

Heavy Volume of Freight Handled on Busy Ohio Central Division

Extensive Coal Fields as Well as Industrial Centers Served

Twenty-Three Per Cent of System's Soft Coal Traffic Moved Over This Route in 1944 — 160 Plants Are on Line

A FEW days spent on the Ohio Central Division would be an education for anyone who had never had the opportunity to visit it. It is true practically the entire line is single tracked and speeds are not comparable with those on through main line Divisions, but a heavy volume of traffic is there and its handling over more than 700 miles of line is a compliment to the personnel in that busy territory.

The Ohio Central Division is primarily a freight line, serving extensive coal fields in southern Ohio and West Virginia as well as many important industrial areas. In 1944, the Division's coal traffic equalled 23% plus of all bituminous coal moved on the entire New York Central System.

A total of 99,779 carloads of coal originated on the line, exclusive of 7,034 cars loaded on the Nicholas, Fayette & Greenbriar and routed New York Central, and an additional 180,289 carloads received from connections, making in all 287,102 carloads of coal. On the entire System in the same year 1,207,907 carloads of bituminous coal were moved.

While coal traffic comprises more than half of the total freight business of the Ohio Central Division, there are other important kinds of freight, principally from the industries located in the great Kanawha River Valley of West Virginia. The major industries served, in order of their importance from a traffic standpoint, are chemical, iron and steel, glassware, machinery, sand and cement, synthetic rubber, rayon, and textile.

As an indication of the density of traffic over this single-tracked railroad, figures for a representative month reveal that in freight business alone, a total of 3,925 trains were handled on it. This is, of course, in addition to passenger service between Toledo and Columbus, Ohio, and Charleston and West Virginia. Big Four trains, both freight and passenger, operated over the territory from Toledo to Berwick, and Virginian trains, both freight and passenger, between Deepwater Bridge and Charleston, West Virginia. In addition also trains are operated on the Nicholas, Fayette & Greenbriar — approximately 25 a day.

Because of the large volume of coal traffic, the predominant movement is northward. This coal, much of which is for Lake shipment out of Toledo, originates in southern Ohio and West Virginia. In this great producing area, the New York Central serves, either directly or through short feeder lines, approximately 50 mines, 16 of which are located in southern Ohio and 44 in West Virginia. Sixteen of the West Virginia mines are served by the Toledo & Ohio Central, and 18 by the Nicholas, Fayette & Greenbriar Railroad.

Included in the Ohio total is a recently opened mine at Misco, a few miles south of Zanesville, which, since last March, has built up production to a daily average of more than 100 carloads.

800,000,000 Tons to be Mined

It is estimated that there are approximately 800,000,000 tons of unmined marketable bituminous coal remaining in the territory served by the Toledo & Ohio Central, and some 350,000,000 tons in the area tributary to the Nicholas, Fayette & Greenbriar.

The Ohio Central Division consists of the Toledo & Ohio Central Railway; the Zanesville Terminal Railroad, owned jointly by the New York Central System and the Pennsylvania Railroad; the Federal Valley Railroad, a short line of approximately 16 miles between Palos, O., located some five and one-half miles south of Corning, at Lathrop, wholly owned by the New York Central; and the Nicholas, Fayette & Greenbriar Railroad, owned in equal shares by the New York Central and the Chesapeake & Ohio. The Zanesville Terminal Railroad is operated alternately by the New York Central and the Pennsylvania for periods of two years each.

The Toledo & Ohio Central Railway, which constitutes the main line of the

Some Ohio Division Officers



Rear row, left to right: W. J. Embree, Agricultural Representative; C. C. Carson, Captain of Police; W. N. Clark, Trainmaster; W. G. Bristow, Land & Tax Agent; D. K. Robinson, Chief Train Dispatcher; W. C. Wardwell, Master Mechanic; W. R. Waide, Signal Supervisor; J. N. Jones, Road Foreman of Engines; H. V. Hecox, Road Foreman of Engines; G. W. Bloom, Assistant Division Engineer; E. K. Pickett, Trainmaster; G. W. Birmingham, District Claim Agent. Front row: W. F. Davis, Trainmaster; J. W. Crowley, Assistant Superintendent; J. H. Spooner, Superintendent; L. S. Emery, Assistant Superintendent; and P. H. Clifford, Trainmaster.

at Columbus, Fostoria, and Hobson, O., and Charleston, W. Va., the entire line is single tracked. Actually, the total of second track at the three locations amounts to only 21.7 miles.

