

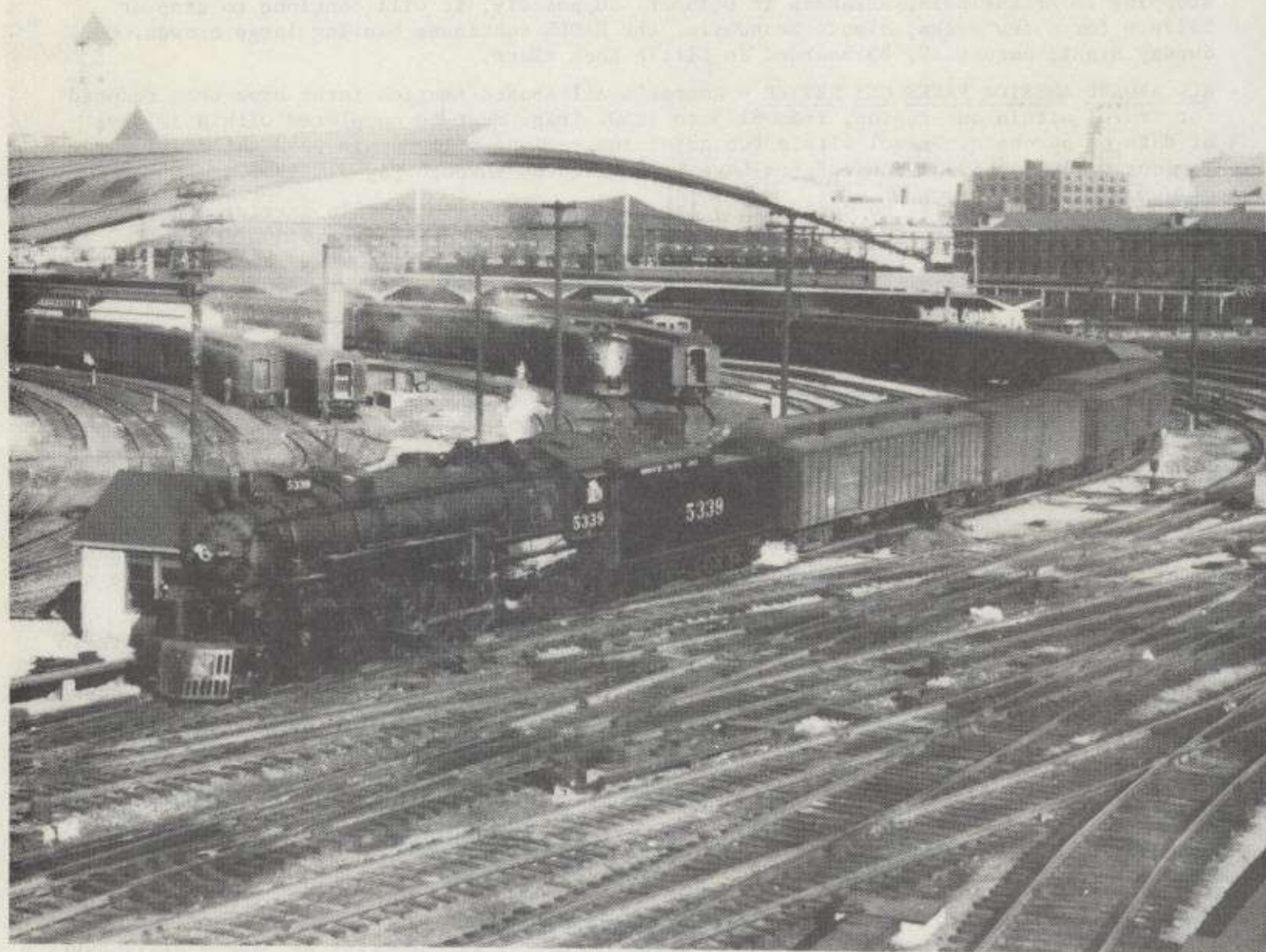
ARKANSAS RAILROADER



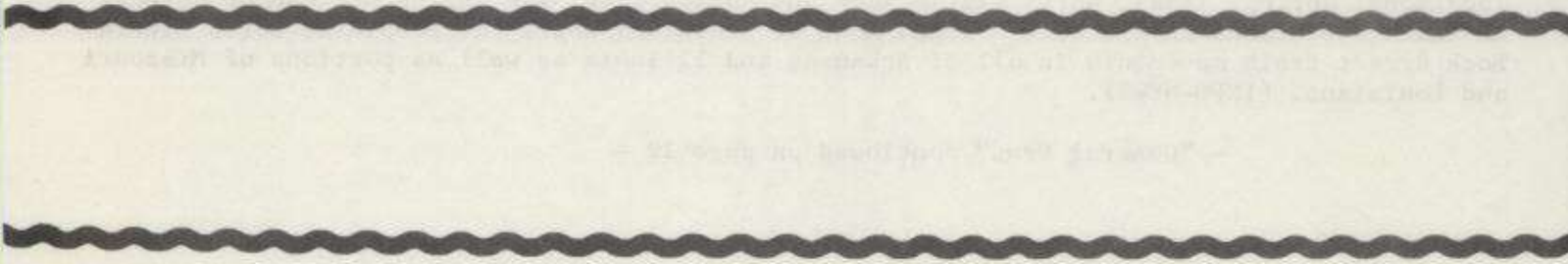
LITTLE ROCK CHAPTER
NATIONAL RAILWAY HISTORICAL SOCIETY

VOLUME 15 NUMBER 9

SEPTEMBER 1984

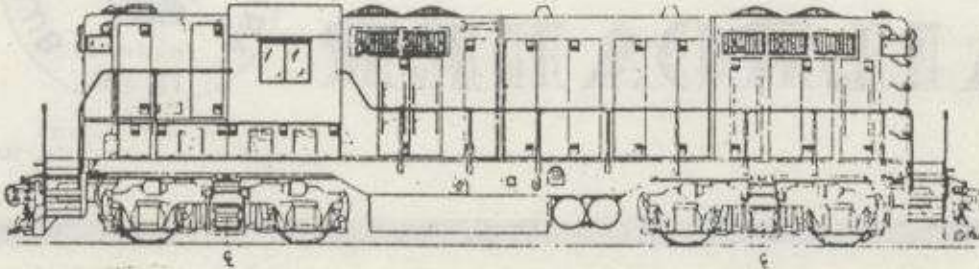


MISSOURI PACIFIC First No. 15, the "Royal Gorge" leaves the immense train shed in St. Louis around 1946. See picture/article on later, declining days of the great St. Louis Union Station elsewhere in this month's RAILROADER. (Photo by Joe G. Collias, from the collection of Mike Adams).





Former MoPac conductor and Arkansas Railroad Club member W. T. Church will give a talk and slide presentation on the building and operation of the famous Claiborne and Polk Military Railroad and on the 711 Railway Engineers of World War II. See his story printed elsewhere in this issue of the ARKANSAS RAILROADER (page 8). Meeting will be held at the usual place, the TCB Bank Building on Main Street in North Little Rock, just across the river. Time will be 2 PM, Sunday, September 9, 1984. Everyone welcome! The meeting room is on the 3rd floor.



GENERAL NEWS

AMTRAK TO STOP AT ARKADELPHIA - maybe. Local rumors have it that the EAGLE will start stopping in Arkadelphia, Arkansas in October. Supposedly, it will continue to stop at Malvern for a few weeks, also. Meanwhile, the EAGLE continues hauling large crowds. On Sunday night, August 19, 85 boarded in Little Rock alone.

ALL ABOARD AMERICA FARES GET BETTER - Amtrak's All Aboard America fares have been reduced for travel within one region, from \$175 to \$150. Trips must be completed within 30 days of date of purchase. Travel within two adjoining regions will remain \$250 while all three regions will stay \$325. These fares have been extended through May 31, 1985.

AMTRAK'S AUTO TRAIN will go daily (finally) on October 15. This train carries you along with your car from Lorton, VA to Sanford, FL. One-way coach fares are \$130 for adults, \$98 for children and \$200 for each automobile. Sleeping space is, of course, available at extra cost. All fares include a buffet dinner, continental breakfast, after-dinner movies, etc. Over 50,000 have ridden the Auto-Train so far.

READER RAILROAD ANNOUNCES 1984 NIGHT TRAIN SCHEDULE - This historic Reader Railroad will be operating special night trains again this year, leaving Camp DeWoody, Arkansas at 6:30 PM, rain or shine, on the following dates this Fall: September 8, October 6 and November 3. All trips include a meal at Reader (barbecue on September 8, South Arkansas fried chicken on October 6 and old fashioned cracker barrel featuring hoop cheese, assorted breads, sliced apples, hot chocolate, etc on November 3. Double headed steam power may be used. Tickets are \$12.50 adult (12 and over), \$7.50 (4 thru 11), \$2.00 (1 thru 3) and under 1 is free. These prices include the meals. For reservations, which are required, write to READER RAILROAD, P.O. Box 9, Malvern, AR 72104. Your editor has attended this event for the past 2 years and it is well worth the trip to Southwest Arkansas, especially if friends are along.

