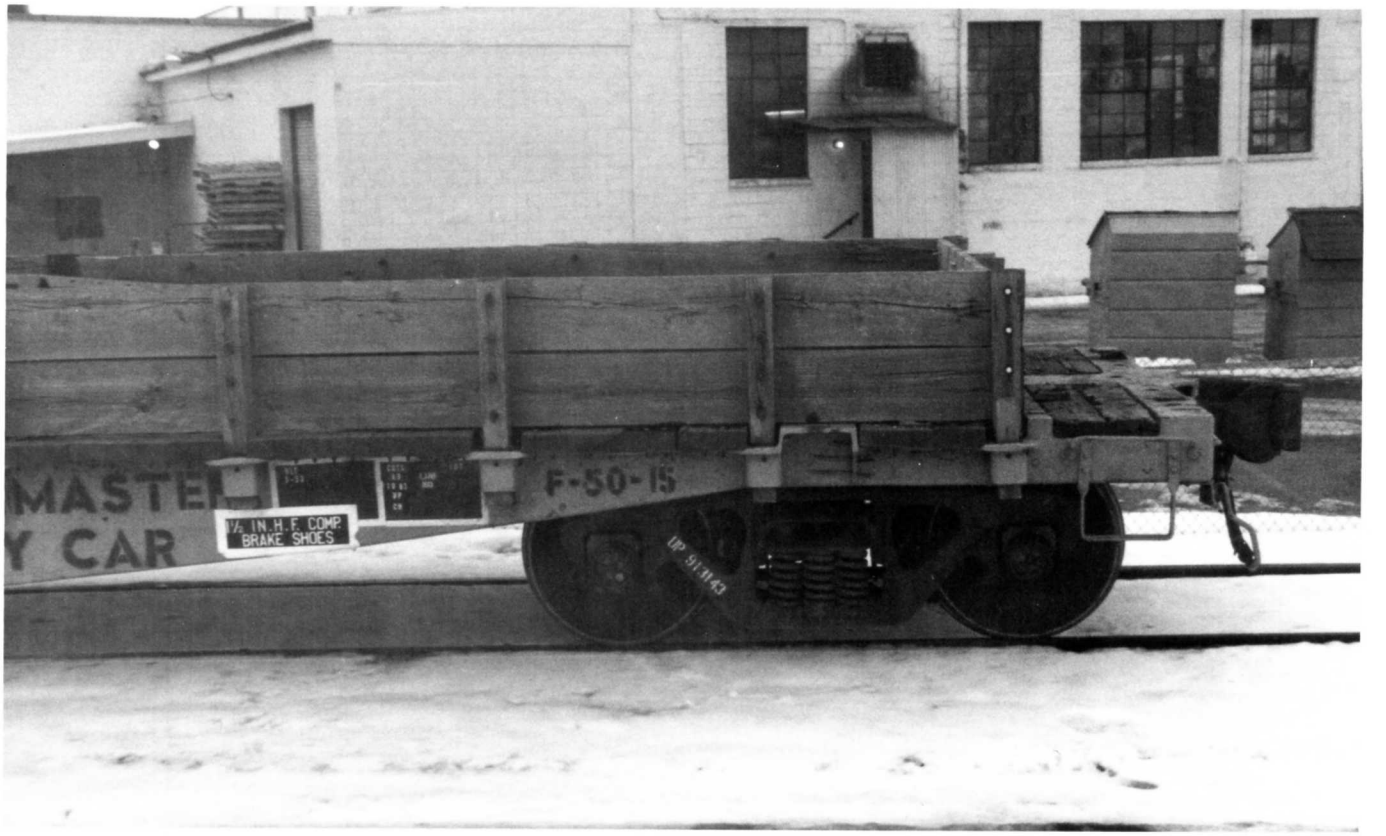
RESEARCH AND
MECHANICAL STANDARDS

PAINTING, LETTERING, & NUMBERING

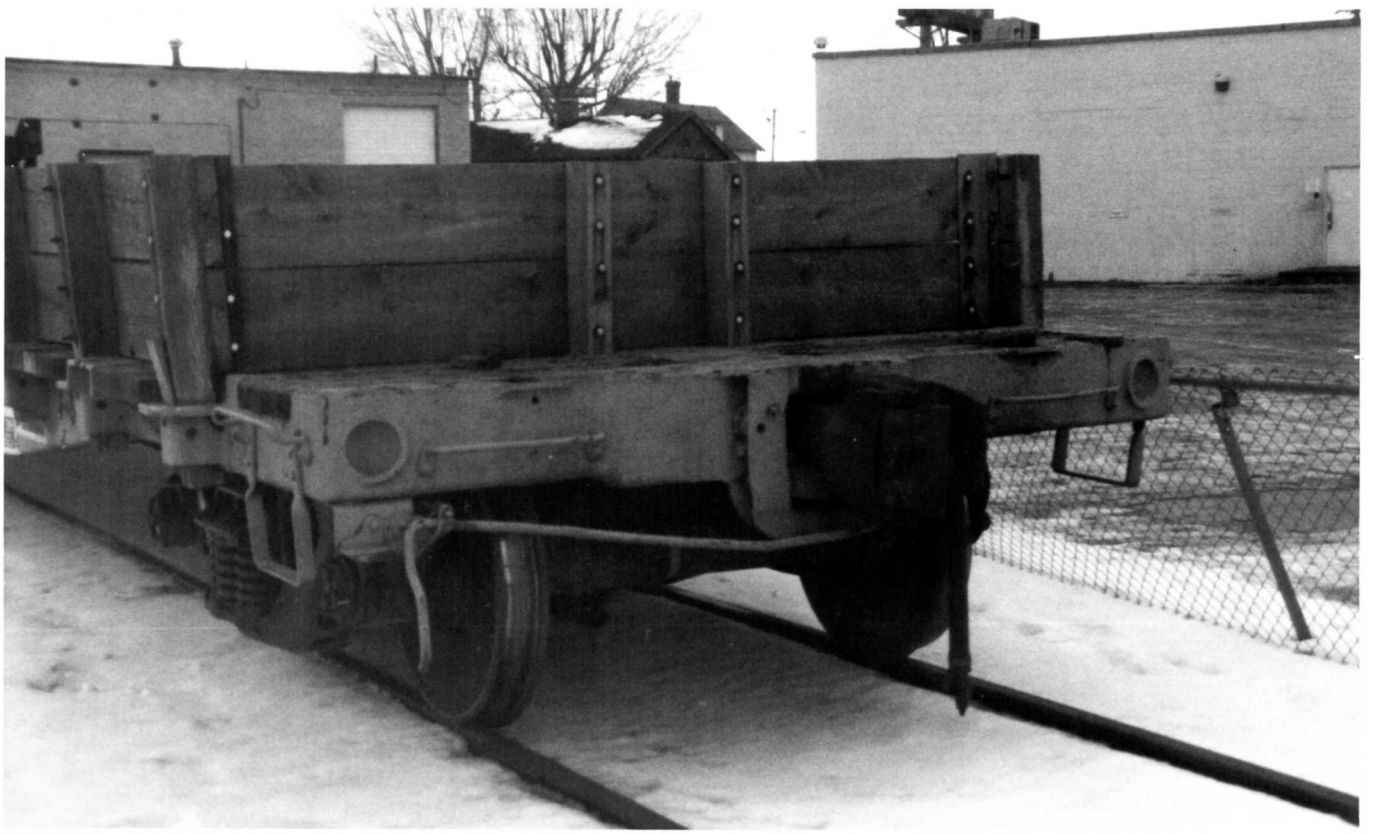
LETTERING ON FLAT CARS

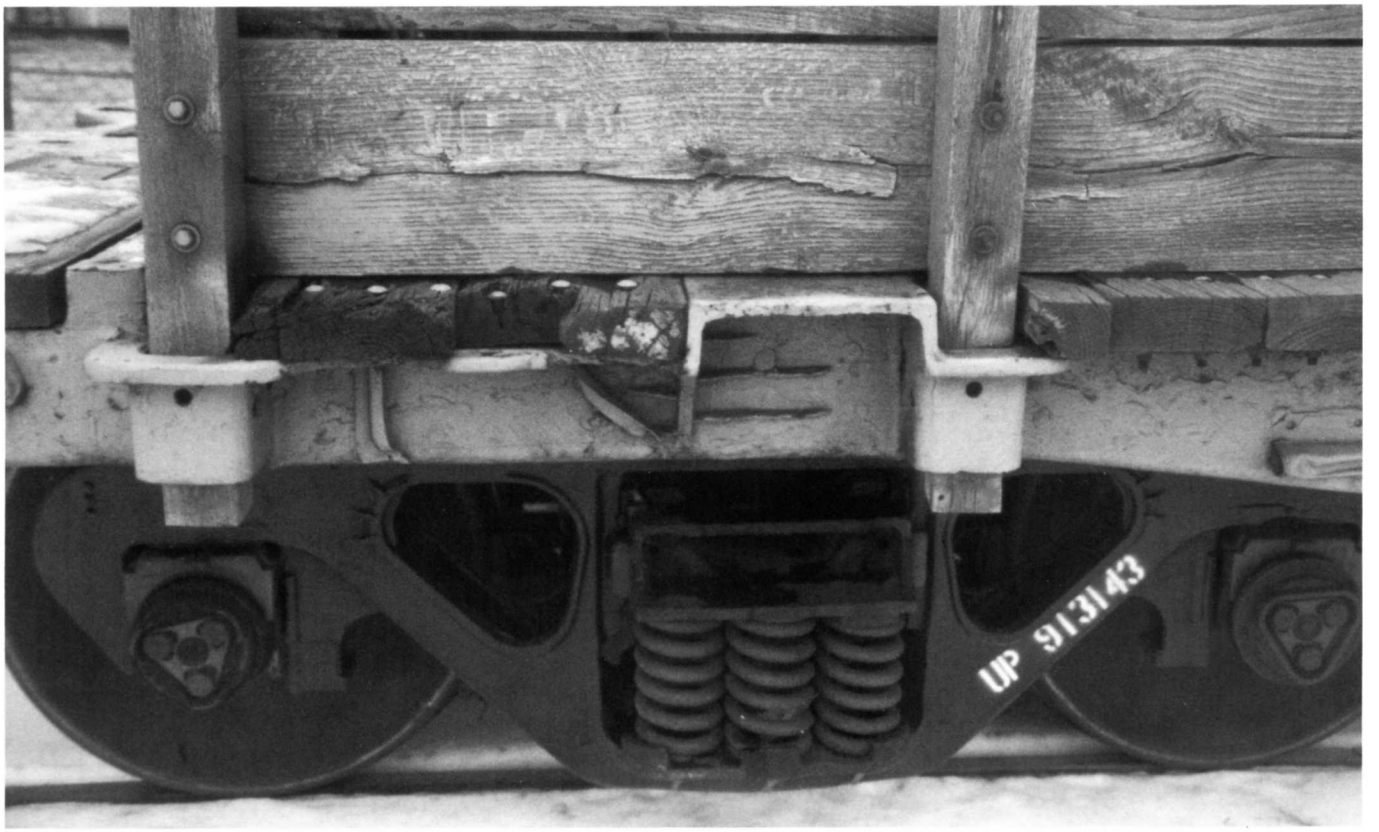