Considerable contrast in operating conditions is encountered as one progresses from one end of the Division to the other. Generally speaking, the northern half is fairly level, while in the south it runs into the hill country of southern Ohio and the mountains of West Virginia.

At the extreme southern end, along the Nicholas, Fayette & Greenbriar, it is a typical mountain railroad, with curvature up to 18 degrees and grades up to 3.5%, and so far as can be learned, a considerable portion of this section of the line is located at a greater height above sea level than any other part of the New York Central System. Between Swiss and Rainelle the line passes up the gorges of the Gauley and Meadow Rivers, reaching an elevation of 2,400 feet above sea level at Rainelle.

The assembly yard for the coal mines of the district is at Rainelle, hence trains moving to the Toledo & Ohio Central connection at Swiss move downgrade most of the way, a distance of 48 miles. From Rainelle southward to Meadow Creek where a connection with the Chesapeake & Ohio is made, there is a rise from 2,400 feet at Rainelle to 2,795 feet at Springdale Summit, or 395 feet in a distance of about 8 miles, with a maximum grade of 2% compensated for curvature for a distance of 3.7 miles. From Springdale Summit there is a drop of 1,522 feet in a distance of about 11 miles to Meadow Creek.

Four Switchbacks

Between these two points there are four switchbacks, and the maximum gradient is 3.4% compensated for curvature to two sections, one 5.6 miles and the other 1.8 in length. Branches extending northward from the main line at Rainelle rise rapidly, reaching an elevation of 3,009 feet at Johnstown, 3,151 feet at Watts, and 3,409 feet at Clearcro.

Northward along the Toledo & Ohio Central from Swiss to the Ohio River at Point Pleasant, a distance of 104

miles, the line follows the Gauley and Kanawha Rivers in the direction of their flow. The alignment is generally satisfactory and there are no grades of any consequence. A steel bridge, three-fourths of a mile in length, over the Ohio River at Point Pleasant, has an approach grade northbound of only 0.3% compensated for curvature. From Point Pleasant to Hobson, a distance of 12 miles, the line follows the Ohio River and the alignment is favorable and the grades negligible.

A dam in the Ohio River, about ten miles below Point Pleasant, creates a single pool extending about 40 miles up the Ohio River and 30 miles up the Kanawha River. This indicates the relatively flat gradient of these rivers in the vicinity of Point Pleasant, which is favorable to railroad construction and operation. However, the maximum high water mark at Point Pleasant is 39 feet above the pool level, and 70 feet above the bed of the river, and the track level was not located at sufficient elevation to prevent occasional flooding.

Progressing northward from Hobson to Thurston, the railroad is located in the valleys of small streams in the hill country of southern Ohio. Curvature is excessive and there are three hills to cross, in addition to six tunnels.

The Albany Hill

The first hill is located at Albany, where the grade line rises 122 feet in four and one-half miles and the maximum grade is 0.95% compensated for curvature, one and one-half miles in length. The second hill is between Rendville and Moxahala Tunnel where the grade line rises 140 feet in about three miles and the maximum grade is 1.27% compensated for curvature, about one and one-half miles in length.

The third is between Clay Bank and New Lexington Tunnel, where the grade line rises 110 feet in a distance of a little less than three miles and the maximum grade is 1.03% compensated for curvature, about one and one-half miles in length. Tonnage trains over these grades require helper service.

The alignment of the two Sub-Divisions between Thurston and Toledo is generally favorable. There is one tangent 24 miles in length between Marysville and West Columbus. The Columbus line, or Western Sub-Division crosses two hills. The first one is between West Columbus and Arnold, where the grade line rises 213 feet in a distance of 10 miles and the maximum grade is 0.68% compensated for curvature, about two and one-quarter miles in length. The second is north of Kenton, where the grade line rises 47 feet in about one and one-quarter miles at the rate of 0.8% compensated for curvature. Tonnage trains over these grades also require helper service.

The Eastern Sub-Division also crosses two hills. The first one is between Clemons and Johnstown, where the grade line rises 233 feet in a distance of about seven miles and the maximum grade is 0.86% compensated for curvature, about one mile in length, requiring helper service for tonnage trains.

The second one is at McCutchenville, where the grade line rises 78 feet in a distance of about three miles and the maximum grade is 0.72% compensated for curvature, about one mile in length.

Such grades, of course, place restrictions upon the gross weight which

may be handled. At Arnold, O., just north of Columbus, for example, the gross tonnage is 6,000 tons, as is the case at Albany Hill in the south.

