



# GREEN DIAMOND

ILLINOIS CENTRAL HISTORICAL SOCIETY

ISSUE 29

\$2.25



# Illinois Central Historical Society



\*\*\*\*\*

ILLINOIS CENTRAL RAILROAD  
HISTORICAL SOCIETY

## OFFICERS

PRESIDENT  
JACK LAUDE  
5244 HOWARD ST.  
WESTERN SPRINGS IL.60558

FIRST VICE PRESIDENT  
NITA FRASER  
205 SUNDOWN TRAIL  
JACKSON MS. 39212

SECOND VICE PRESIDENT  
TERRY MCMAHON  
865 GEN. GEO PATTON RD.  
NASHVILLE TN. 37221

SECRETARY  
DAVID HAYES  
P.O. BOX 382  
HARDINBURG KY 40143

TREASURER  
RICHARD CHENAULT  
4964 A PARKER  
ST. LOUIS MO. 63139

## DIRECTORS

LEW CONCKLIN  
DAVID J. DAISY  
TONYA DAISY  
DAVE FRASER JR.  
JIM KUBAJAK  
PHILLIP MARVIN  
CHARLES WERNER

\*\*\*\*\*

ICHS 1991 ANNUAL MEETING  
SATURDAY AUGUST 24, 1991  
METAIRIE, LOUISIANA  
RAILRODIANA SHOW & SALE  
\*\*\*\*\*

GREEN DIAMOND PAGE 2

\*\*\*\*\*

GREEN DIAMOND EDITOR  
Tom Grant

\*\*\*\*\*

ASSOCIATE EDITOR  
Jim Kubajak

\*\*\*\*\*

ICHS NEWSLETTER EDITOR  
John Thomas

\*\*\*\*\*

INDIANA DIVISION EDITOR  
Robert K. Dillon  
335 Knollwoods Terrace  
Roswell GA 30075

\*\*\*\*\*

IOWA DIVISION EDITOR  
Ted Richardson  
431 Briar Place  
Libertyville IL 60048

\*\*\*\*\*

KENTUCKY DIVISION EDITOR  
David Hayes  
P.O. Box 382  
Hardinsburg KY 40143

\*\*\*\*\*

## ICHS PAXTON DEPOT

Charles Werner  
642 S. Park St.  
Paxton IL 60957  
(217) 379-2261

\*\*\*\*\*

## ON THE COVER

IC GP 40's lead a special publicity train of new IC 50' plugdoor boxcars southbound across the Cairo Bridge. The three new short piers that were added to the bridge and the new 200' deck truss spans show clearly in this photo. Part 2 of the Cairo Bridge story starts on page 6 of this issue.

\*\*\*\*\*

\*\*\*\*\*

1991 ANNUAL MEETING CHMN.  
Dave Fraser Jr.  
205 Sundown Trail  
Jackson MS 39212

ICHS MEMBERSHIP CHAIRMAN  
Jim Kubajak  
14818 Clifton Park  
Midlothian IL 60445

ICHS NEWSLETTER CHMN.  
John Thomas  
9918 Torigney Ct.  
St. Louis MO 63126

PUBLICATIONS CHAIRMAN  
Tom Grant  
22539 Arquilla Dr.  
Richton Park IL 60471

ICHS SPECIAL RUN CARS  
MODEL CHAIRMAN  
David Daisy  
746 N. Bruns Lane  
Springfield IL 62702

ICHS COMPANY STORE  
Tonya Daisy  
746 N. Bruns Lane  
Springfield IL 62702

MODEL CONTEST CHMN.  
ICHS MODULE CHAIRMAN  
Lew Concklin  
P.O. Box 586  
Oak Park IL 60301

ICHS LIVING HISTORY  
David Hughes  
R.R. 2 - Box 6  
Palestine IL 62451

\*\*\*\*\*

ICHS & C&EI SPRING MEET  
APRIL 27-28, 1991  
TUSCOLA, ILLINOIS  
RAILRODIANA SHOW & SALE  
\*\*\*\*\*

\*\*\*\*\*  
 Thanks to the following people who contributed photos or information to this issue of the GREEN DIAMOND:

American Bridge  
 ( US Steel )  
 Clifford Chandler  
 C.T. Felstead  
 Bruce Gurner  
 David Hayes  
 IC Magazine  
 ICRR photos  
 Kalmbach photos  
 Terry McMahon  
 Mike Shafer  
 Jay Williams

\*\*\*\*\*  
 Thanks to the following people who makeup the mailing staff for the GREEN DIAMOND and stuff envelopes, stick on labels, sort and count etc... so that all of us finally get the magazine in the mail:

Gary Barnes  
 Tom Biscan  
 Lew Concklin  
 Lyman Dunning  
 Al Kempf  
 Rick Kempf  
 Kevin Kempf  
 Jim Kubajak  
 Abigail Kubajak  
 James Kubajak  
 Jack Laude  
 George Rondelli  
 Dale Windhorst

\*\*\*\*\*  
GREEN DIAMOND

The GREEN DIAMOND is in need of articles and photographs for publication. Materials submitted are done so with the understanding that no monetary compensation is paid. Photographs and written materials will be returned if requested. Send any materials for the GREEN DIAMOND to Publications Chairman Tom Grant. Send items for the ICHS NEWSLETTER to John Thomas.

\*\*\*\*\*  
CONSIST

- 3. ICHS NEWS
- 6. The Cairo Bridge  
 Part 2.  
 by Tom Grant
- 14. Y.& M.V. #74  
 Kalmbach Collection
- 25. ICHS
- 26. Memories & Nostalgia  
 by Clifford Chandler

\*\*\*\*\*  
ST. LOUIS DIVISION

Members interested in forming The St. Louis Division of the ICHS will have an informal meeting and dinner on Saturday, February 16, 1991 in Carbondale IL at the Orchids, Trains, Planes and Stamps Show at the Hillside Nursery. The show runs from Feb, 14-18. Contact Mark Miller at 1204 A West Central, Marion IL 62959.

\*\*\*\*\*  
Y. & M.V. #74

The center photo of Y. & M.V. #74 is from the Kalmbach photo collection - donated in 1989 to the ICHS. The 4-4-0 started out as a Louisville, New Orleans & Texas engine built by Schenectady Locomotive Works in 1888 before being acquired by the Yazoo and Mississippi Valley.

\*\*\*\*\*  
SPRING MEETING

The ICHS and the C&E Historical Society will hold a joint meeting on the weekend of April 28-29, 1991 in Tuscola, Illinois. All of the details are being worked out as of this writing, and will be announced as soon as possible.

**Rail oddities**



A RAILROAD PRESIDENT WHO LIKES TO SING GRAND OPERA INDULGES HIS HOBBY BY JOINING THE CHORUS OF THE "MET" WHEN BUSINESS TAKES HIM TO NEW YORK.

AMERICA'S NO. 1 MASTER OF ANIMATION FILMS--WALT DISNEY --PURSUES RAILROAD MODEL-BUILDING AS A HOBBY--BUILT AND OPERATES HIS OWN 1/8th SCALE MODEL TRAIN WITH COAL-FIRED LOCOMOTIVE CAPABLE OF PULLING A LOAD OF 3,000 POUNDS.



REBUILDING ITS BRIDGE ACROSS THE OHIO RIVER, A RAILROAD (1) MOVED AN OLD SPAN OFF ITS PIERS IN 57 MINUTES; (2) MOVED A NEW 518-FOOT SPAN TO THE SAME PIERS IN 75 MINUTES; (3) HOOKED UP THE TRACKS AND RESUMED FULL MAIN LINE OPERATIONS ALL WITHIN 20 HOURS.