F-50-15

303-C-10782								
DATE 1-2-51	A							

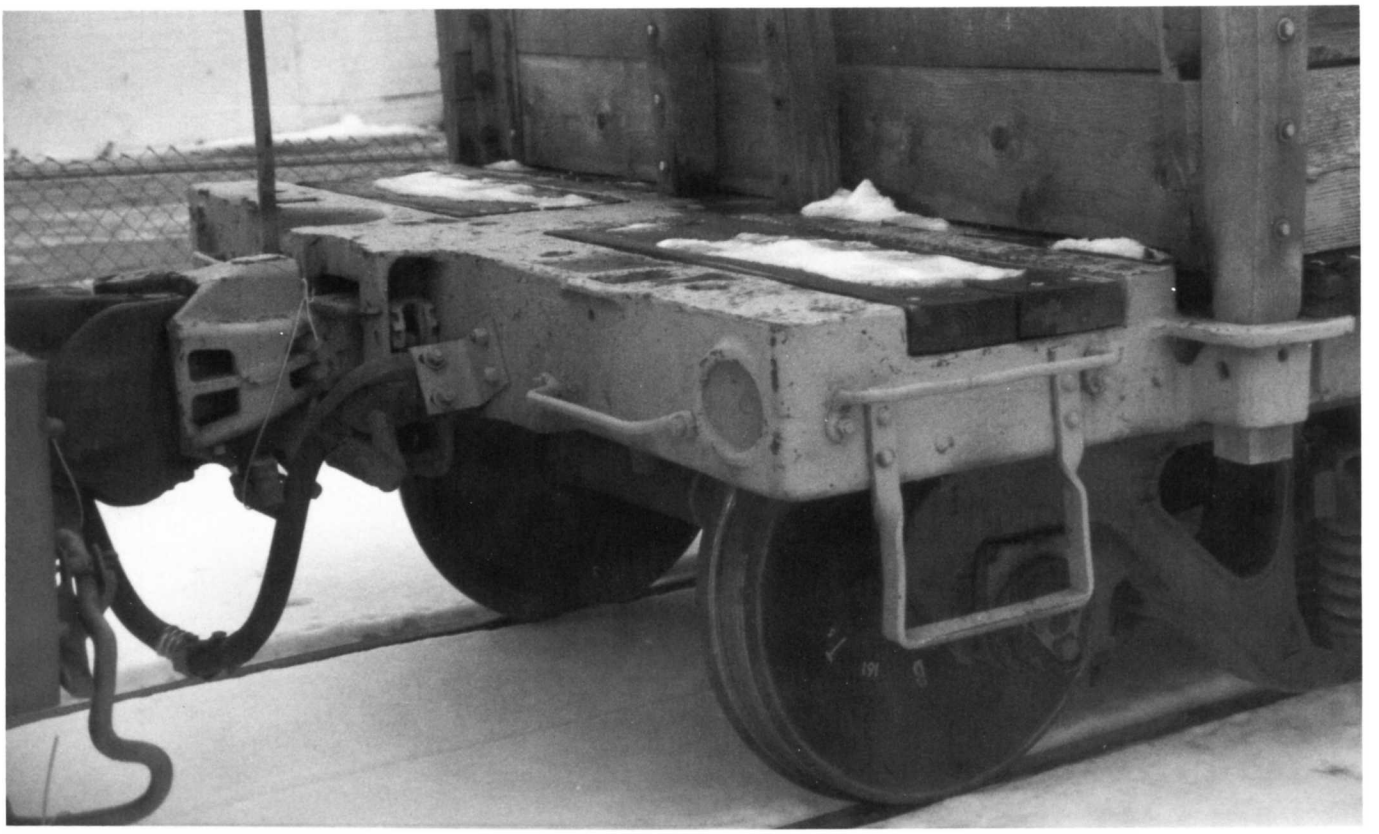


(Above) **"A" end view. Note step on end for brakeman and "F-50-15" stencilling. This car was built in May 1953, indicating it was in the second series of F-50-15 flat cars that the Union Pacific assembled.** (Below) **An end view showing poling pockets on the end of the casting and the sill step for the brakeman on the sides of the car.**