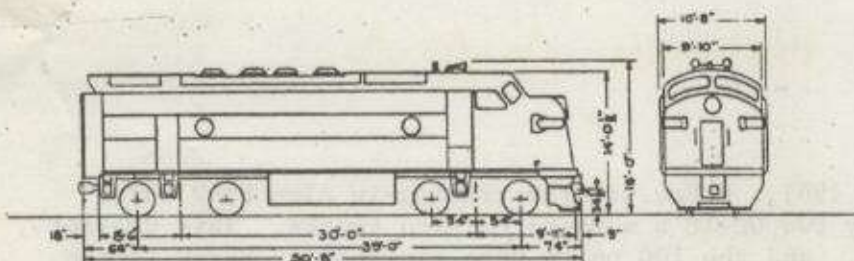
EUREKA SPRINGS & NORTH ARKANSAS RAILWAY CO. now has DINING CAR SERVICE on its line in Eureka Springs, Arkansas. For about \$23, you can take a liesurly trip aboard a steam train on a converted coach and enjoy a five course meal in the process! These trips leave the old Missouri and North Arkansas Depot in Eureka Springs several times a day and last anywhere from 45 minutes to an hour, allowing you plenty of time to enjoy your meal. For more information and reservations, write to EUREKA SPRINGS & NORTH ARK RWY CO., P.O. Box 310, Eureka Springs, AR 72632

TRAIN STOLEN - A Kansas City Southern freight was stolen by a drunken man in Watts, Oklahoma (just across the border from Siloam Springs, Arkansas) on August 15. The 51 car train was awaiting a crew change. Nineteen of those cars were loaded. The man was later jailed in Siloam Springs. (The DISPATCHER).

REPAINTING PROGRESSING - Some 1,445 MOPAC locomotives will be repainted in UP yellow shortly, at the rate of 5 to 7 locomotives a day. This repainting is occurring at Kansas City, Houston and North Little Rock. Union Pacific's yellow dates back to 1934 when UP debuted the nation's first streamliner. Yellow was selected for its great visibility. (INFO NEWS).

MOPAC DISPATCHERS ASSISTED BY COMPUTERS - MP's train dispatchers use some very advanced computer systems to track trains, activate signals and switches and program signals for train "fleeting". MOPAC's roadway train dispatching and signals are controlled from three locations: Spring, Texas, North Little Rock and Kansas City. The Spring CTC center directs MP train operations in all of Texas and most of Louisiana while the people at North Little Rock direct train movements in all of Arkansas and Illinois as well as portions of Missouri and Louisiana. (INFO-NEWS).

- "General News" continued on page 12 -



MISSOURI PACIFIC
MOTIVE POWER TRENDS

1961 - 1972

COMPILED AND EDITED BY JOHN M. MARTIN, JR. FROM MISSOURI PACIFIC DOCUMENTS

Motive Power Trends was an internal document produced by the Missouri Pacific Lines Mechanical Department covering a 12-year period and revised up through December 31, 1972. Note there were three sharp fluctuations in MoPac's fleet ownership due to the acquisition of the Kansas, Oklahoma & Gulf in April, 1964; acquisition of the Chicago & Eastern Illinois in May, 1967; and sale of the C&EI East side line to the Louisville and Nashville in June, 1969. Thus during the study period, the following increases were obtained:

Ownership:	from 1,033 units to 1,037 - 4 units or 0.4%
Tractive Effort:	from 60,100,000 lbs. to 67,000,000 lbs - 6,900,000 or 11.4%
Horsepower:	from 1,533,760 to 1,851,350 - 317,590 or 20.7%
Gross Ton Miles:	from 56,776,145,000 to 84,727,200,000 - 27,951,055 or 49.3%

While MoPac was aware that fleet ownership and capacity had lagged behind traffic growth, operating requirements were met with the help of the following course of action, according to Mr. John German:

1. Retiring obsolete, inefficient, high maintenance units, particularly Alcos, Baldwins and older EMD units.
2. Elimination of Passenger Service.
3. Procuring 535 new high capacity units with fully compatible multiple-unit control capabilities for greater fleet flexibility. (Note that in early diesel days, some Alco units would not M-U with EMDs, EMD units may have lacked m-u capability on one end (F-units) and Baldwin units would not M-U with EMD or Alco without modification.)
4. Upgraded the condition of the overall fleet by tightening maintenance standards and the use of the latest renewal parts. This resulted in improved operating efficiency, reduced locomotive down time and improved over-the-road performance.
5. Improved utilization of motive power by the Transportation Department.

As far back as 1961, on the Missouri Pacific System, a heterogeneous fleet of 1104 diesel-electric locomotive units was owned. At this time there were 38 different models manufactured by five builders - EMD, ALCO, Baldwin (BLH), General Electric, and Plymouth. The Plymouth units were diesel-hydraulic industrial type engines assigned to specific special duty ranging from 165 to 240 hp apiece. The diesel-electric units ranged from 350 to 1800 hp. Some of the units were built as early as 1937, being among the first diesel-electric locomotives in the country. This resulted in many of the power plants being obsolete, with parts being very difficult to obtain from the manufacturer or any other source of supply. Furthermore, the fleet had undergone deferred maintenance for some time, and the net result was extremely poor condition and performance for these locomotives.

Units which were most predominantly in the shops for heavy repairs were from the Alco road fleet and the older switch engines. The condition of the Alco 1500 and 1600 hp FA-1 and FA-2 freight units led to the decision in mid-1961 to remanufacture this group of locomotives. From experience with 12 Alco model RS-11 units powered by the 251 engine which MoPac owned, plus the shared experience of other roads, it was decided that there would be no further use in continuing ownership of the Alco units inasmuch as the 251 engine was already demonstrating the same attributes that made the 244 engine such a difficult and expensive engine to maintain. Further it was felt that the General Electric U25B was not yet fully developed enough to warrant acquisition and therefore MoPac turned to the other major locomotive builder, Electro-Motive, to see what they could do in revitalizing their freight fleet.

At this time the GP-20 was experiencing considerable problems with turbo failures and control circuitry so MoPac chose the normally aspirated GP-18 locomotive. While MoPac had some ring-breakage problems with the first 31 GP-18's already in service, they felt this problem was alleviated and could expect an average of 15,000 miles per month of reliable and economical service from additional GP-18's. This decision was made after extensive studies of other railroads and detailed cost studies of their own fleet.

Commencing in the fall of 1961, MoPac started trading-in Alco FA-2 units at the ratio of three for every two GP-18's mounted on Alco trucks. This project was completed in January, 1963, and the 100 units were assigned at North Little Rock and operated between St. Louis and Texas. In addition other BL-2 and F-3 units, which had suffered fire and wreck damage, were traded-in for 20 more GP-18 units on EMD trucks and operated between St. Louis and Pueblo. They were operated in heavy freight service accumulating 12,000 to 14,000 miles per month.

After about 3 or 4 months service they began to have trouble with broken exhaust valves and cracked cylinder heads. Studies were undertaken and it was shown that most of the trouble was from the units assigned at Kansas City. It was established that combustion at altitudes up to 4,600 feet had a lot to do with the problem. Because of the extremely high back pressure of engines of this type and additional two exhaust stacks were applied making this group of units "FOUR STACKERS". This modification alone reduced the back pressure from the exhaust by approximately 70% and increased the horsepower by 80 HP per unit without an increase in fuel consumption.

The result of the program was so gratifying that in the fall of 1962 they started a program to perform this modification on all GP-18 locomotives and later extended it to GP-9 locomotives. For the first time they were able to get a full 1800 horsepower out of the 16-567D1-engine.

About the time this problem was solved, it was found that air inlet trouble was developing because of the oil-bath intake filter material collapsing from the engine pulsations and vibrations. Modifications were made to correct this and resulted in decreased failures and improved performance. In the meantime the manufacturer, after constant prodding from the MoPac mechanical department, developed a smaller liner and injector tip nozzle which further increased the performance of the locomotive. Reducing to a 15 port liner and a 5 hole injector tip instead of a 20 port liner and a 6 hole liner also allowed even further increase in horsepower.

The 100 GP-18's placed on Alco trucks was the first time an attempt had ever been made on such a large scale to place EMD power plants over General Electric traction motors, according to the MoPac Mechanical Department. There were some problems in regard to flashovers and brush wear. This problem has been considerably alleviated by the fact that there have been changes made in the field shunting of these motors, adaption of a different type of brush and by EMD quality control. All in all the progress made in the development of these motors was gratifying and the GP-18 became the backbone of MoPac's fleet.

By mid-1962, age, obsolescence and the difficulty to obtain parts for the antiquated switch engine fleet, plus the fact that the engine repair points were continually flooded with these engines under repair, led to the decision to purchase or repower 25 yard switchers annually. Because of the improved cost control and the segregation of certain engines to particular points it was possible to pinpoint problems that were encountered on certain classes of yard units, particularly Baldwins and Alcos.

During the year 1962, E-6 and E-7 units were given general repairs at the rate of two per month to enhance the performance of the passenger fleet. By early 1963, it was obvious that they could no longer tolerate the maintenance cost of the Alco PA-1 and PA-2 units and included them also as trade-ins on GP-18's.

Forty-two GP-7 units, equipped with steam generators, were used primarily in freight service but also protected some local passenger service in Texas and on the Kansas City run. These units were the last of the GP-7's to be built by EMD and therefore had the 16-567C engine which is common to the later GP-9's. By this time the DE7 traction motor armature had proven itself to be a good performer so they began upgrading these units for mainline passenger service by equipping them with this armature allowing them to operate up to speeds of 80 MPH with the standard 62:15 gear ratio common to 65 MPH engines. The steam generators were reconditioned and a larger fuel and water tank combination was applied. The result of an 1800 HP "Hot Rod" which could accelerate the train out of town and handle any type of passenger service it was assigned. In addition, at the end of the run, such as Brownsville, it could handle yard service or double back in regular freight service. This program was completed in 1965 and the introduction of the GP-7P in regular passenger service permitted the retirement of all Alco passenger units.