## 1990 ANNUAL MEETING

The 1990 ICHS annual meeting was held August 11-12 at the Holiday Inn Union Station in Indianapolis IN. The Railroadiana Show & Sale on Saturday started off the weekend of activities. Over 70 tables of railroadiana and model railroad items were offered for sale, filling the two available rooms at the hotel.

On Saturday night over 100 people attended the banquet. Mr. Thomas Hoback, president of the Indiana Rail Road (former IC Indiana - polis line), was the guest speaker. Mr. Hoback told of the purchase and revitalization of the Indianapolis line and included a slide presentation of some of the scenic views along the line, and motive power and equipment.

A special award was given to GREEN DIAMOND editor and past ICHS president Tom Grant for his work for the historical society. President Jack Laude presented Tom with a limited edition pewter 4-4-0 steam engine mounted on a walnut base, and a brass HO scale model of an IC Extended Vision Caboose. (Much appreciated and unexpected-Editor T.G.)

The annual election saw all of the existing officers and directors re-elected for another term. An ICHS quiz, slides, movies, and door prizes rounded out the evenings activities.

Sundays activity was a roundtrip excursion on the Indiana Rail Road from Indianapolis to Bloomington with photo runbys on each leg of the trip.

This years annual meeting and train excursion was the most ambitious one yet, but all of the activities went off without a hitch (except for the lack of toilet paper on the train - but we got some.). Treasurer Rich Chenault reported that after all the bills were paid we did manage to break even on the weekends expenses, which is what we aim for.

## ICHS MEMBERSHIP

Membership Chairman Jim Kubajak reports over 700 active members in ICHS. Green Diamond # 30-31, the special freight car issue, will fulfill our 1990 publications schedule. Your 1991 dues will gladly be accepted anytime between now and April 30. Official dues notices will be mailed shortly after Green Diamond # 30-31 is delivered to the membership.

## 1991 ANNUAL MEETING

The date has been set for next years annual meeting. You can mark your calendars for Saturday August 24, 1991. The location is the Landmark Hotel in Metairie LA. near New Orleans. Dave Fraser Jr. is the show chairman for the 1991 meeting. More information will be sent out as soon as it becomes available.

## DOWN AT THE DEPOT

ICHS building committee chairman Chuck Werner reports that as of the November 1990 board meeting, there have been 17 volunteers who have worked about 350 hours at the depot on various clean up, restoration and remodelling efforts. The upstairs portion of the front of the depot has been cleaned out, framed, insulated, drywalled and painted. Recessed lighting has been installed and the room is ready to be used for storage and library functions. Work on the main floor portion of the front end of the building is progressing. Plans are to restore this area to look like it did when in use as a freight office. We will have displays and our gift shop area in this section.

## SUSTAINING MEMBERSHIP

A very common question is: What's the difference between a regular and a sustaining membership?

A sustaining member contributes \$20.00 (or more) to the ICHS instead of the regular amount of \$15.00. The \$15.00 amount is used to provide services to the individual member. The extra \$5.00 (or more) goes into the ICHS treasury to fund other projects. Now that we have a headquarters building, there is no shortage of need for extra \$\$\$. There are many things to build and buy for the museum and archives as well as maintenance of the structure itself. An appeal for contributions for the depot is being prepared at this time by the board of directors and will be mailed in 1991. Like sustaining membership, this is yet another way that anyone can make an extra contribution to the ICHS.

## ICHS BOARD MEETING

The next ICHS board of directors meeting will be held on Saturday, March 16, 1991 at Elizabethtown, Kentucky. Contact David Hayes for further information. (address on page 2.)

## ICHS PUBLICATIONS

I am glad to say that by years end, (1990) you will have received this issue, (#29) of the GREEN DIAMOND as well as our double freight car issue, (GREEN DIAMOND #30-31), which was prepared jointly by the ICHS staff and David Casdorff of FREIGHT CARS JOURNAL. These three issues will get our publications back on schedule, and along with the 1991 calendar, which was mailed out in October, we will have met our publications obligations to you as members. To get caught up with our magazine has been our goal for a couple of years now, I'm glad that we're finally there.

I hesitate to climb up on the editorial soap box all the time, but that's one of the things that comes with doing this job, so here I go again.

We receive many favorable comments from members about our publications efforts all the time, and these are really appreciated. After all, praise is the only pay for this job, as well as all the other jobs done by ICHS volunteers.

I often solicit comments from members and others connected with the society, asking for suggestions and ideas to improve the publications and other ICHS activities. In fact we have included another questionnaire with this issue so you can tell us what you think and what you're interested in. Please fill it out and return it to us.

People are often reluctant to offer criticism to me in person, but by asking around I find out how members are feeling "through the grapevine."

Most members feel that the Green Diamond is the most important part of their membership. The most frequent complaint I hear is that there are not enough magazines, or that too much time elapses between publications.

Just a few years ago we published 4 issues per year, with up to 16 pages in each issue - 64 pages per year. When we started printing calendars we went to 3 issues of the magazine per year, but the size of each issue was up to about 30 pages per issue. That's 90 pages plus a calendar. This year we have printed our first all color calendar, but it cost more than \$5000.00 to print it. That's more than a years worth of magazines. Color is expensive! My point here

is that less has been more. Membership benefits have steadily increased as much as our budget will allow. There are also three to four newsletters each year, the expense of membership cards, dues notices, and don't forget postage. The key phrase there was "as much as our budget will allow."

The amount of money we are able to spend on publications is directly related to membership dues. We have always run this aspect of the society in the black, no deficit financing here. If we have 700 members paying \$15.00 each - that equals \$10,500.00 in dues, and that is the money used to pay for our yearly publications and member benefits, in other words all the things that you get in the mail including the envelopes and postage to get them to you.

Now that we have caught up on our publications schedule we will go back to single issues and try to decrease the time between mailings. We combine mailings whenever we can to save on postage expenses, so sometimes you will receive a newsletter and a magazine or calendar together etc...

We lose a number of members each year, I presume because they are dissatisfied with the magazine and publications etc... I think you can see how we have been trying to run our budget based on our membership dues. I hope you can see that even if we could produce more magazines we don't have enough money to print them and mail them. With only 700 members, if we lose 100 members, that is the equivalent of what it takes to print one magazine per year. That's only the printing cost. If we gain members we can afford to do more with publications. (We still need authors to write the stuff, we always have.)

I guess the bottom line is that we have done more this year than ever, so if you were'nt satisfied in 1990, you probably won't be satisfied next year either. If you're leaving the society, were sorry to see you go. On the other hand, if you have been happy with the job we've done, please help us to do more... find a new member for The Illinois Central Railroad Historical Society, and sign him (or her) up. Their contribution of membership dues will help you too, as well as the other members of the society!



# THE CAIRO BRIDGE



CAIRO BRIDGE over the Ohio River recently was modernized with minimum interruption to traffic.

IC publicity photo shows the newly rebuilt Cairo Bridge in 1952. This view is from the Illinois side looking toward Kentucky.