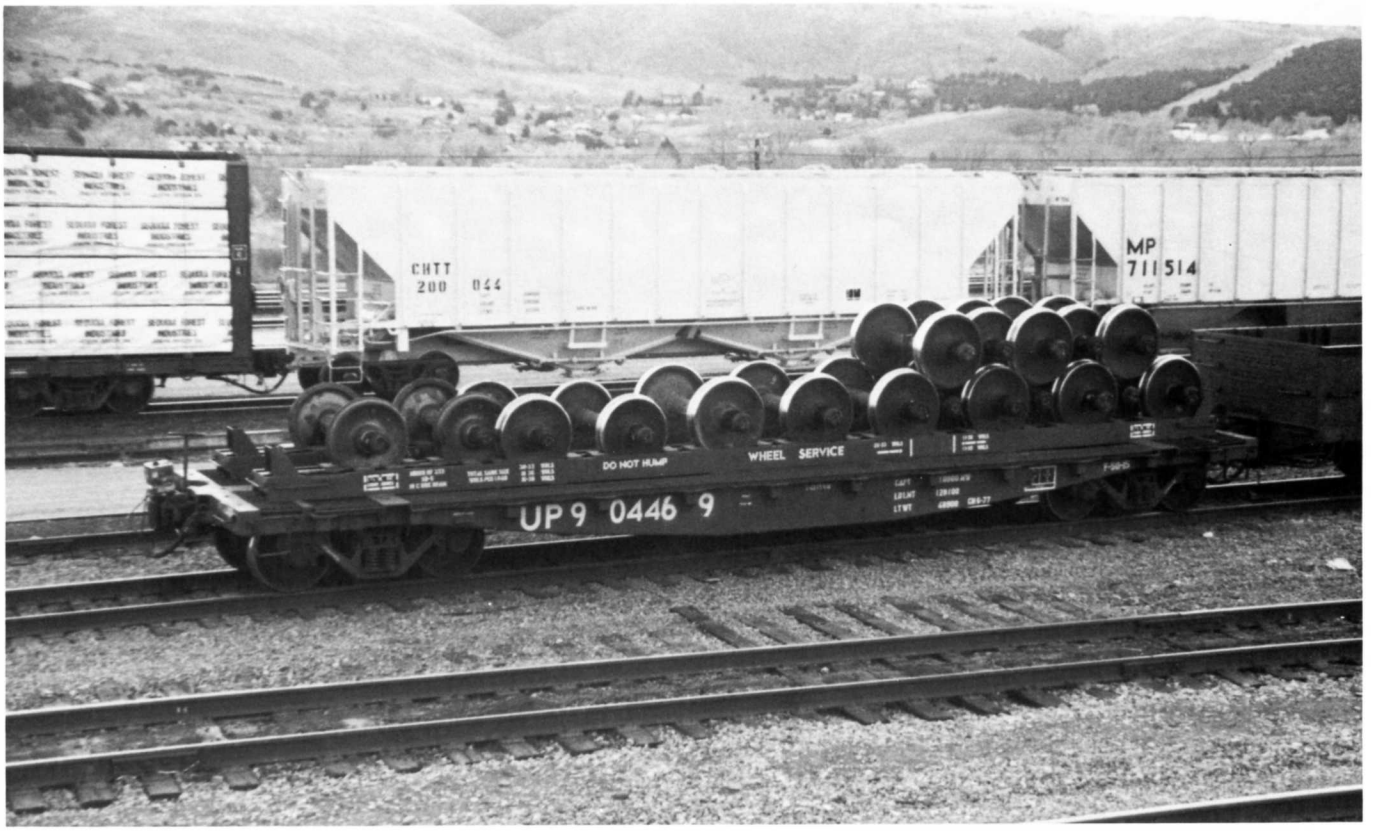




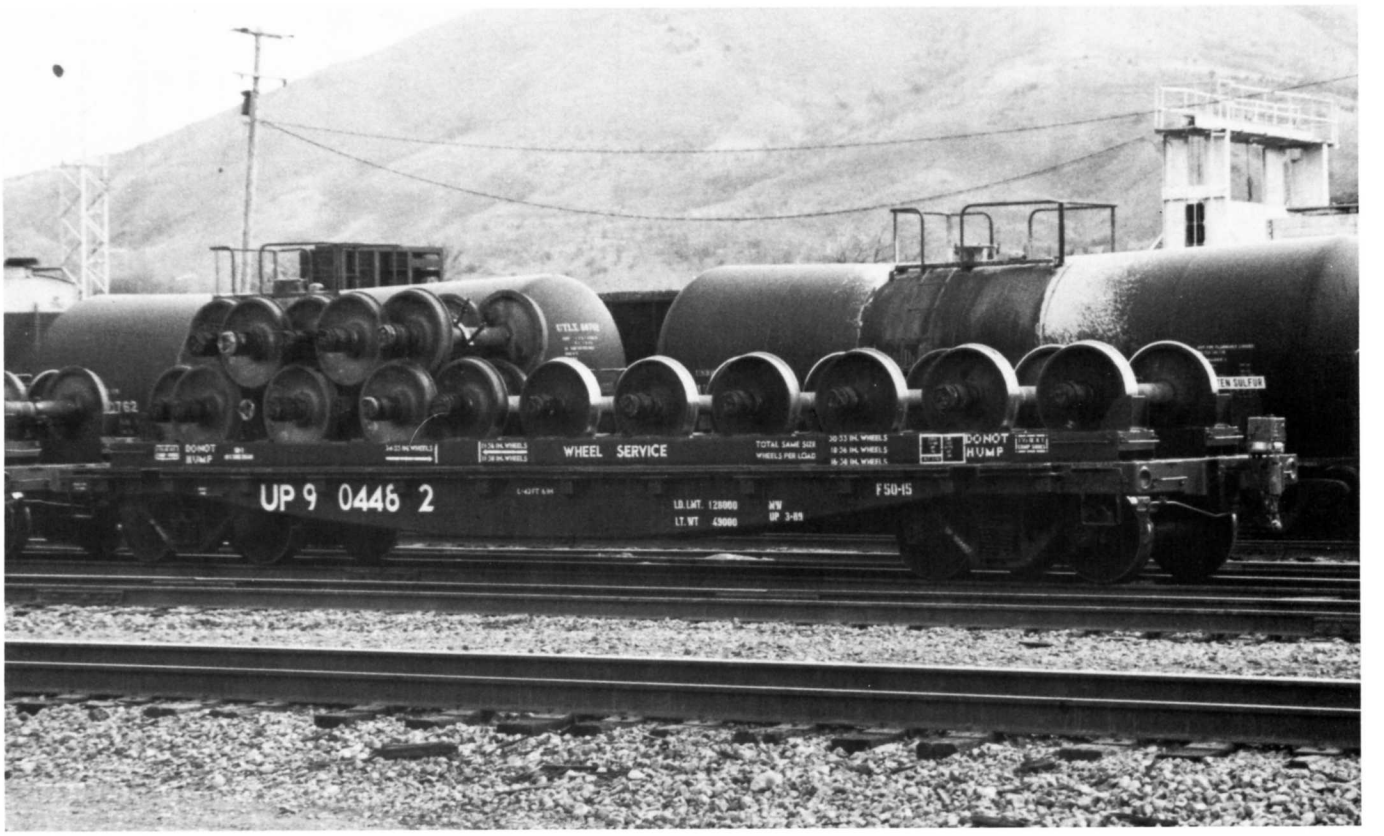
(Above) **A close view of the stake pockets, showing how they were reinforced and an integral part of the car frame. The castings had a slightly rough texture, but paint hid most of the rough spots.** (Below) **"B" end view. Note the poling pockets which were later banned by the ICC as unsafe. The reinforced metal angle by the coupler was used to protect the air hose. The sill step was made from strap metal and riveted onto the car frame.**



(Above) **A view from above showing the brake wheel, flush body casting with deck and uncoupling lever. Note the stake pocket on the end of the car frame which was also used to help secure loads.** (Below) **UP 904492, painted in Pocatello April 1991. The car is freight car red with white lettering. These wheel cars are used to transport worn wheelsets to the Pocatello shops and return the re-machined wheelsets to the appropriate location. Note the cars are not to be humped. This car is restricted to carrying 36 inch wheels only.**