As passenger service further declined the use of GP-7P units permitted the retirements of all E-6 and E-7 units. According to the cost sheets, the E-6 and E-7 units were costing entirely too much money due to the style of construction and obsolescence of parts.

As E units were retired, MoPac salvaged two of the 12-567A engine for use in repowering the remaining RS-3 model road switchers. The Alco RS-3 was originally operated in local service. However they could not live with the high

cost of maintaining these units plus the failures experienced, particularly with the model 12-244 engine. In order to reduce costs these units were re-assigned to yard service. The GE 752 traction motor under these units coupled with the GE generator tends to make a well adapted performer where tractive effort, adhesion and high amperage rating is desirable. Therefore fourteen of these RS-3 units were originally placed into yard service at North Little Rock and Kansas City. Yard operation doesn't require nor in fact can it utilize all 1500 HP. Therefore, it is felt that these Alco units could be maintained economically and operated for some time if they were repowered with an EMD 1200 hp engine surplus from the E-unit fleet. They called these conversions "EMCO's"(EMD-ALCO).

In 1967, the EMCO fleet had increased to 49 units with assignments at North Little Rock, Kansas and St. Louis. They averaged 2,519 miles per month in 1969 and were utilized 51.1% of the time.

In mid-1963, the decision was made to acquire some high-horsepower units. Twenty-five F3 and F7 units all coming due for heavy general overhaul or having wreck or fire damage were traded in for 25 GP-35's in the fall of 1963. Prior to this decision, considerable research was made on the GP-30, the General Electric counterpart - the U25, and the Alco model Century 424 locomotives. A study of confidential cost figures and failure sheets plus inspection of these units on various roads indicated that the most reliable power plant in the 2500 hp range was the GP-35. These units were originally operated in service from El Paso, Texas to Pueblo, Colorado, via St. Louis at the rate of 19,800 miles per month. A true test for this engine.

Trouble was experienced with brush wear and flashovers in the traction motors; however, as with the GP-18's MoPac took action to eliminate those problems. Also there were problems with static control devices, namely, transducers. EMD has continually redesigned this element and their latest designs appear to be satisfactory.

Continuing with the high horsepower trend, in 1967 twenty 3000 HP SD-40's were purchased by trading in E and F unit power. They were slated to make the El Paso to Pueblo via St. Louis run, an average of 19,800 plus miles per month.

The first 34 SD-40's experienced electrical troubles but with the change of certain diodes this problem was reduced. In 1968 and 1969, 16 more SD-40's were purchased by using older switch power and F units as trade-ins. Through 1969, the SD-40 fleet totaled 54 units and their performance on the El Paso and Pueblo runs continued to improve. Because of their adaptability to long freight service and low cost to operate, sixteen more were purchased in 1970 and 20 in 1971. This brought the total fleet of SD-40 units to 90 by December 1971.

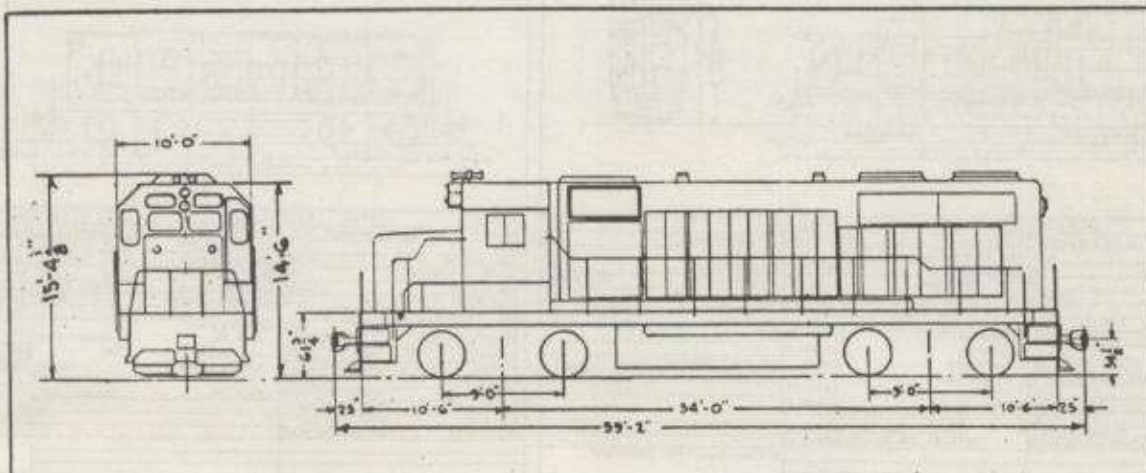
In the high-horsepower units the old problem of liner leakage, rings cracking and injectors not functioning properly continued; but MoPac and the diesel manufacturers are working to alleviate this weakness and with the advent of newer quality control gaskets it is improving.

In 1972, the EMD GP-38/2 was added to the fleet. During the first quarter of 1972, 45 of these 2000 HP units with 16-645E engines were purchased. In addition 20 more were received in the last quarter of 1972.

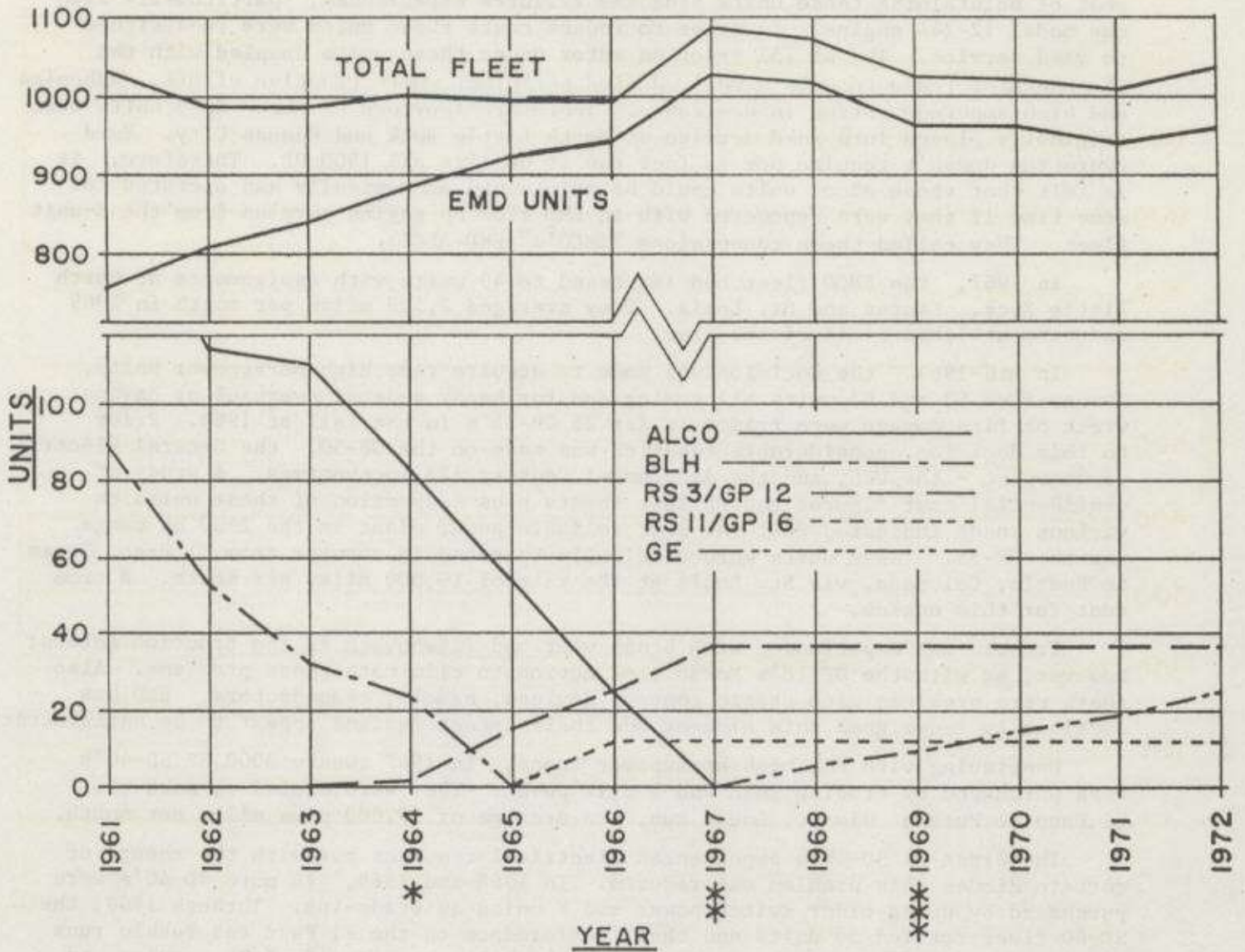
By trading-in high cost F-units, MoPac reaped the benefits of a big saving in maintenance expense and added more flexibility in fast freight movements.

Because of an increasing need for power to pull long unit coal trains and unit ore trains, a purchase of the General Electric U30C was made in 1968. The U30C compares in price and performance with the EMD SD-40 and its low minimum continuous speed is very helpful in the long heavy drags related to iron ore and coal.

Thus we trace the evolution of MoPac's fleet thru the Mid-1960's with the decline of Passenger service and several changes in locomotive concepts.