## THE CAIRO BRIDGE PART 2

by Tom Grant

Part 1 of "The Cairo Bridge" appeared in Issue #27-28 of the Green Diamond. In part one we followed the progress of the construction of the IC (north of the Ohio River) and the Chicago, St. Louis & New Orleans Railroad (south of the Ohio River) to a point at Cairo, Illinois in 1889. The wider gauge (5 foot) rails of the southern lines had been reset to the 4' 8 1/2" standard width, in 1881, in a one day, 550 mile job that was unprecedented in rail history. When the 3.875 mile long bridge and trestlework was completed in 1889, the Illinois Central became the first single direct rail route between the great lakes and the Gulf of Mexico.

In 1890 the Illinois Central moved more than 6 million tons of freight, but by 1900 the volume of freight had almost tripled - to over 18 million tons. Ten years later this number was up to almost 33 million tons, and by 1920, volume had risen to more than 60 million tons per year, or 10 times the volume that had existed in 1890.

Illinois Central's rail mileage in 1890 was 2,874 miles. By 1920, mileage had risen to 4,799 miles. The IC was still growing and in 1924, with the acquisition of the Yazoo & Mississippi Valley Railroad, the IC mileage jumped to 6,218 miles. IC track miles reached 6,700 miles in the 1920's and would remain about 6,500 miles until the 1972 merger with the Gulf Mobile & Ohio and the formation of the Illinois Central Gulf.

To move 10 times more freight by 1920 than had been moved in 1890, train frequency was obviously increasing on the Illinois Central. The quantity of motive power and equipment also increased rapidly between 1890 and 1920. In 1890 the IC had 473 engines, by 1920 there were 1,594 engines. Freight cars had increased from 14,103 to 68,420, and passenger equipment had grown from 401 cars in 1890 to 1,572 in 1920.

This was the time period of the greatest growth for the Illinois Central System. The great increases in business during this period enabled the IC to expand and created the need for some major improvement projects on the system. Notable projects which were brought about by the growth of the IC were Markham yards, the Chicago terminal and suburban electrification projects, the Chicago Produce Terminal, the upgrading of the Paducah shops, and many improvements to track and facilities along the entire system, including the construction of the Edgewood cutoff.\*

The building of the Edgewood cutoff was a direct result of the great increase in traffic volume on the system, the increase in size of steam engines, and the limitations of the Cairo Bridge.

At the turn of the century, The Mogul type engine (2-6-0) was the most common type on the IC. Consolidation types (2-8-0), began appearing on the IC roster in the 1890's, but not in large numbers until 1903. The IC built or purchased 4-6-0 and 4-4-2 types during the 1890's and early 1900's and also acquired others of these types and numerous 4-4-0's along with the many railroads that were absorbed into the Illinois Central System during these years.

The Mikado type (2-8-2), known as "Mikes" on the IC was first ordered in 1911, and these engines were being delivered to the IC from Baldwin, Lima, and Alco steadily until the mid 1920's when their numbers exceeded 500 engines on the roster. The "Mikes" were the backbone of the steam power roster for the IC. No other single type of engine would be

\* (Separate articles are planned for the Green Diamond on these major improvements which were made on the IC system during the 1920's. Interested authors and contributors are invited to share any photos or information with the Editors.)

## The Link that unites Mid-America



Many ties bind the states and cities that, together, are called Mid-America.

The first thread was woven when the French explorers paddled their canoes from the Great Lakes to the Gulf. Then came the day of steamboats. In the foaming wakes of paddlewheels, commerce was born between North and South. Later on the steamers of Mark Twain's day linked up with Illinois Central trains from the North, drawing tighter the bond. Reaching West, Illinois Central trains joined the lands from the Great Lakes to the Missouri.

But the great link was forged at Cairo, Illinois, just 62 years ago this month when newspapers, north and south, hailed the completion of the longest bridge in the world.

Today the Illinois Central bridge, soaring high above the broad Ohio, is being strengthened to bear the heavier, faster traffic that joins the industry, commerce and people of Mid-America.

The heavier sinews of this great bridge symbolize the ever strengthening partnership between the North and the South of the land the Illinois Central serves—Mid-America.

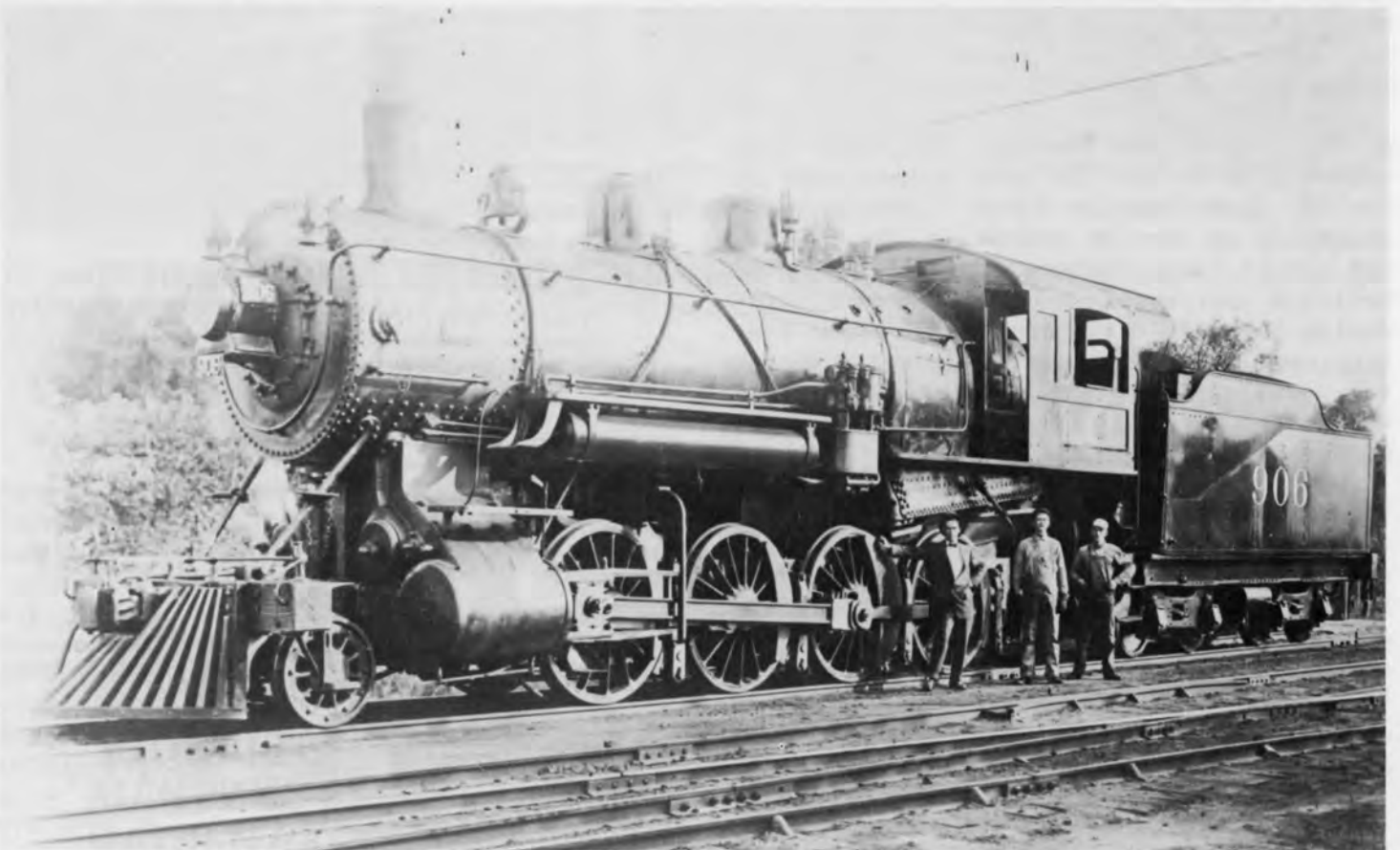
W. A. JOHNSTON  
President



## ILLINOIS CENTRAL RAILROAD



IC 2-6-0 #3719, originally #560 built by Brooks in 1900. photo-collection of Jay Williams.