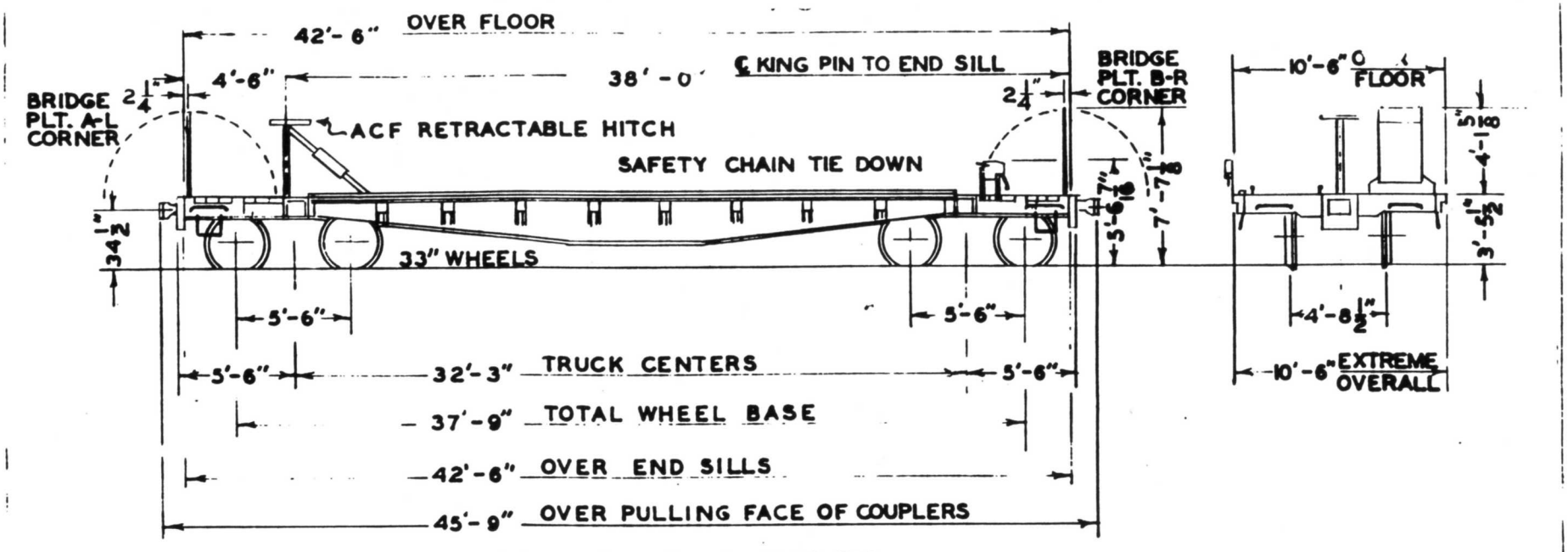
(Above) **A wheel car in service, at Pocatello, ID, November 1989. This car was rebuilt to transport various sizes of wheelsets. The car decks have been modified to hold the wheelsets, with a metal framework and openings for the wheels.** (Below) **UP 904482. Pocotello, ID, November 1989.**



UP 904413. Another wheel car, seen at Pocatello in March 1991. Many of the F-50-15 flat cars have been converted to this service by the UP. Although some cars are freight car red, other wheel cars, such as this one are painted bright red.

CAR SPECIFICATIONS - Initial Series

Flat Car Numbers:	51000-51499
Number Built:	500
Date Built:	1951
Where Built:	Denver, Colorado
Capacity:	100,000 pounds
Light Weight:	43,400 pounds
Car Length, over coupler faces:	45'9"
Car Length, over end sills:	42'6"
Car Length, truck centers:	32'3"
Car Width:	10'6"
Car Height, from top of rails:	3'5-1/2"
Frame Castings	General Steel Castings, Granite City, IL
Casting Weight:	22,160 pounds
Axle Size:	5-1/2" x 10"



MIN. CURVE NEGOTIABILITY COUPLED TO BASE CAR – 158 FT. RAD.

LENGTH – OVER FLOOR	42'-6"
WIDTH – " "	10'-6"
HEIGHT – RAIL TO TOP OF FLOOR	3'-5 1/2"
WT. OF EACH TRUCK – SNUBBER – SIMPLEX	7000 LBS.
LT. WT. OF CAR COMPLETE	45,600 LBS.
UNDERFRAME – CAST STEEL	AV. WT. 22,180 LBS.