DIESEL FLEET MISSOURI PACIFIC RAILROAD AND SUBSIDIARIES AS OF DECEMBER 31, 1972



TYPE	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	% FLT.
EMD	761	810	838	888	926	941	1033	1020	968	962	940	963	92.7
ALCO	173	114	110	82	54	24	0	0	0	0	0	0	0.0
BLH	90	53	33	23	0	0	0	0	0	0	0	0	0.0
RS 3/GP 12	0	0	0	2	15	25	37	37	37	37	37	36	3.6
RS 11/GP 16	0	0	0	0	0	12	12	12	12	12	12	12	1.2
GE	0	0	0	0	0	0	0	6	10	14	19	24	2.3
PLY-MIS.	9	9	7	6	2	2	2	2	2	2	2	2	0.2
TOTAL	1033	986	988	1001	997	996	1084	1077	1029	1027	1010	1037	100.0

* ACQUIRED 20 KOG-MV LOCOMOTIVES
 ** ACQUIRED 104 CEI LOCOMOTIVES
 *** SOLD 48 CEI LOCOMOTIVES TO L&N

GRAPH I

MODEL	GP-16	EMD	ENGINE	EMD 8-667B	RADIO	YES
BUILDER	ALCO	REULT	GOVERNOR	WOODWARD P2	DUAL CONTROL	NO
TYPE	3-B	MAIN GENERATOR	GE 361-C-9-18	M.V. CONTROL	NO	YES
HORSEPOWER	1700	AUX. GENERATOR	GE 301-27A3	HUMP CONTROL	NO	NO
UNIT CODE NUMBER	42	TRACTION MOTORS	GE 732	SAFETY CONTROL	FOOT PEDAL	NO
MAX. SPEED	65 MPH	AIR COMPRESSOR	WEST 3000	CRS TRAIN CONTROL	NO	NO
GEAR RATIO	74:18	STEAM GENERATOR	NONE	SPEED INDICATOR	BARCO OR CP REC.	NO
MIN. CURVATURE	274 RAD. (10")			SHOW FLOW	NO	NO
AIR BRAKE SCHEDULE	24L	CAPACITIES				
BRAKE CYCLES	10 1/2"	LUBR. OIL	155 GALS.			
JOURNALS	BB-TIMKEN 8 1/2" JOUR.	ENG. WATER	200 "	MIN. SPEED FOR CONT. RATING	12 MPH	
WHEELS	AAR A-40 GRADE B	ST. GEN. WATER	NONE	CONT. TRACTIVE POWER RATING	42,300	
HAND BRAKE	A-1A3	SAND	28 CU. FT.			
SHAFT GEAR	AMCO M-315	FUEL OIL W.	1800 GALS.			
COUPLERS	TYPE E 4					
BATTERIES	32 CELL 64 VOL. T					
HEADLIGHTS	P/N TRM SEALED BEAM					

DATE 6-1-72 DIESEL-ELECTRIC ROAD SWITCH LOCOMOTIVE

MODEL	GP-16	EMD	ENGINE	EMD 8-667	RADIO	YES
BUILDER	ALCO	REULT	GOVERNOR	WOODWARD P2	DUAL CONTROL	NO
TYPE	3-B	MAIN GENERATOR	GE 301-27A3	M.V. CONTROL	NO	YES
HORSEPOWER	1650	AUX. GENERATOR	GE 301-27A3	HUMP CONTROL	NO	NO
UNIT CODE NUMBER	46	TRACTION MOTORS	GE 732	SAFETY CONTROL	FOOT PEDAL	NO
MAX. SPEED	65 MPH	AIR COMPRESSOR	WEST 3000	CRS TRAIN CONTROL	NO	NO
GEAR RATIO	74:18	STEAM GENERATOR	NONE	SPEED INDICATOR	BARCO OR CP REC.	NO
MIN. CURVATURE	274 RAD. (10")			SHOW FLOW	NO	NO
AIR BRAKE SCHEDULE	24L	CAPACITIES				
BRAKE CYCLES	10 1/2"	LUBR. OIL	200 GALLONS			
JOURNALS	BB-TIMKEN 8 1/2" JOUR.	ENG. WATER	200 "	MIN. SPEED FOR CONT. RATING	12 MPH	
WHEELS	AAR A-40 GRADE B	ST. GEN. WATER	NONE	CONT. TRACTIVE POWER RATING	42,300	
HAND BRAKE	NATIONAL	SAND	4-28 CU. FT.			
SHAFT GEAR	NW CO. M3-4853A	FUEL OIL	1800 GALLONS			
COUPLERS	TYPE E ALIGNMENT					
BATTERIES	32 CELL 64 VOL. T					
HEADLIGHTS	P/N TRM SEALED BEAM					

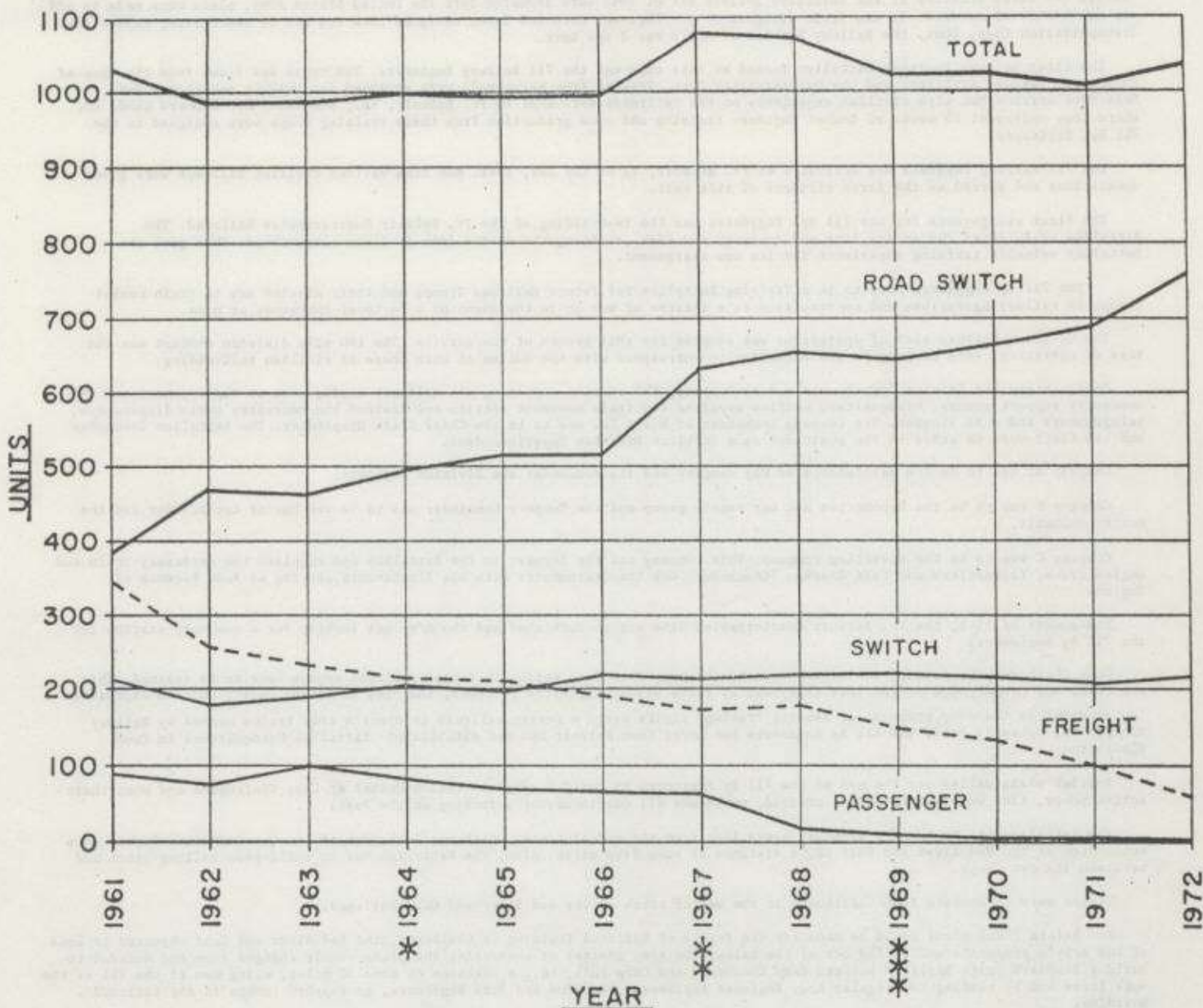
DATE 6-1-72 DIESEL-ELECTRIC ROAD-SWITCHER LOCOMOTIVE

MISSOURI PACIFIC LINES
M.P. TR. C.E.L. A.B.S.
M.I. A.W.C. K.O.S.
AND SUBSIDIARIES

MICH. DEPT.