IC 2-8-0 #906 at Water Valley, MS c. 1922 in freight service between Water Valley and Jackson Tennessee. Crew is L. to R. Engineer Leland Norris, Frank Starms and Fireman Harry Adams. photo from the collection of Bruce Gurner.





One of the first group of Mikados received from Baldwin in 1911 was #1608. This "Mike" became an 0-8-2 during rebuilding in 1942 and was renumbered #3682. It remained in service for the IC until 1953.  
photo from the collection of Mike Schafer.



IC 4-8-2 #2452 was one of the last group of 2400 Mountain types built for the IC by Alco. It was delivered in November of 1926 and served the IC until the end of steam in 1960. The (Courtesy-Efficient-Service-Always) logo on the tender and cab engine number are unusual.  
Photo at East St. Louis by R.J. Foster, from the collection on C.T. Felstead.



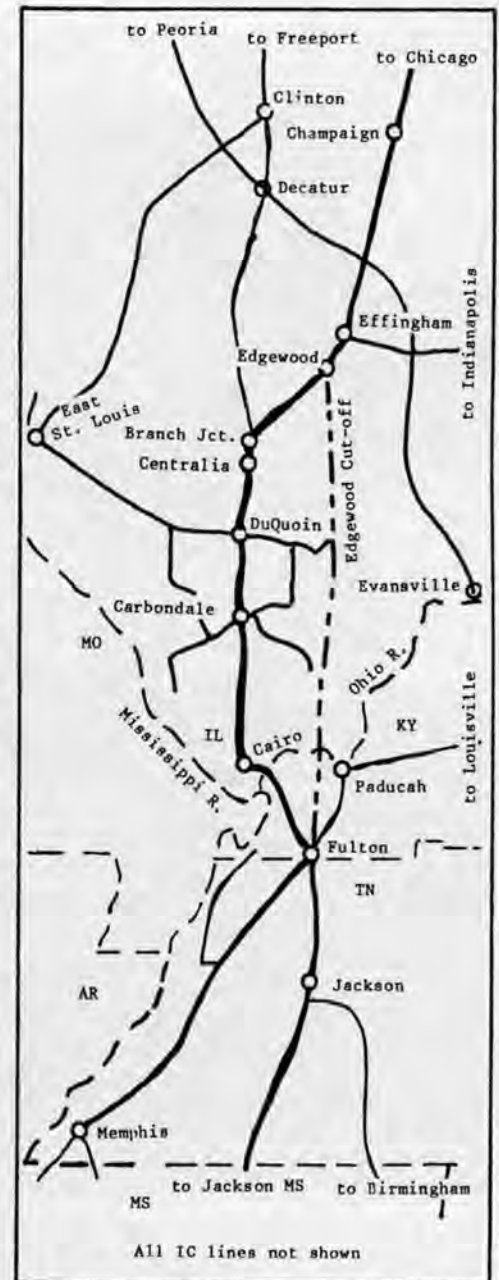
IC 4-8-2 #2613 one of the Paducah War Babies, built at Paducah by the IC in 1943 and in service until the end of steam less than 20 years later.  
Photo at Bluford, Illinois by R.J. Foster in 1947, from the collection of C.T. Felstead.

seen in such numbers on the IC until the Geeps arrived in the 1950's. The 2-8-2's are significant to the Cairo Bridge because they were the largest engine that was used on the original bridge. As IC steam engines continued to get larger and heavier in the 1920's, and the heavier engines could not be run over the Cairo Bridge, management had to look for another way to handle the traffic.

In 1921 the IC purchased 100 2-10-2 type engines from Lima Locomotive Works. These engines were used in drag freight service, hauling long trains at slow speeds, in an attempt to handle the ever increasing volume of traffic. Also in the mid twenties, the first Mountain type (4-8-2) engines were purchased. These were the 2400 class which were used mainly for the heavier passenger trains. Unfortunately all of these larger engines were too heavy for the bridge structures on the Cairo Bridge.

More significant than the weight restrictions imposed by the Cairo Bridge though, was the sheer volume of traffic that was being funneled across the Ohio River at Cairo. In 1900, only 10 years after the completion of the bridge, traffic volume had reached a point where the IC management realized that a second track was necessary to handle the traffic. The IC management in 1890 could not have predicted the great traffic increases that the railroad would see in the future. The acquisition of many "southern lines" and the trackage rights granted to the Mobile & Ohio Railroad in 1899 over the Cairo Bridge also added to the traffic load.

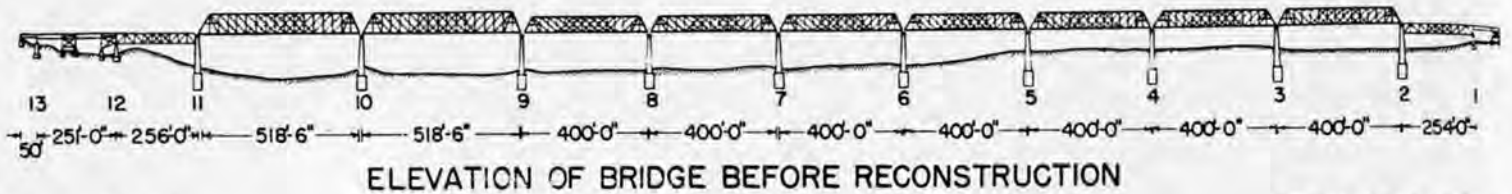
Every known improvement had been made to speed the flow of traffic over the single track bridge. Heavier rail had been laid, signals installed on the bridge, and the bridge had been strengthened to allow the use of larger locomotives. Double tracking the bridge itself was not possible. A look at the IC system map will show that prior to the Edgewood line being built in the 1920's, IC traffic from the south all funneled through Fulton, Kentucky. From the north, traffic from Chicago and Iowa and Freeport came together at Centralia, with some St. Louis traffic joining the mainline at Carbondale.



Double track was installed between Centralia and Cairo by 1903, and between East Cairo (Kentucky) and Fulton by 1906. The north approach spans were removed and replaced by an embankment which carried the new double track right up to the bridge on the Illinois side of the river. The long trestlework, similar to the approaches on the Kentucky side of the main span, had been replaced by earth fill earlier, and the yard at North Cairo was built on the embankment. But business kept getting better for the Illinois Central and by 1920 the IC main line over the Cairo Bridge was handling up to 100 trains a day. Even with all the improvements, the traffic capacity of the bridge had been reached.