CAR BUILDER	NO. CARS BUILT	YEAR BUILT
DENVER	*	1951

*MODIFIED TO HANDLE 40 FT. HYWAY TRAILERS
1964-65
85 CARS

GENERAL DESIGN	244-C-10675
AIR BRAKE ARRG'T	153-C-10679
BRIDGE PLT. ARRG'T.	294-C-18858
TRUCK ARRG'T	423-C-10678
UNDERFRAME ARRG'T	444-C-10767
PAINT LETT. & NUM.	303-C-10782
ALLOCATION OF SPEC.	282-C-10794
ACF HITCH APPLI'N	293-C-18469
HAND BRAKE ARRG'T.	154-C-18491
ACF PARTS LIST & LUB.	294-C-13704

AXLES 5 1/2 x 10	CARNEGIE, STD. FORG. BETH
BOTTOM ROD GUARDS	CRECO
BRAKE BEAMS NO. 18 POSITIVE	"
BRAKE BEAM SUPPORTS	"
BRAKE HANGERS – LOOP TYPE	SCHAEFER
BRAKE HANGER WEAR PLATES	"
REGULATOR – MANUAL	ROYAL RY. IMPR.
COUPLER – TYPE E	NATL. MALL.
COUPLER CENTERING DEVICE	SREMCO
COUPLER RELEASE RIGGING – ROTARY	"
COUPLER YOKES BY-40	SCULLIN
DRAFT GEARS – HULSON 202	HULSON
DRAFT KEY RETAINER – AZEE	ILL. RY. EQ.
HAND BRAKE	UNIVERSAL
SNUBBERS – UNIT TYPE – SIMPLEX	A.S.F.
TRUCK BOLSTER	"
TRUCK SIDE FRAMES	STORE STOCK
TRUCK SIDE BEARING BLOCKS	PAXTON-MITCHELL
TRUCK LEVERS	SCHAEFER

TRAILER HITCH – RETRACTABLE	ACF
UNDERFRAME	GEN'L. STL.
WHEELS – ONE WEAR WROT STL.	CARNEGIE
SPRING PLATE – UNIV. UC-4	ALCO

TRAILER LOADING
ONE ACF HITCH

UNION PACIFIC RAILROAD CO.
RESEARCH AND
MECHANICAL STANDARDS

			2-1-73	5-1-70	LST DATE
			B	A	DRAWN 12-23-64

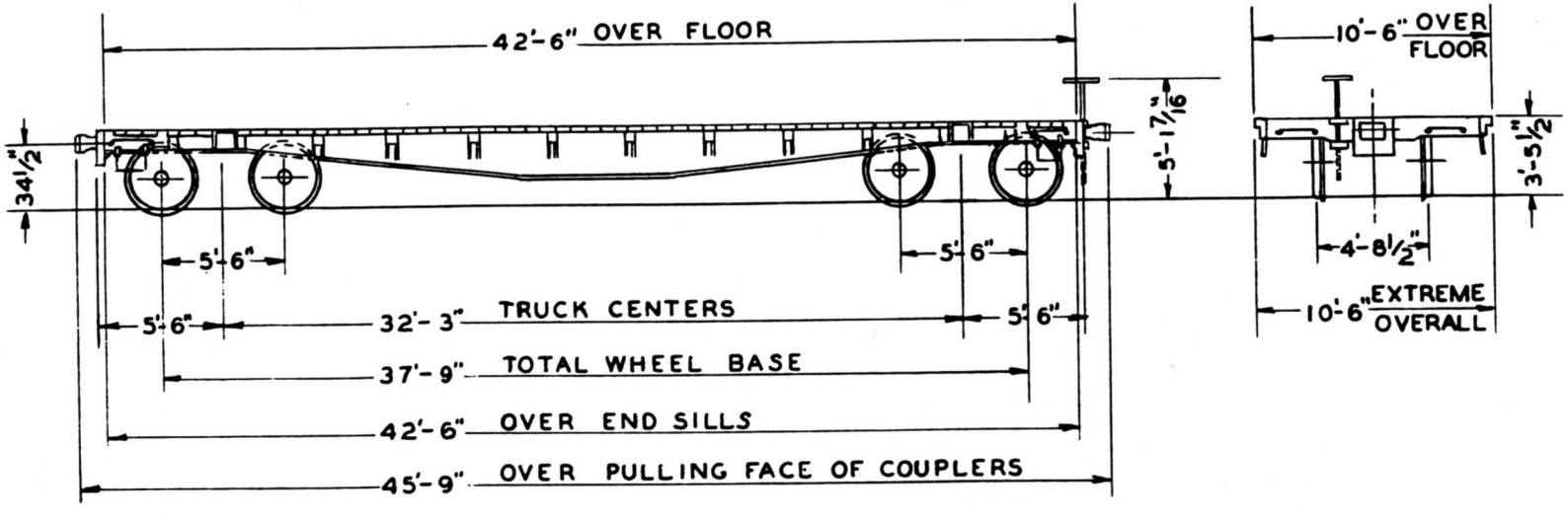
DIAGRAM F-7-45

FCJ48 ISSN 0742-9355

CLASS
F-50-15

FLAT CAR
110000 LBS. CAPACITY
FM

CAR NO:S
51000-51499



LENGTH- OVER FLOOR	42'-6"
WIDTH- " "	10'-6"
HEIGHT RAIL TO TOP OF FLOOR	3'-5 1/2"
WT. OF EACH TRUCK AM-A3	7000 LBS.
LT WT. OF CAR COMPLETE	43400 LBS.
UNDERFRAME-CAST STEEL AVERAGE WT.	22160 LBS.