SEE DATA SHEET FOR OWNERSHIP

LOCOMOTIVE OWNERSHIP BY CLASS MISSOURI PACIFIC RAILROAD AND SUBSIDIARIES

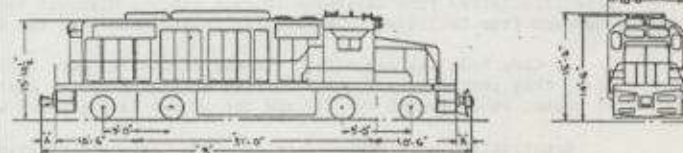
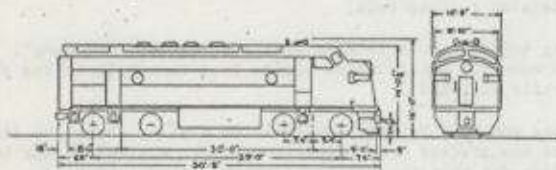


TYPE	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972
PASSENGER	87	75	100	85	73	67	63	21	11	7	6	0
FREIGHT	343	257	232	216	210	190	173	179	150	137	100	60
ROAD SWITCH	387	473	467	496	514	514	632	652	644	664	689	759
SWITCH	213	178	186	202	198	223	214	223	222	217	213	216
TOTAL	1030	983	985	999	995	994	1082	1075	1027	1025	1008	1035

* ACQUIRED 20 KOG-MV LOCOMOTIVES
 ** ACQUIRED 104 CE1 LOCOMOTIVES
 *** SOLD 48 CE1 LOCOMOTIVES TO L&N

GRAPH II

MISSOURI PACIFIC LINES
M.P. T.S. C.E.L. A.S.S.
M.I. A.R.T. K.O.G.
AND SUBSIDIARIES



NOTE: LOW FRONT HOOD APPLIED TO UNITS 300-19, 310-19, 324, 331, 332, 334-38

MODEL	P-7A	ENGINE	1-16-267A	RADIO	YES
DRIVER	EMD	GOVERNOR	WOODWARD P.S.	DUAL CONTROLS	NO
TYPE	3-2	MAIN GENERATOR	EMD D-212	W.M. CONTROL	YES
HORSEPOWER	1800	AUX. GENERATOR	DELCO A-7189	W.M.P. CONTROL	NO
UNIT CODE NUMBER	80	TRACTION MOTORS	D-27-D-47	SAFETY CONTROL	FOOT PEDAL
MAX. SPEED	63 MPH	AIR COMPRESSOR	BAR-DENVER W-20	W.M. TRAIN CONTROL	NO
GEAR RATIO	62-10	STEAM GENERATOR	NONE	BARCO OR CP REC	NO
W.M. CONTROLLER	250 RAD. 1237	CAPACITIES —		SPEED INDICATOR	BARCO OR CP REC
AIR BRAKE SCHEDULE	3-4-8	LUBR. OIL	200 GALS.	SHOW FLOW UNITS	300-19, 310-19, 324, 331, 332, 334-38
BRAKE CYLINDERS	3 X 8"	ENGL. WATER	230 "	MIN. SPEED FOR CONT. RATING	12 M.P.H.
JOURNALS	RD-HYATT 8 1/2" JOUR	ST. GEN. WATER	NONE	CONT. TRACTIVE POWER RATING	4,000 P
WHEELS	AAR A-40 GRADE B	SAND	18 CU. FT.		
HAND BRAKE	NATIONAL	FUEL OIL	1,200 GALS.		
DRIFT GEAR	NMDD M-373				
COMPLEX	TYPE 72				
BATTERIES	32 CELL 64 VOLT				
HEADLIGHTS	3/4" TWIN SEALED BEAM OR P/W 14" DIA. 22 VOLT 250 W.				

MODEL	CONVERTED FROM GP-7	ENGINE	1-16-267 "BC" OR "C"	RADIO	YES
DRIVER	EMD	GOVERNOR	WOODWARD P.S.	DUAL CONTROLS	NO
TYPE	3-2	MAIN GENERATOR	EMD D-212	W.M. CONTROL	YES
HORSEPOWER	1800	AUX. GENERATOR	DELCO A-7189	W.M.P. CONTROL	NO
UNIT CODE NUMBER	80	TRACTION MOTORS	EMD D-27	SAFETY CONTROL	FOOT PEDAL
MAX. SPEED	73 M.P.H.	AIR COMPRESSOR	BAR-DENVER W-20	W.M. TRAIN CONTROL	NO
GEAR RATIO	62-10	CAPACITIES —		SPEED INDICATOR	BARCO OR CP REC
W.M. CONTROLLER	274 RAD. 1237	LUBR. OIL	200 GALS.	SHOW FLOW UNITS	300-19, 310-19, 324, 331, 332, 334-38
AIR BRAKE SCHEDULE	3-4-8	ENGL. WATER	230 "	MIN. SPEED FOR CONT. RATING	12 M.P.H.
BRAKE CYLINDERS	3 X 8"	ST. GEN. WATER	NONE	CONT. TRACTIVE POWER RATING	4,000 P
JOURNALS	RD-HYATT 8 1/2" JOUR	SAND	18 CU. FT.		
WHEELS	AAR A-40 GRADE B	FUEL OIL (L1070)	200 GALS.		
HAND BRAKE	NATIONAL				
DRIFT GEAR	NMDD M-373				
COMPLEX	TYPE 72				
BATTERIES	32 CELL 64 VOLT				
HEADLIGHTS	3/4" TWIN SEALED BEAM				

FORM G-1-72

DIESEL-ELECTRIC FREIGHT LOCOMOTIVES

FORM G-1-72

DIESEL-ELECTRIC ROAD SWITCH LOCOMOTIVE

THE 711 RAILWAY ENGINEERS OF WORLD WAR II

by Wm. Church

Before the first Draftees of the Selective Service Act of 1940 were inducted into the United States Army, plans were made to add one new branch of service. It was first assigned to the Engineer Corp and later assigned to a new Arm of the Service, called the Transportation Corp. Thus, the Railway Service of World War 2 was born.

The first Railway Engineer Battalion formed at this time was the 711 Railway Engineers. The cadre was drawn from the Corp of Engineers, Railway Artillery and the Quartermaster Corp. Regular Army personnel were screened for railway experience and Selective Service Men with civilian experience on the railroads were sent to Ft. Belvoir, VA., and later Ft. Leonard Wood, MO. where they underwent 13 weeks of Combat Engineer training and upon graduation from these training camps were assigned to the 711 Ry. Engineers.

The 711 Railway Engineer was activated at Ft. Belvoir, VA on May 1st, 1941. Men from various civilian railways were given commissions and served as the first officers of this unit.

The first assignments for the 711 Ry. Engineers was the re-building of the Ft. Belvoir Quartermaster Railroad. The Battalion re-surfaced the entire line and inserted new ties, putting the entire line in first-class shape. This gave the Battalion valuable training experience for its new assignment.

The 711 Ry Engineers were to be a Training Battalion for future Railroad Troops and their mission was to train combat troops in railway operations and construction in a theatre of war or in the event of a National Emergency at home.

The Civilian Railway plan of operations was adopted for this branch of the service. The 100 mile division concept was the base of operation, each company in the Battalion to correspond with the duties of each phase of civilian railroading.

Headquarters and Service Company was a dual company. The service supplying all military needs, such as supply, mess and the necessary support groups. Headquarters section supplied the train movement section and trained the necessary train dispatchers, telegraphers and wire linemen. The Company Commander of H & S Co. was to be the Chief Train Dispatcher. The Battalion Commander and his Staff were to serve in the positions as a Civilian Division Superintendent.

Company A. was to be the Maintenance of Way company and its commander the Division Engineer.

Company B was to be the locomotive and car repair group and the Company Commander was to be the Master Car Builder and the Master Mechanic.

Company C was to be the operating company. This company was the largest in the Battalion and supplied the necessary train and engine crews, Yardmasters and Yard Clerks. Commander was the Trainmaster with his lieutenants serving as Road Foreman of Engines.

Mid-summer of 1941, the Ft. Belvoir Quartermaster line was re-furbished and the Army was looking for a new duty station for the 711 Ry Engineers.

Camp Claiborne, Louisiana, was selected to be the Army Post from which all future railroad troops were to be trained. This selection was largely due to the fact that near by there was a short-line railroad, the "Red River and Gulf", who had expressed an interest in the Army proposal of leasing trackage rights over a nearby railroad to operate army trains manned by Railway Troops. So, by early Fall, the 711 Ry Engineers had moved from Belvoir and had established Battalion Headquarters in Camp Claiborne, LA.

Initial plans called for the men of the 711 Ry Engineers to build a complete rail terminal at Camp Claiborne and when their motive power, that was then on order, arrived, to assume all Quartermaster switching on the Post.

The Battalion was to build a standard gauge line from the end of track, which was just west of the Quartermaster Depot, to a connection of the Red River and Gulf RR, a distance of some five miles. Also, the Battalion was to build some rolling stock and maintain its own shops.

Trains were to operate from Claiborne to the end of track on the Red River and Gulf Railroad.

But before final plans could be made for the future of Railroad Training in Claiborne, the Red River and Gulf objected to some of the Army's proposals and pulled out of the talks. The Army instead of abandoning the plans simply changed them and decided to build a Standard Gauge Railroad between Camp Claiborne and Camp Polk, La., a distance of some 50 miles, using men of the 711 as the work force and by sending two regular Army Engineer Regiments, the 92nd and 93rd Engineers, as support troops in the railroad building.

Captain Henry A. Israel, commander of "A" Company, was in charge of the survey between Camp Claiborne and Camp Polk, LA. It was said that Captain Israel walked the fifty miles between the two posts without making any written notes and when he arrived at Camp Polk he sat down and filled out his note book and gave it to the men of the survey team who then ran the line from it. One change was made from Captain Israel's notes later on when the expansion of Camp Polk was ordered, the main line of the railroad had to be re-located. This new railroad, the first ever attempted by the US Army, was named "The Claiborne and Polk Military Railroad." All equipment was marked with the Twin Castles of the "Corp of Engineers".

The motive power of the Claiborne and Polk Military Railroad was from various sources. Some ex-WWI 2-8-0's that had been in storage for years were dispatched to Claiborne for overhaul by men from "B" Co's locomotive platoon. There were nine 4-6-0's from the T & P RR, and two new 2-8-0's refurbished at Claiborne were coal burners.

Construction work on the Claiborne and Polk Military Railroad was started in the late Fall of 1941. While awaiting the necessary motive power, the construction work trains were powered by a coal fired clam shell. Men of the Battalion were kept busy by endless details of unloading rails and ties which were stored along the existing Quartermaster Main line. The rail was 85 pound relay in good condition.