The Ohio Central Division's main line, the Toledo & Ohio Central Railway, was formed by the consolidation of a number of small lines. The first portion opened to operation was the seven miles between New Lexington and Moxahala, O. In 1875, this portion was placed in operation to serve a blast furnace at Moxahala, which has long since been abandoned.

The line was gradually extended from Moxahala to Toledo via Bucyrus, from Thurston to East Columbus, and from Moxahala to Corning, and at the end of 1881, these portions of the road were in operation. By the end of 1882 the line was in operation from Corning to Charleston, with the exception of the Ohio River crossing at Point Pleasant, which was placed in operation in 1885.

Stanley to Findlay in 1883

The line between Stanley and Findlay was placed in operation in 1883, between Findlay and Kenton in 1889, between Kenton and Columbus in 1893, and between Columbus and Truro in 1895.

Extending southward from Charleston, the line between Charleston and Malden was placed in operation in 1890, between Malden Gauley Bridge in 1893, between Belva and Swiss in 1907, and between Gauley Bridge and Truro in 1920.

Eleven freight yards are required to handle Ohio Central Division traffic. The largest of these is the West Columbus Yard, with a capacity of 1,535 cars. The second is an assembly and classification yard at Hobson with a capacity of 1,212; third is the Dickinson, a mining and industrial assembly yard for 1,183 cars; fourth, Bucyrus, 1,164 cars; and fifth, Corning, 1,162 cars. The capacities of the remaining yards, which are located at Charleston, Thurston, Kenton, Findlay, Chauncey and Fultonham, range from 300 to 750 cars.

There are no heavy repair shops located on the Ohio Central, but engine houses and Car Department facilities are strategically located over the division. At West Columbus, Bucyrus, Corning, Fultonham and Hobson, O., and Charleston and Dickinson, W. Va., are both roundhouses and car repair forces. The largest of these is at West Columbus where the roundhouse capacity is 20 pits and where some 300 persons are employed. Car department forces in West Columbus total 72 and average 2,500 car repairs monthly. Daily inspections average 2,700.

The Dickinson enginehouse services Virginian Railroad locomotives, as well as New York Central. The Charleston enginehouse services Baltimore & Ohio and Virginian locomotives in addition to New York Central.

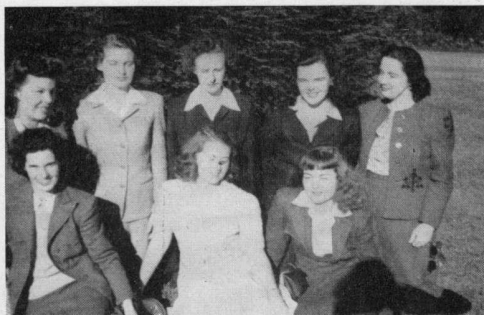
First Centralized Traffic Control

Of more than passing interest is the centralized traffic control system between Stanley Yard and Berwick, O., a distance of 41 miles, of which three and one-half miles in Fostoria is double tracked. This was the first installation of its kind in the world, and following its completion in July, 1927, it was inspected by representatives of many railroads, both domestic and foreign.

This project consists of 21 switches, 6 crossovers, and 8 passing sidings equipped with signals controlled directly from the dispatcher's office located at Fostoria, which is 30 miles from the extreme north end of this 41 mile stretch of track. The dispatcher at Fostoria has complete control over the entire distance, including passing sidings so that he is able to arrange "meets" at any point, and so well does the system work that frequently these "meets" are made without either train stopping.

Largest of the cities served by the Ohio Central Division is Columbus, capital of the State of Ohio and the seat of Ohio State University. In addition to the New York Central, it is served by four steam railroads, the Baltimore and Ohio, the Norfolk and Western, the Chesapeake and Ohio, and the Pennsylvania, all of which use a centralized union station, owned jointly by the New York Central and the Pennsylvania.

B. & A. Traffic Folk Enjoy Fall Outing



Members of the Traffic Department of the Boston & Albany Railroad recently staged an outing at King Phillip's Stockade in Springfield, Mass. Employees from Boston, Springfield, Worcester and other offices enjoyed the day's program, which included a picnic. Above are shown eight of the girls present. Left to right, front row: C. Beatty, G. O'Brien and B. Russell. Rear: P. Sullivan, D. Collins, R. Woodbill, B. Cooney and H. Cooney.