The construction of the Edgewood Cutoff was the answer to the traffic volume and motive power restrictions caused by the single track limitation of the Cairo Bridge. The 169 mile line, built between 1925-1928, gave the IC a second route between Chicago and Fulton Kentucky. The "Cutoff" was built

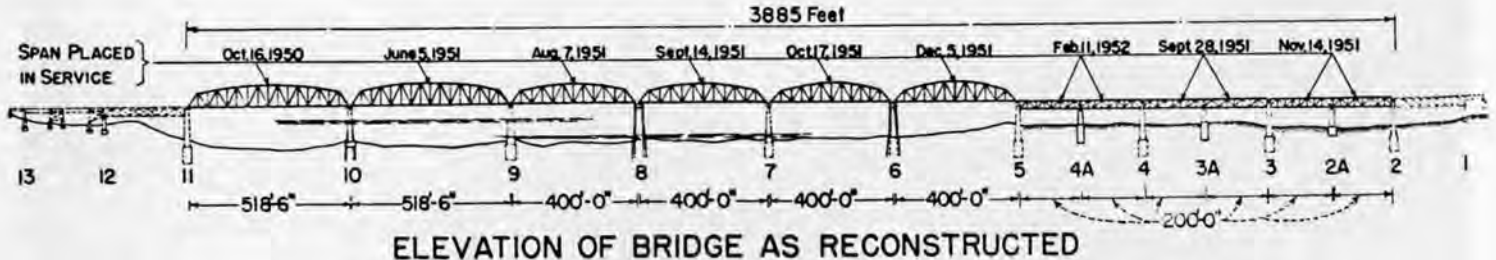
as nearly straight and flat as was possible. The line used the Metropolis Bridge a few miles west of Paducah to cross the Ohio River. The Metropolis Bridge, originally built by the Chicago, Burlington & Quincy in 1917, was jointly owned by the Burlington, IC, and the Nashville, Chattanooga & St. Louis.



ELEVATION OF BRIDGE BEFORE RECONSTRUCTION

NORTH TO CHICAGO

SOUTH TO NEW ORLEANS



ELEVATION OF BRIDGE AS RECONSTRUCTED

Piers and steel spans reused shown in dotted lines.

The building of the "Cutoff" also gave the IC more direct access to Paducah, Kentucky where great improvements were being made to the shop facilities during these years. The new Paducah Shops, completed in 1927 would become the IC's main locomotive shop and be the site of steam and diesel locomotive rebuilding and innovations which continue to this day.\*

Additional improvements were made to the Cairo Bridge during the 1930's which included additional strengthening of the bridge itself, and the installation of the first CTC (Centralized Traffic Control) on the IC.

The boom period of the twenties came rapidly to a halt in 1929 with the stock market crash and the economy of the country did not fully recover until the Second World War. The War once again brought about tremendous demands on the transportation system which resulted in higher traffic levels on all of the countries rail lines. More large steam engines were added to the IC roster over the years, and none of them could operate on the Cairo Bridge. The Lima's, (Berkshire type 2-8-4) were added to the roster in the early forties (IC 7000 & 8000 series). The 2500 and 2600 class Mountains were also added to the roster in the late 1930's and during WWII.

\* (Separate articles are planned for the Green Diamond on these major improvements which were made on the IC system during the 1920's. Interested authors and contributors are invited to share any photos or information with the Editors.)

When the war ended the IC looked once again at the Cairo Bridge and made a decision to rebuild the structure so that longer heavier trains could be carried across it and none of the larger steam engines would be restricted from operations over the main line.

By 1949 the plans had been completed for the rebuilding of the Cairo Bridge and the work was started. The following excerpts from Illinois Central Magazine tell the story of the rebuilding of the Cairo Bridge:

IC MAGAZINE MARCH 1950

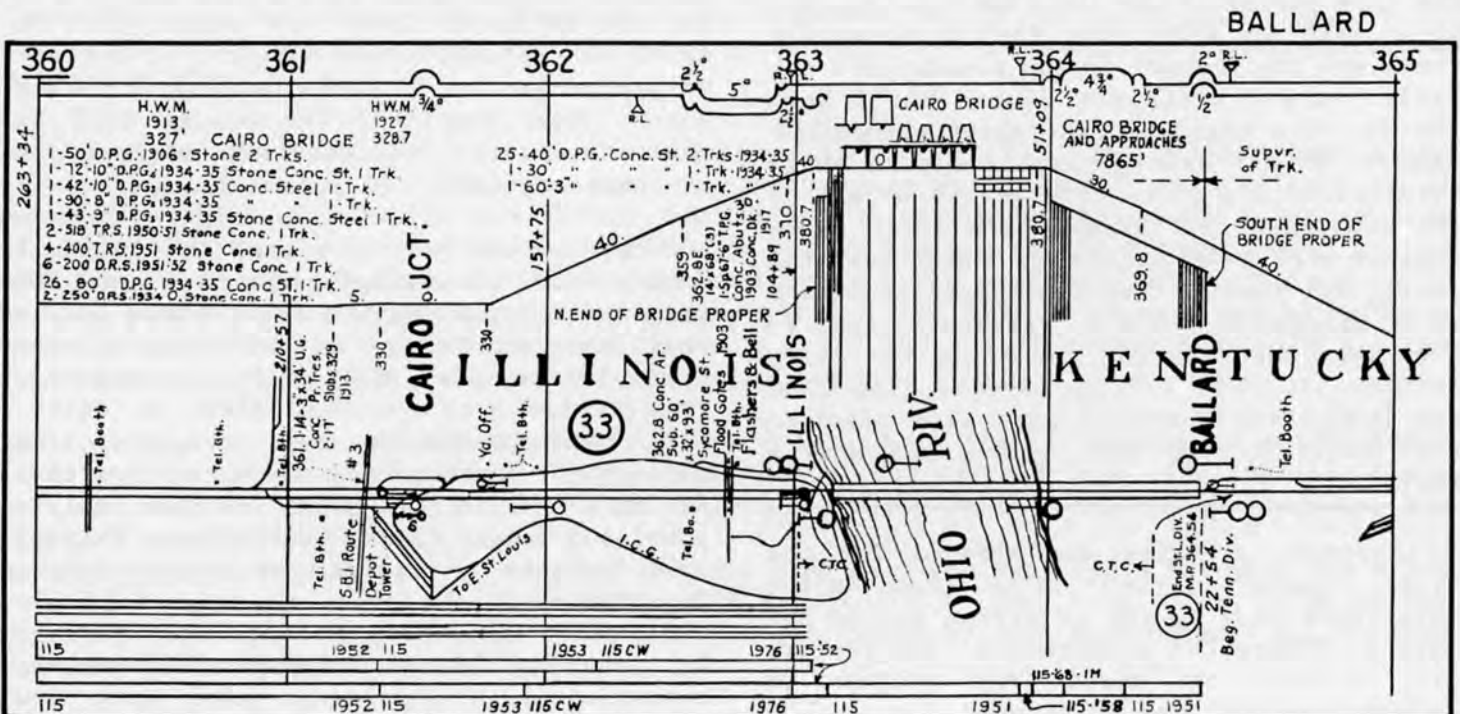
"Historic bridge at Cairo, Ill. is being improved at estimated cost of six and a half million dollars. Three new piers will be added on Kentucky shore as part of largest bridge project on Illinois Central in recent years. When completed the bridge will be able to carry the heaviest engines at increased speeds.

During the next three years, the Illinois Central will be carrying out a \$6,500,000 program of replacing the river spans on the most important bridge on the property, the Cairo Bridge. When this work is completed, this bridge over the Ohio River at Cairo, Ill. will become an even stronger link between the northern and southern lines than it has been in the past. Heavier motive power and longer trains hauling more tonnage will be able to operate at higher speeds over the new spans.

At present, heavier freight locomotives operating on freight runs both north and



Work on the rebuilt bridge is well along as a 1500 class "Mike" speeds a freight across the bridge and northward into Illinois in the fall of 1951. Note the work proceeding on the far side of the river.  
 photo by Hedrich - Blessing for ICRR.





The first span of the old Cairo Bridge plunges into the Ohio River while the new replacement span sits in place and ready for traffic. ICRR photo.

south of the river are not permitted to cross the bridge. They must be uncoupled at North Cairo, Ill. and Fulton, Ky.. Lighter-weight Mikado are put on to haul trains across the bridge. Greater operating efficiency and better maintenance of freight schedules promise to result from the opening of the reconstructed Cairo Bridge in 1952.

At present...Diesel equipped passenger trains use the Cairo Bridge continuously, but these, as well as all freights, will be

detoured during the span replacement. The extent of the detour period will be approximately two days per span.

#### TRAINS WILL BE REROUTED

The exact detour routes have not yet been selected, but it is tentatively planned to route passenger trains via Carbondale, Marion, and the Metropolis Bridge to Fulton. Freight trains will move via DuQuoin, Benton, the Edgewood Cut-off and the

## PUBLICATIONS

As I said in the last issue we are making a serious effort to turn out more magazines and catch up with our publications schedule. We have had a new computer (IBM compatible Epson) for about a year now and still do not have the thing working up to par. Part of the problem, admittedly is the button pusher sitting in front of it. We do need someone to help out who has some computer know how. Any volunteers? What we have is an Epson Equity II+ with hard drive and Wordperfect 5.0 and Dbase4 programs. We are using Wordperfect for the Green Diamond, and Dbase4 for membership and archives indexing. We also need authors, a draftsman, typists, and pasteup help, (Anything / Everything) no experience necessary. If you think this sounds like another begging for help message - you are exactly right!

### ICHS MEMBERSHIP

The GREEN DIAMOND is published by the Illinois Central Railroad Historical Society, an Educational, Nonprofit, Illinois Corporation organized to preserve historical material, and collect data on the former Illinois Central Railroad. Membership in the society is available to anyone interested in the Illinois Central Railroad or it's predecessor lines.

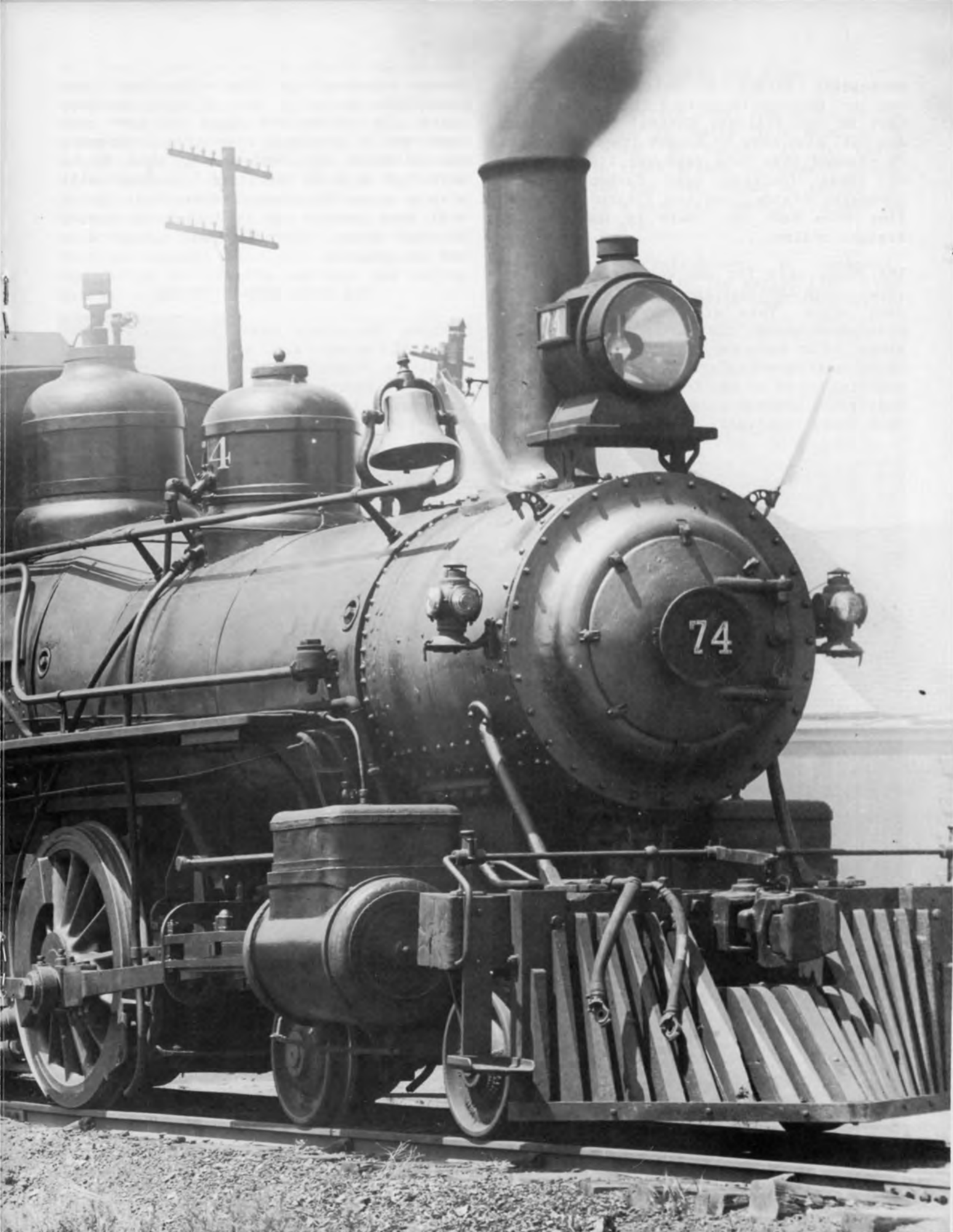
#### DUES

Regular       \$15.00  
Sustaining   \$20.00

ICHS MEMBERSHIP  
14818 Clifton Park  
Midlothian IL 60445

-----  
(Sustaining membership is available to anyone making a contribution of \$20.00 or more to the ICHS annually.)





74

Metropolis Bridge to Fulton. The Gulf, Mobile & Ohio Railroad is a tenant and joint user of the Illinois Central Cairo Bridge and will also have to detour its traffic. It is planned that this road use its own line to Texas Junction near Carbondale for passenger trains, and the Illinois Central line from East St. Louis to DuQuoin for freight trains....

The plans call for the replacement of the three south 400-foot spans with six 200-foot deck spans. This will permit sufficient clearance above the maximum high water stage. It is necessary however, to construct three additional piers midway between the existing piers on the Kentucky shore, and to modify the present ones, because of the new deck truss construction.

Further substructure work will entail the rehabilitation of three of the existing piers. To accomplish this a plan was developed to construct a concrete incasement approximately two feet thick, this to be supported on steel bearing piles. There will also be a modification of four piers, which will have pockets cut into them to receive the deck spans. The work on all ten piers is now in progress.

#### OLD PIERS REMAIN STRONG

Despite the sixty years of service, the original piers are still in excellent condition. These were constructed of Bedford Limestone masonry, with the exception of the upstream noses from the low water line to the granite starlings (the top section of



Rails are being secured to the deck of one of the new spans as it is built in place next to the old span that it will replace. ICRR photo.



the lower portion of the pier). Two of the piers had cracks which had developed thirty five years ago and which, at the time, had been banded with steel plates and turnbuckles. In the remaining piers, some cracks were found which might occur in any stone masonry structure of this age. The bridge seat stones on all the piers are in excellent condition. The stones were laid with mortar made of the finest imported Portland cement. Little or no erosion has occurred on the granite settings and mortar joints.

#### PUMP CONCRETE FOR PIERS

The concrete for the three new piers on the Kentucky shore is being furnished by a Ready-Mix plant at Cairo. It is being delivered in truck mixers to hoppers on the Illinois side and then loaded on barges for transport to a pumpcrete machine located on the Kentucky side.

The steel superstructure, as designed, consists of trusses of the Warren type, that is, with inclined tension and compression



A completed new span is ready to be changed out with the old span.

ICRR photo.

members. The floor is open deck construction with steel stringers placed 7 feet center to center, or 1 foot outside of each rail. Panel lengths of 25 feet for the shorter deck spans and approximately 33 feet for the longer through spans are being used. Because of the limited spaces on the piers, the truss centers are the same as for the present bridge, 25 feet for the 518-foot spans, and 22 feet for the 400-foot spans. The deck trusses will be 16 feet center to center.

Silicon steel is being used in the longer trusses, where found to be economical. The shorter deck spans and all of the floor system are to be fabricated with carbon steel. In members subject to deterioration, because of the brine action from refrigerator cars, such as the top flanges of stringers and floor-beams and bracing, copper bearing steel is being used. The expansion rollers for the spans will be made of stainless steel. The American Bridge Company will perform the fabrication and



The old span has been moved to the side and the new span is being winched into position  
ICRR photo.

erection of the new superstructure and the dismantling of the old.

The plan for erection of the new spans and the dismantling of the old spans are unique in bridge construction, considering the length and weights involved and the heights above the river bed at which the work will have to be done.

The old spans will be rolled out and the new ones rolled into position on the piers. Two of the deck trusses which later will be used in the permanent bridge on the Kentucky shore will be erected on barges. Steel piling will be driven into the river on the upstream and downstream side of the piers and steel falsework will be installed. The deck trusses will then be floated onto the falsework.

The new spans will be erected on the

falsework trusses and the contractor will make a complete installation of the ties, rail and accessories in its erected position. After each span is completed, the old span will be rolled out and the new rolled in. As much as possible of the floor system of the old spans will be removed by derrick barges and then the trusses and remaining floor members will be side launched into the river below, from which they will be recovered as salvage. This will require nine separate operations. Each time this phase of the work is done, trains will be detoured for the two days required to complete one such undertaking.

On the Kentucky shore, the changing out will require the rolling in of two of the deck spans at one time. Because of the position of the bearings in the recesses, it will be necessary to omit the end panels of these shorter spans during the operation. It is



Almost there - the new span is moved into alignment.

ICRR photo.



The new fourth span is in place while the old span still rests next to it. Some of the decking was removed before the old spans were slid into the river. In the meantime the 200' spans which were used to construct the larger spans upon, are in position and work is well underway on span #5. ICRR photo.



The fourth span of the new bridge is ready for placement in this photo.

ICRR photo.



The old span has been stripped as much as possible and sits next to the new span, already in service. Finally, the old span is released and crashes into the Ohio River below.

Two photos by Hedrich - Blessing for the ICRR.



hoped that the work may be co-ordinated so that two of the deck spans and one of the through spans may be moved into position at the same time to reduce the number of detours.

The total weight of steel in the new work is 9,500 tons....

The Cairo Bridge was originally designed for a moving load of 3,000 pounds per lineal foot. At this early date, however, no consideration had been given to the effect of impact caused by moving loads, so no direct allowance for this impact factor was included. The use of low unit stresses in bridge design at this period and even as late as 1900 has enabled the continuous use of structures without an over-stress of the component parts, even with the operation of heavier locomotives. ("heavier" than the original 2-6-0's Ed.) The designing engineers had reason to believe that the Cairo Bridge would serve for a great number of years....

During the second World War heavier motive power was developed by the Illinois Central to handle its emergency rail traffic. Engines with tenders reached a weight of 400 tons, too heavy to cross the Cairo Bridge. The bridge took a heavy pounding during the recent war. The bridge has received the highest standard of maintenance at all times. To accomplish this, a steel maintenance gang has been in service since 1920."

#### IC MAGAZINE NOVEMBER 1950

"Freight and passenger traffic continued to flow freely over the Ohio River by means of an alternate route while Cairo Bridge was closed for 20 hours last month. The closedown, on October 16 and 17, enabled bridgemen to install the first new span of the bridge. The giant piece of steel was 518 feet long and weighed 1,760 tons.

While passengers on the detour route watched the changing autumn leaves as their trains through the beautiful Illinois Ozark country on the railroads Bluford District freight line, or saw the unfamiliar names of towns located off the beaten path, they were handed printed cards which explained what was going on. The cards read:

"To Our Patrons--We are rebuilding our bridge over the Ohio River at Cairo, Ill., and occasionally service over the bridge will be interrupted for approximately 48 hours. Hence, the detour of this train between Carbondale, Ill., and Fulton Ky., by way of the bridge at Metropolis. A delay of about two hours may be expected, and we hope that this unavoidable interruption of normal service will not inconvenience you greatly."...

Moving out the old span and moving in the new one was a feat of modern engineering. Powerful, diesel-operated winches, installed on a barge anchored upstream in the river, pulled on strong steel cables to move the old 518-foot span across rollers and onto a falsework structure build alongside. The sideways move on the upstream side was accomplished in about 55 minutes. Moving of the new span, which also rested on falsework and rollers alongside the bridge on the downstream side, was started soon thereafter. Within fifteen minutes it had been moved about one third of the distance. It then became necessary to change some of the cable-pulling rigging at various intervals during the afternoon as the bridge inched over on its rollers. As the cables, operating from a complex set of blocks, tackle and pulleys, again began responding to the winches, the new span continued to move until, at 5:30 p.m. it reached...its final resting place.

Four-way telephone communication was maintained between each end and the center of the span and the barge in the river during the operation. In this manner it was possible to keep an accurate check on just how far each end of the span was moving and to make the necessary adjustments to keep it even.

The entire operation, which involved moving the two spans, took exactly eight hours, from 9:30 a.m. to 5:30 p.m., on October 16. American Bridge Company officials said it was the first time that this method of pulling an old span to one side and replacing it with a new one already constructed on falsework supports, had ever been done."

CAIRO BRIDGE WORK PROGRESSES

"Reconstruction work on the Illinois Central's big bridge over the Ohio River moved a step closer to completion on August 21, when the third old span was launched from its high supports to drop 100 feet into the water below. The new and stronger span was already in place as the old span was dropped from the falsework built upstream alongside the bridge. In all nine old spans will be replaced with 12 new spans.

Accomplished with engineering precision, the

sideways launching of the old 400-foot span with its tons of steel had all the elements of drama which attended the two previous launchings. Reporting on the incident to its readers the Cairo Evening Citizen vividly described the spectacle of falling tons of steel in this language:

"The old span remained stiffly erect for her sideways journey. Still practically erect but with nothing but air for support, she began to fall, the east end lowest.

Then, as she was supposed to do, she toppled over on one side as



View from the north side of the bridge looking toward Kentucky.

ICRR photo.

she fell. Reports like cannon shots sounded as steel in the great span broke.

She plunged on to her doom, striking the water after her drop of more than 100 feet with a thunderous roar, hurling upwards a Niagra in reverse, then sank quickly to the Ohio's own Davy Jones' locker.

Steelworkers minutes later were going ahead busily with the erection of the forth new span..."

IC MAGAZINE JUNE 1952

"On February 11, 1952, crews rolled out the last of the old spans and moved in the two 200-foot deck truss replacements. Then came a period of putting the finishing touches to the bridge as traffic resumed its normal flow in both directions.... This work, some of which was still going on toward the middle of April, included the riveting of members, covering the superstructure with

aluminum paint, and cutting up, loading and shipping the old steel scrap from the replaced spans.

Reconstruction of Cairo Bridge was a job that required the cooperation of many departments on the Illinois Central and the professional skill of many outside companies. Design details for the reconstructed bridge were prepared and the construction supervised by Modjeski and Masters, consulting engineers, under the general direction of C.H. Mottier, vice president of the Illinois Central, and M. Block, engineer of bridges. R.P. Holley was resident engineer for Modjeski and Masters. The American Bridge Company was the contractor for the furnishing and erecting of the superstructure. C.O. Edmunds was superintendant for the American Bridge Company at the site, under the direction of A.A. Porter, manager of erection. All substructure work, including that on the three old piers and construction of three new ones on the Kentucky shore, was carried out by the Kansas City Bridge Company and Massman Construction."



This aerial view from the Illinois side of the Ohio looking across the river to Kentucky shows the new bridge and the long trestle approach on the Kentucky side. ICRR photo.



ICHS LIMITED EDITION CAR KITS

If you haven't ordered your 1991 Limited Run cars yet - don't wait too long! These HO Athearn cars - painted for ICHS by Walthers - are going fast. Here are a couple of photos to show you how nice they look. The photo at the bottom of the page is of the real ones. A few other Limited Run kits from past years are still available. See the current order form included with this mailing for car availability. The 40' split rail car is orange with the black & white split rail IC logo. The 50' express reefer has the courtesy - efficient - service - always logo in black, white and red on a green car. Note - The 50' express reefer will not be available through hobby shops due to the limited number of cars run.



# MEMORIES AND NOSTALGIA

By Clifford Chandler

I wasn't a brakeman, conductor, or engineer. I wasn't even a railroad employee, but my father was a depot agent and telegraph operator for the Illinois Central. He was located at Burlington, Illinois. He held this position at this location for 25 years, with a total of 52 years of service. This was in the days of steam engines.

The depot was built in the late 1890 style with the living quarters above the station. A freight room, office, and waiting room were on the first floor.

I had the unique experience of having been born at home above the depot. We lived here until I was seventeen years old, then my father transferred to another location.

During this time, I played with a twelve inch to the foot scale train. I spent many

hours with my father in the office. I was able to know most of the train crews and they would come in the office for orders, etc.

By knowing the crews, I was able to ride the engine many times, as they did their switching. There were livestock pens, a lumberyard, coalyard, grain elevator, milk receiving plant, and a grist mill. It seems that there was always some switching to be done. With this situation, I was lucky enough to be able to ride in the engines a great deal of the time. One day after the work was done by the train crew and they were getting ready to leave for the next town, I asked if I could ride the engine. It was alright with the engineer but I had to ask my father, so I did. He said it was fine with him but how would I get back home? I told him I could ride the motor car with



Illinois Central Station at Burlington, Illinois.

photo Clifford Chandler collection

the track gang that was working there. So you see, I was even aware of some of the action that was going on at that time. In those days I guess that there was not the enforcement of safety rules so much. Any way, it was to my advantage.

Having mentioned the section gang reminds me how I even used to go out with them just to ride the motor car. I would spend all day with them, my mother having packed a lunch for me. I think it was the fun of riding and also being with grown men.

At times I even would O.S. the trains, in other words, phone and tell the dispatcher when the train had arrived and departed from town. Of course, I was told to do this by my father, mostly when we would be at a meal up stairs. This way it saved him running downstairs and telling the dispatcher. It seems there was no trouble with this as I did it for a long time, or until we moved.

I learned to tell time by the railroad method.

Another job of mine, under the direction of my father again, was to chase down the train order hoops. After getting the orders, the hoops were thrown off by the crews and someone had to go get them, that was me. It seemed to me at the time that the crews would see how far they could carry them before throwing them off.

I think of these days often and really consider having been very fortunate to have had the experience that I've related and that other people would have liked to have done the same as I.

The memories related here were sent in for the Green Diamond by ICHS member Clifford Chandler. Anyone with personal recollections about the railroad is invited to submit them for publication. We would be glad to print them.

The following is a list of Articles in various stages of preparation for the Green Diamond. Some are in the final stages of preparation, some are just ideas that members have suggested. If you see a topic that you would like to work on, or if you have another idea for a story in the magazine, why not contribute something. Photos, information, drawings, and first hand accounts of riding on, or working on the railroad are welcome.

This list will be a regular part of the magazine so that everyone will know what we are planning for future issues. With your help any one of these articles could be better.

#### ARTICLES IN PREPARATION

IC Depots & Stations  
Chicago Central Station  
New Orleans Union Passenger Terminal  
Depot photos & drawings  
IC Diesel Power  
GP 7 & GP 9  
E Units - Passenger Power

#### IC Divisions - Lines

Addison Branch  
Kentucky Division  
Cedar Rapids Branch  
The Edgewood Cut-off

#### IC Electric

Chgo. Term. Electrification  
Suburban Electrification  
Electric Suburban Service

IC Freight Equipment  
IC Aluminum Refrigerator Car  
Various Equipment  
(installments)

#### IC Freight Trains

Banana Trains  
Piggyback Service  
Wrecks & Wreckers  
Coal - Mining it and Moving it

#### ICRR Misc

ICRR Medal of Honor  
Paxton & IC History  
IC Passenger Trains  
Panama Limited & Magnolia Star

St. Louis Trains  
City of New Orleans  
Suburban Service

#### IC Passenger Cars

IC Dome Cars  
IC Streamlined Sleepers  
City of New Orleans Cars  
Heavyweights & Harrimans -  
continued

#### IC Steam Power

Steam on the IC 1900-1930  
The Mikados - IC Workhorses  
Locomotive Trivia

#### Modeling The IC

Modeling a Special Hopper  
Detailing GP7 & GP9's  
IC Headend Cabooses  
IC Banana Messenger Caboose  
IC Drovers Caboose

IC Freight Cars  
(installments)

#### IC Freight Yards & Shops

Markham Yard  
Burnham Shops  
East St. Louis

#### IC SUCCESSOR LINES

ICG Power in the 1980's  
History of the Chicago  
Central & Pacific  
Paducah & Louisville - the  
P&L



1936 - 1950



SCENES FROM INDIANAPOLIS ICHS ANNUAL MEETING - AUGUST 1990

Upper left- Indiana Rail Road rebuilt CF7 #201, center left- Banquet dinner at the Holiday Inn Union Station, lower left- The excursion train with CF7, a former IC caboose, and two coaches that made the Indianapolis - Bloomington trip on Sunday. Upper right- David Hayes and Jack Laude lend a hand, lower right- Chuck Werner at the show on Saturday. Thanks to everyone who helped with this year's show, especially the dealers who donated items for the Auction on Saturday night; D. Wornum, J. Clark, M. Abalos, D. Horn, J. Williams, Chicago Chapter NRHS, M. Miller, ICHS, J. Hass, R. Stadt, W. Rattin, T. Daisy, L. Bruce, F. Radek, H. Miller, H. Robertson, N. Fraser, C. Hannah, and D. Fraser jr.