The Missouri Pacific daily switcher from Alexander, LA serviced the Quartermaster Depot at Claiborne and when the occasion arose, it often went to the end of track west of the Quartermaster Depot to pull the empty flats at the rail stockpile to return them back to Camp where they would be re-loaded by details from all 711 companies.

Shortly after arrival at Claiborne of the first motive power occurred. The ex-T&P ten-wheelers were put into service followed later by two new 2-8-0's from Lima Locomotive Works. The MoPac was relieved of all the Quartermaster switching by the 711 Ry Engineers.

After the 711 assumed all rail duties in Claiborne, the Kansas City Southern was relieved of all of the work at Camp Polk, LA and men from Claiborne were sent to Polk for operations there. At the same time, Lima-built No. 11 and several ex-T&P ten-wheelers were transferred from Claiborne to Polk via the Missouri Pacific to Oakdale, LA, ATSF from Oakdale to De Ridder, LA, Kansas City Southern from De Ridder to Leesville, LA and then over the Camp Polk Extension to Camp Polk.

As Camp Polk was expanding, the men of the 711 were kept busy hauling building materials to what they called "New Camp". Also, they performed all Quartermaster switching on the Post and ran the numerous construction trains from Camp Polk to the end of track, where men of the 711 and the 92 and 93 Engineers were laying rails eastward.

Construction work westward out of Camp Claiborne carried the Claiborne and Polk Military Railroad to a point where the first proposed connection with the Red River and Gulf RR was to be located, but now instead of a connection track, a steel girder bridge was to be built. This bridge was named "Big Cut Bridge" because of the deep cut that the tracks of the Red River and Gulf traversed. From "Big Cut Bridge" the line cut through second growth pine woods to "Spring Creek", where the men of the 711 constructed a wood pile trestle, using borrowed MoPac piledriver and a 711 owned Burro Crane.

From "Spring Creek" the Claiborne and Polk Military Railroad entered the Calcasieu Swamps. Numerous steel culverts instead of small wood pile bridges were used. Using a large amount of manual labor to remove trees and other obstacles in their way, details from all companies of the Battalion labored in waist-deep water.

The largest bridge job on the line was the Calcasieu River Bridge, some 1400 feet in length. This was a wood piling bridge and the men of the 711 erected it in what was later recorded a record time.

After the Calcasieu was crossed, the Claiborne and Polk followed the abandoned right-of-way of the H. & D. Lumber Co. RR. This right-of-way was restored and put into a passable shape.

To house construction crews, a tent camp was erected near the Calcasieu Bridge and named Camp Gray, after Commanding General of the Railroad Troops.

Shortly before the 1st of July in 1942, the work gangs from Camp Polk and Camp Claiborne met and the rail line was joined mid-way at La Camp, LA. The official ceremony for the last spike was to be at La Camp on the 11th of July, 1942.

The east end of the Claiborne and Polk was built on solid ground with some ballast, but the west end was on gumbo which the summer rains had turned into an impassable piece of track. So bad was the track that it was almost impossible to move a hand car over the track, nether the less a locomotive and cars.

This condition made it impossible to run a train from Camp Polk to meet a train at La Camp from Camp Claiborne so a change of plans were made.

Plans called for engine No. 7 to meet engine No. 11 at La Camp, thus the 7th month, 11th day, engine 7 and 11 would honor the 711 Ry Engineers. But since the Claiborne and Polk was not passable and No. 11 was at Camp Polk and it would have to take the long detour to get back to Claiborne, plans were changed. No. 1 was honored with an additional digit, making her No. 11 for one day. Then it was planned that No. 7 with Sgt. Ed Sovina at the throttle would pull a train of coaches to La Camp and run around his train and be facing east, ready to steam into La Camp when Engine No. 11 arrived from Claiborne with the first load of passengers for the celebration.

Early morning of 11 July 1942 the 711 had all of the motive power in Claiborne steamed up for the ceremony. Engine No. 7 had departed for La Camp as scheduled. Later that morning No. 11 followed by the rest of the roaster. All were pulling passenger carrying equipment. The men of the 711 were riding on benches secured to the decks of flat cars with home-made GI cabooses bringing up the rear.

At La Camp, Major Welch, the Commanding Officer of the 711 and General Gray drove home the last spike on the Claiborne and Polk Military Railroad, then the engineers of the #7 and #11 moved forward their engines and touched couplers. General Gray and Major Welch shook hands across the couplers.

Although it was several weeks before the first trains could be operated between Claiborne and Polk, the railroad issued a timetable and set up operational schedules. The daily details of ballasting the line continued and soon the Claiborne and Polk was in operation.

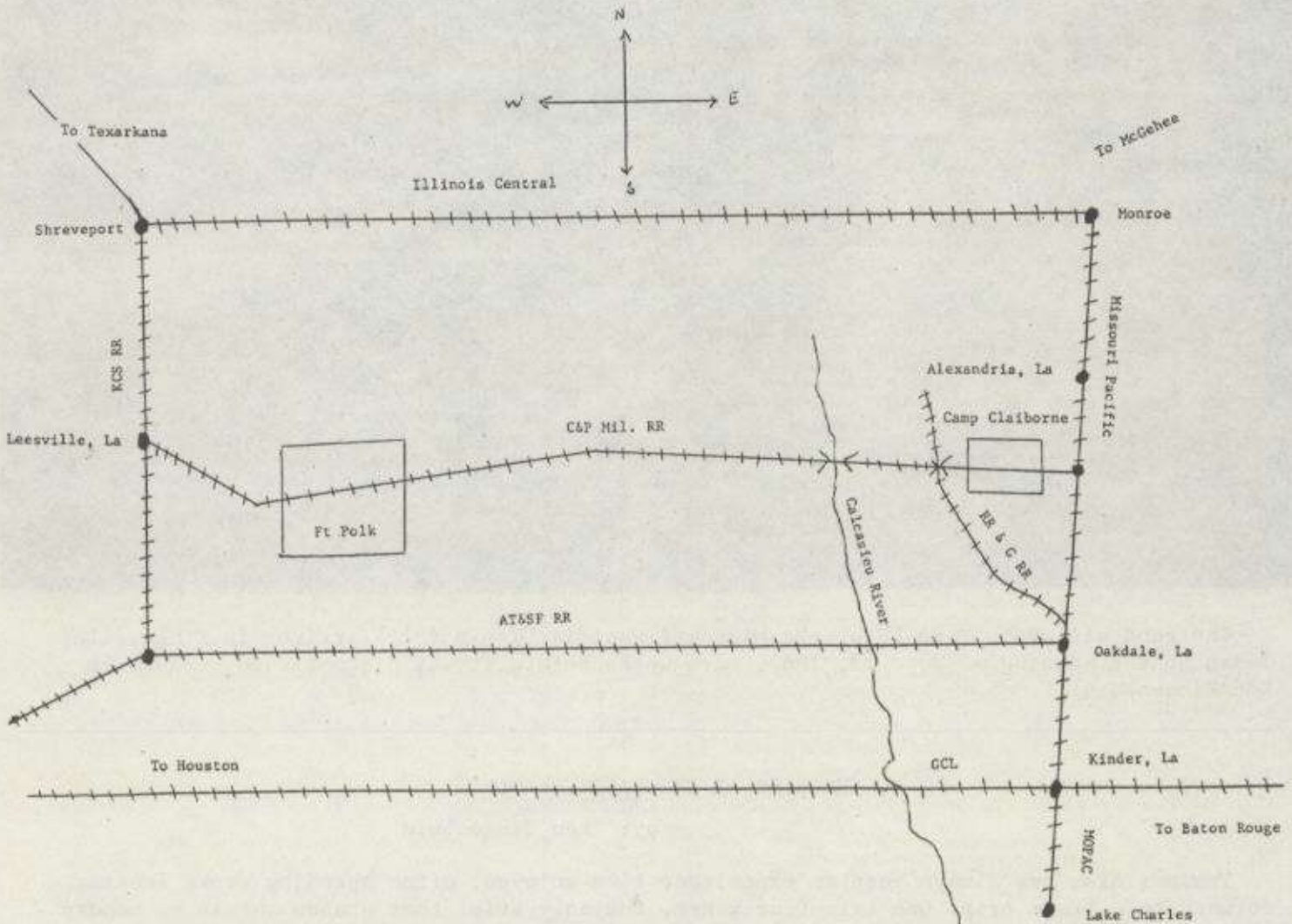
The 711 Ry Engineers did not operate the Claiborne and Polk for any length of time after completion. The Battalion was changed from a Training Battalion and received new men to fill out the T.O.E. and was alerted for overseas duty. They were relieved of the Claiborne and Polk by the 759 Railway Operating Battalion in October 1942 and were sent to Ft. Dix, NJ for overseas shipment.

The 711 arrived in the Persian Gulf in December 1942 and immediately took control of the Iranian State Railways. Their mission: to supply the Russian Army through their back door. This supply line existed until the war with Germany was over in May 1945, then the 711 was deactivated at Ft. Benning, Georgia in October 1945.