CAR BUILDER	NO CARS BUILT	YEAR BUILT
DENVER	500	1951

REFERENCE DRAWINGS	
GENERAL DESIGN	244-C-10675
TRUCK ARRGT.	423-C-10676
TRUCK ARRGT.	423-C-10765
ALLOCATION OF SPEC.	282-C-10794
BRAKE ARRGT	154-C-10677

AIR BRAKE A B	WESTINGHOUSE
ANGLE COCK HOLDER - FITZALL	RY DEV CO
AXLE JOURNALS	5-1/2"x10"
BOTTOM ROD GUARD	CHICAGO RY. EQ. CO.
" TRUCK LEVER CONN.-	SCHAEFER EQ. CO.
BRAKE BEAMS #18 POS.	CRECO-CH. MALL. CSTG.
" " SUPPORTS	DREXEL-GRIPCO
" HANGERS LOOP TYPE	SCHAEFER
" " WEAR PLATES-	SCHAEFER-ILL. RY.
" PIPE ANCHORS	GUSTIN-BACON
" REGULATOR-MANUAL	ROYAL RY. IMPR.
" ROD JAWS & EYES	SCHAEFER EQ. CO.
" SHOE-DUPLANE -	AMER. BRAKE SHOE CO.
" " KEYS -	STORE STOCK
COUPLER-TYPE E HEAD	
" CENTERING DEVICE-ADJ.-	STD. RY. EQ. CO.
" RELEASE RIGGING-ROT.	" " " "
" YOKES VERTICAL	A A R
DEFECT CARD REC-	CHEEPER-WESTERN RY. EQ. CO.
DRAFT GEARS-	HULSON 202 HULSON CO
" KEY RETAINER	ILL. RY. EQ. CO.

DUST GUARD	AJAX-CONSOLIDATED
" " PLUG-	CLINGTITE T-Z RY. EQ. CO.
HAND BRAKE-	EQUIPCO UNION ASB. & RUBB.
JOURNAL BEARING	A A R
" " WEDGES	A A R
" BOX LID WITH PIN	SYMINGTON-GOULD
SNUBBERS-	UNIT TYPE AMER. STL. FDY.
SPRINGS-	2-1/2" TRAV; 250 CARS - AMER. LOCO.
" PACKING RETAINER-	SPRING PACKING CO.
" PLATE-	UNIVERSAL-AMER LOCO.
STABILIZERS-	SIMPLEX & ASF A-3
TRUCK BOLSTER	" "
" LEVERS	SCHAEFER EQUIP. CO.
" SIDE BRNG BLOCKS-	PAXTON-MITCHELL
AXLES	5-1/2"x10"
WHEELS	ONE WEAR STEEL

250 CARS SERIES 51000-51249 EQUIPPED WITH AM. A-3 TRUCKS.

UNION PACIFIC RAILROAD CO.
RESEARCH AND
MECHANICAL STANDARDS

ISSUE	DATE	DIAGRAM
E	9-1-75	F-7-15
D	8-1-69	
C	4-31-65	
B	8-1-64	DRAWN
A	3-1-54	7-18-51

RESEARCH REQUESTS

James Kinkaid, 2222 Savannah, Wichita, KS 67217 needs help on a LF/LG/GBC (bulk container only) project for a future FCJ. Any information, diagrams, drawings, photos, etc would be much appreciated. Willing to pay for expenses.

Douglas Fleming, 78 Courtice Crescent , Collingwood, Ontario, Canada L9Y 4G1, needs slides or prints of SOO LINE Gunderson container cars #54569-54570.

Joe Stetson, Box 783, Bloominton, IN 47402-0783 is looking for any information on steel grain access door box car, prominent on many roads, especially in the 60's and 70's before hopper cars cornered almost all of the grain hauling trade.

A.E. Roach, 6919 Harrison Lane, Alexandria, VA 22306 will offer premium prices for original copies of *Freight Cars Journal* #'s 1-9, 11, 27-30 and *Freight Cars Journal Monograph* #'s 2, 3, 5, 6, and 8.

A. Richard Smith, P.O. Box 9350, Austin, TX 78766-9350 is looking for photos and final dispositions of CPCX 1000-1087 (ex T&P 25000 series) and 7000-7009 (ex T&P same nos) which later became APTX 1000-1087 and 7000-7009 respectively.

Also, need photos and final dispositions of ORMX 1951-1970 (ex T&P 25000 series) and a group of cars that were sold to Anderson Clayton in 1952 that originally came from the T&P 7000-7055 series. These are for an all-time T&P roster that is being compiled.