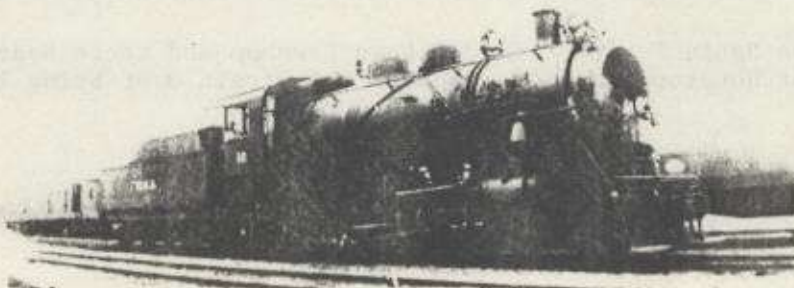
The Claiborne and Polk Military Railroad was abandoned in December 1945 and its equipment transferred to Ft. Eustis, VA, headquarters of the Transportation Corp.

(Authors Note)...A slide show of 140 slides showing the construction of the C & P MRR and operations in Iran by the 711 should be seen to appreciate this report of the first Railway Battalion of World War II.

--- E N D ---



CLAIBORNE & POLK #10, 1942



PASSENGER TRAIN OF THE MONTH

(This is a monthly article devoted to passenger trains, any kind, any time. Pictures and stories welcome).



The good ole' VALLEY EAGLE of the Missouri Pacific (Train #321) arrives in Kingsville, Texas on the morning of June 13, 1962, mere weeks before it was discontinued. (Photo by Ken Ziegenbein).

MEMORIES OF THE VALLEY EAGLE

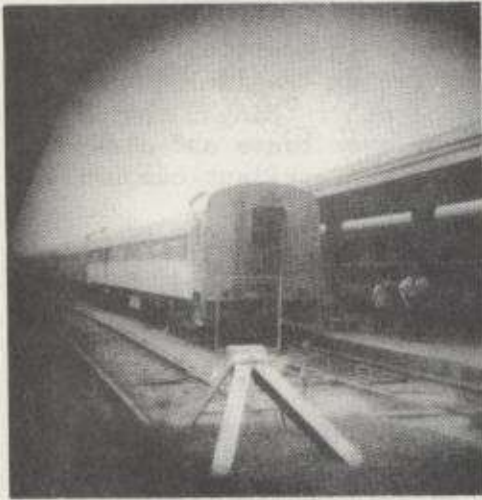
by: Ken Ziegenbein

Train riding has always been an experience I've enjoyed, often spending weeks looking forward to a train trip. One trip (for years, the only trip) that stands out in my memory is riding MOPAC's VALLEY EAGLE between Houston and the Rio Grande Valley of Texas.

This trip would begin well before dawn in Brenham, Texas (90 miles northwest of Houston) when my grandfather, W.H. Kiel, would wake me up about 4 AM. I remember walking in the darkness to get a drink of ice water from the refrigerator, the refrigerator light being the only light illuminating the room.

We'd call a taxi to take us to the Santa Fe depot in downtown Brenham and there board Santa Fe # 5 at 5:13 AM destined for Houston. I don't remember this train ever being late.

After stopping at Bellville, Bellville Yard, Sealy and other towns, we'd back into Houston Union Station on time at 8:00 AM, and there wait for our connection with the VALLEY EAGLE. It was a good little wait, too, from 8 AM to 11:30AM. Of course, the waiting time flew by for me.



Another train waiting for departure at Union Station in Houston in June of 1962. (Ken Ziegenbein photo).



My grandfather along with 2 of my cousins (Janet and Kathy Kiel) at Kingsville waiting for the northbound VALLEY EAGLE in June, 1962.



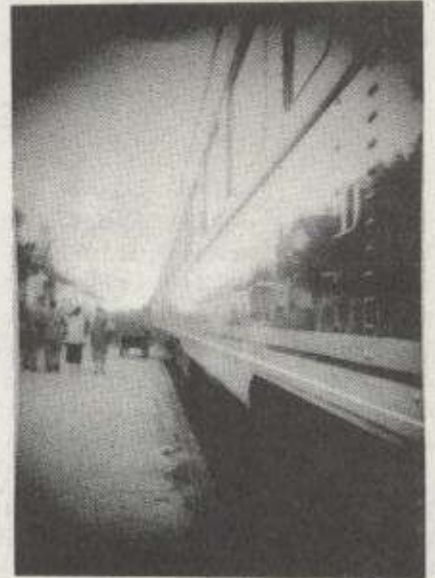
July 1956 view of VALLEY EAGLE unloading in Houston. (Ken Ziegenbein photo).

At 11:30 AM we boarded the VALLEY EAGLE bound for Kingsville and a visit with my uncle and his family. We'd often visit the King Ranch, where my uncle worked (and still does). Years before, we would ride the train farther south to Harlingen, Texas and board a Missouri Pacific bus to San Juan, the town where my uncle used to live.

After our visit, we boarded the northbound train at AM and headed back to Houston. In 1962, the train had lost its Corpus Christi coaches and was down to one engine, a baggage car, a diner, and one coach. (The spaghetti and meatballs were great in the diner!). In a few weeks, the train would be gone altogether.

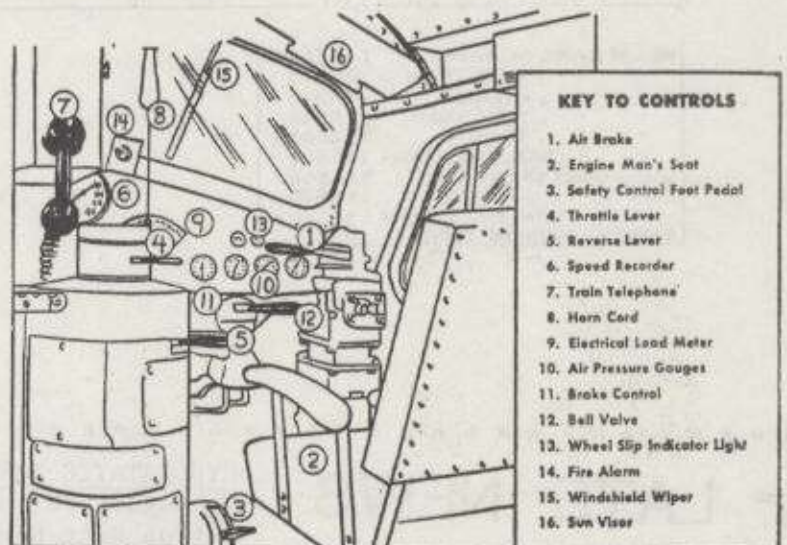
On one trip, the conductor pointed out that our speed was over 90 MPH along a certain straight segment of track. I'm sure he was right.

Our arrival in Houston was usually on time at 3:25 PM. There we walked a couple of blocks to the Greyhound Bus Station and got on a bus to Brenham. Another wonderful trip was over.



VALLEY EAGLE in Harlingen, Texas, July 1956. (Ken Ziegenbein photo).

- END -



AMTRAK SAFETY ISSUE HITS NEWS MEDIA - In an interview in the September 3 issue of PEOPLE Magazine, Barry Williams of the National Association of Railroad Passengers says the following: "In its 13 year history, Amtrak has lost only 25 passengers. That many die in eight hours on the highways." "There are some 250,000 grade crossings in America."

The September 3rd issue also had a very pro-Amtrak article written by Charlie Fink, one of Amtrak's on-board "chiefs" on the EMPIRE BUILDER. He said, among other things, that it's "the adventure and romanticism that make trains totally unique over buses and air-planes". He also said, "Part of the magic of trains is you become a self-reliant community and everybody becomes neighbors and friends".

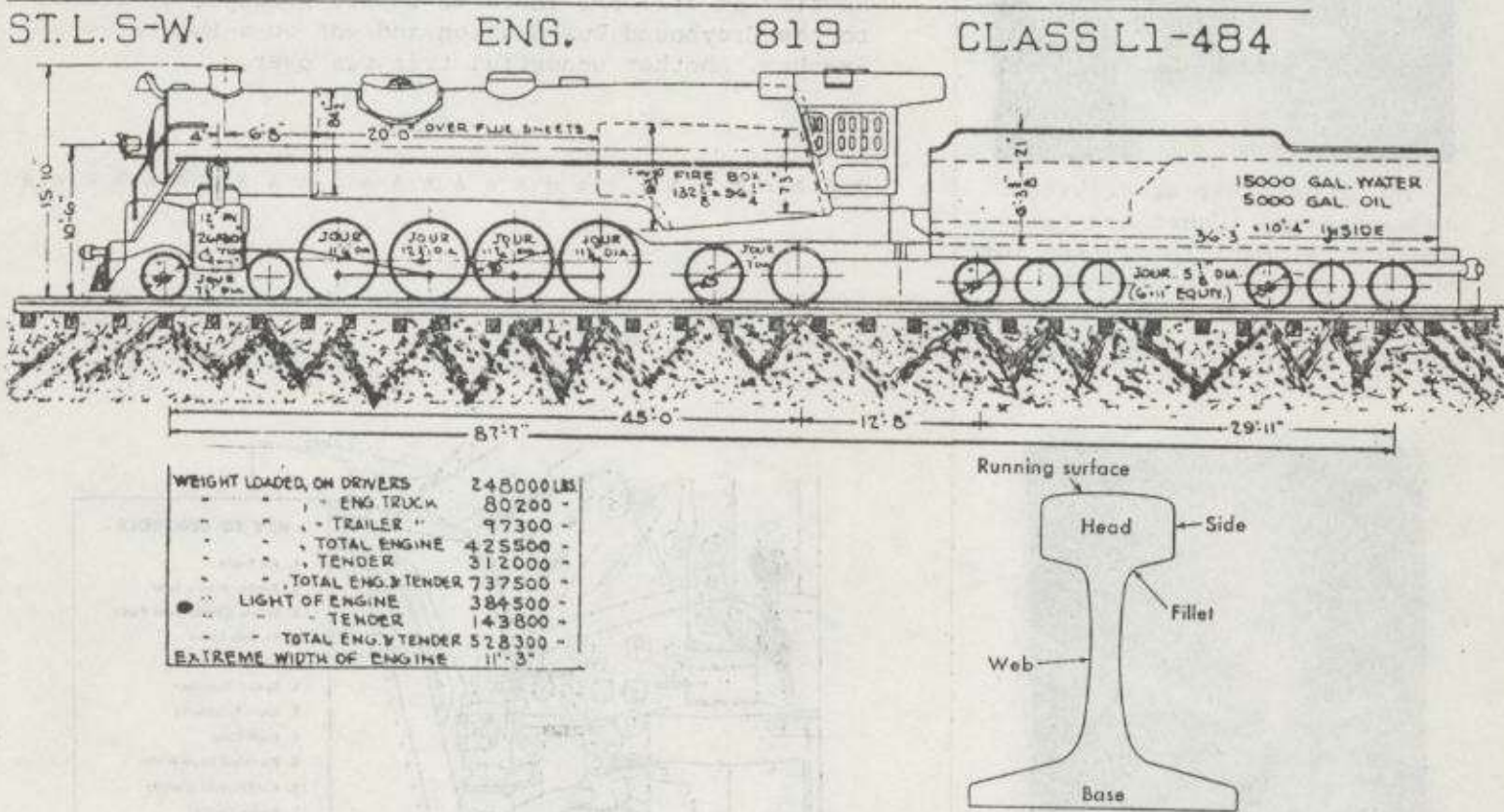
STRESSES IN STRAIGHT RAILS UNDER LOCOMOTIVE 819

by: Bill B. Bailey

For the entire length of a locomotive and tender, the track will be depressed slightly below the normal surface of the rail, with an extra depression under each wheel. In front of Locomotive 819, the rail is actually above normal level (due to wave motion). The depression under 819 wheels is 1/8th inch to 3/8th inch, partly due to compression of the ballast and roadbed. To determine the fiber stresses in rail under the 819's load and the distribution of these stresses in the rail is a matter beyond the general mathematical calculations. However, I will endeavor to state some of the facts and conditions that exists in this problem.

As the load (static or dynamic) is applied, the rail deflects, and there is a compression of the ties, ballast and roadbed, the deflection and compression being naturally greatest under the wheels, or the points where the load is applied. In regard to the rail under a moving load, there is a compression in the head, a tension in the base and a sheering stress across the rail section at or near the ties which at that instant are bearing the load. The span of the rail deflection under the wheel is usually longer than the tie spacing.

At a point a little distance on either side of the wheel the stresses are reversed, the head being in tension and the base in compression. The rail in curves are another subject matter. Also, rail expansion and contraction are other rail topics.

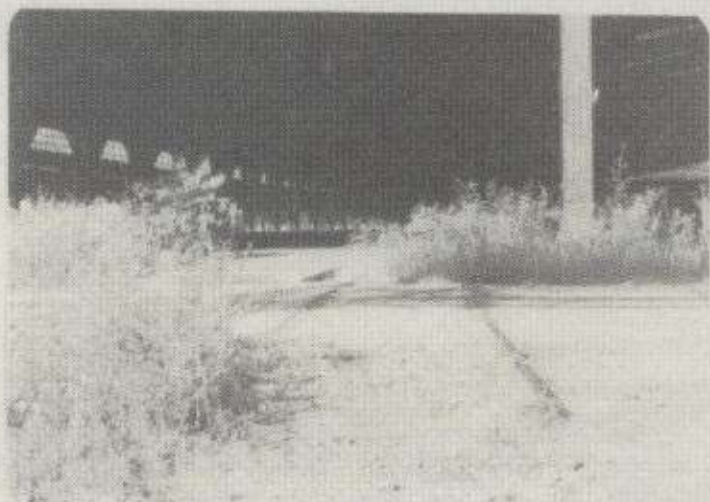
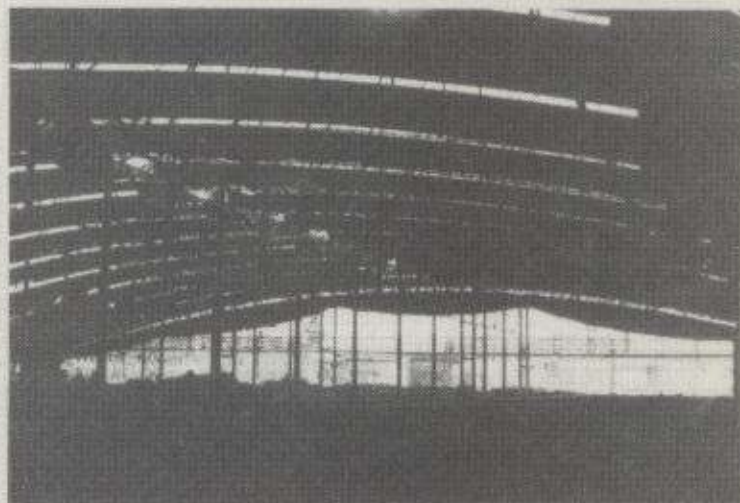
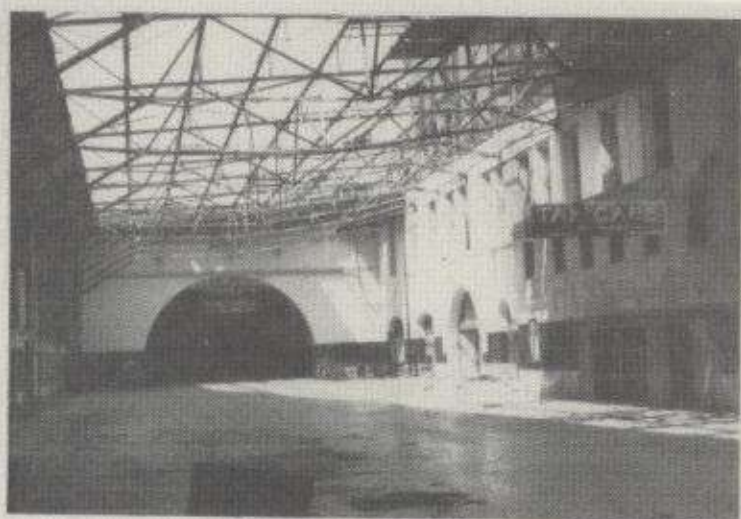


LATE NEWS

HYDROSTATIC TEST HAS GOOD AND BAD NEWS - but mostly good. On August 30 and 31, hydrostatic tests were performed on Cotton Belt Engine 819 in Pine Bluff. Results...the engine has a structurally sound boiler (up to 370 pounds of pressure were applied - 250 lbs being normal pressure). The throat of the boiler had no leaks. The flue sheets and smokebox were dry (there are 200 big flues and 57 small ones). The not-so-good news is that the boiler flues need to be pulled out and inspected and 43 or 44 staybolts were leaking and have to be repaired. Even so, it looks as though #819 will one day be steamed.

ARKANSAS RAILROAD CLUB CHRISTMAS PARTY SET - it will be held at the Coachman's Inn in Little Rock, Friday December 7 at 7PM. More details in the months to come.

ODE TO A USED-TO-BE GRANDEUR TRANSPORTATION HUB - ST. LOUIS UNION STATION



UPPER LEFT - Union Station in St. Louis as seen in October 1975. At this time, it was still used by Amtrak. It still looks like this today from the north. MIDDLE LEFT - Track 3 obviously has seen better days. Grass and trees are reclaiming the area where hundreds of passengers once boarded trains for countless destinations (Oct 1975 photo). LOWER LEFT - Ghost trains wouldn't even have room in this April 1982 view of a weed-infested platform. UPPER RIGHT - Where have all the people gone? All have left on the last train out and none will return. Taxis are no longer needed here (April 1982). UPPER-MIDDLE RIGHT - Howling winds can be heard under the empty train shed, but no more train whistles. LOWER-MIDDLE RIGHT - Track to nowhere. How many trains once exited St. Louis on this track going to many diverse locations? LOWER RIGHT - A line of empty cars from various railroads were lined up on the west track in this April 1982 view. (All photos by your editor, Ken Ziegenbein).

U.S. TRANSPORTATION DEPARTMENT - AIR MAIL PERMIT NO. 1234

ARKANSAS RAILROADER
EDITOR-K. ZIEGENBEIN
905 VALERIE DR.
NORTH LITTLE ROCK, AR 72118

-- HAPPY RAILROADING!! --

Ken Ziegenbein
905 Valerie Dr
North Little Rock, AR 72118
(501)-758-1340

The ARKANSAS RAILROAD CLUB is a non-profit organization of railroad and train lovers who meet once a month on the second Sunday of the month. This month's meeting place is listed under the "PROGRAM" notice.

The ARKANSAS RAILROADER is the monthly publication of the Arkansas Railroad Club and is generally mailed first class one or two weeks before the monthly meeting. In order for you to receive this monthly newsletter, you must be a member of the Arkansas Railroad Club. Current dues are \$10/year for Arkansas residents and \$7.50/year for out of state. The publication is mailed automatically to all members. If you would like to join, send your check, made payable to the Arkansas Railroad Club, to Dick Byrd, 12 Flintwood Dr, Little Rock, AR 72207. You may also join the National Railway Historical Society through the club by paying \$9.00/year more.

Editor of the ARKANSAS RAILROADER is Ken Ziegenbein, with John Martin assistant editor. Stories for publication are welcome as well as pictures. Send all correspondence regarding the ARKANSAS RAILROADER to: