

# Inland Shipping

## — — Development of Waterway Transportation

**N**O REGION of Europe is more favored by navigable rivers than bizonal Germany.

The Rhine, for example, has long been recognized as one of Europe's greatest international highways. The river Danube, before it bisects Austria, flows through Bavaria and contributes 135 miles to bizonal inland navigation. Others like the Neckar, with headwaters in the Swabian Alps; the Main, the Elbe and the Weser are also suitable for inland shipping. Still others—the Lippe, Ems, and the Ruhr—although not navigable themselves contribute feed water to the canal system. In all, bizonal Germany possesses 1,615 miles of navigable rivers.

Interlaced among the rivers are canals. They are located mainly in the Ruhr district and across the northland plains, connecting areas of heavy industry with rivers and North Sea ports. These canals account for an additional 705 miles of waterways, bringing the total navigable distance in bizonal Germany to 2,300 miles.

**I**NLAND SHIPPING plays such an important role in western German economy that without it, the Bizone's industrial recovery would be where it was even before the middle of last September. The backbone of inland shipping is the bizonal inland water transportation fleet. This fleet of barges, tankers and tugs at present numbers about 6,000. The average barge of the Rhine fleet is large enough to carry the equivalent cargo of a train of 40 freight cars. Nearly all inland waterway vessels are ample enough for family accommodations and standard house furniture, radios, bedrooms and kitchens are not unusual.

Before the war the inland fleet sailed at almost twice its present strength. Waterway transportation officials of the Bipartite Transport Group state that the fleet's tonnage reveals more concerning its capabilities than does its numerical size.

Article

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Present strength is 2,500,000 tons against 1938's 4,000,000 tons.

A comparison of the 1948 performance with that of 1938 reveals the extent of postwar progress in inland waterway shipping. Individual craft performance is now approximately equal to 1938, the best year in the history of German inland navigation. The fleet carried approximately 34,000,000 tons in 1948 compared with 62,000,000 tons for 1938. This amounts to over one-half the tonnage in 1938, and it was moved by aging vessels of only around one-half the prewar number.

Of products carried in 1948, coal from the Ruhr and Rhine districts headed the list with 15,000,000 tons. Stones and earths held second place. Other shipments advancing to new postwar records, some of them tripling the 1947 tonnage figures, were: ore, grain, flour, iron and steelware, scrap metal, fertilizers and salt.

**I**N 1945 there was no indication that within three years inland water transportation figures would compare favorably with 1938. Destroyed bridges obstructed many waterways at the rate of one per mile—some 1,014 bridges were destroyed of the 1,477 prewar bridges on the inland waterways of the combined zones. Vessels were sunk and scuttled at an even higher rate. They blocked and clogged the entire waterways system. The inland port of Duisburg, for example, was so jammed with sunken ships that the cleanup

task at first looked hopeless—at least for the next 10 years.

Approximately 500,000 tons of steel, 76,000 tons of concrete and more than 2,200 sunken craft had to be lifted before navigation could return to near normal conditions. By 1948 this work had been accomplished so well that potential capacity of the waterways is now far ahead of actual tonnage being moved. Of the 2,220 craft sunk or scuttled, only around 250 remain to be lifted—boats causing



(US Army)

*Crane at Rheinau unloading coal from Rhine barge for Berlin airlift*

no serious obstruction whose lifting might prove more costly than their salvage value.

**B**UT MANY OBSTACLES still continued through 1948. Floods at the beginning of 1948 delayed all waterway shipments and normal navigation conditions did not return until March. When the Duesseldorf Bridge collapsed in January, Rhine traffic was stopped for a month. The uneven flow of coal from Ruhr mines to loading ports prevented maximum use of the fleet. Periods of thick November fog blocked ships at many key points. At the end of the year water levels

(Continued on next page)



on the Rhine dropped to a point where craft could be loaded to only 45 percent of capacity.

Also, the fleet was badly in need of repairs. Between 30 and 40 percent of the fleet was under repair during 1948 against 10 to 15 percent for 1938. Lack of repairmen and short deliveries of steel and timber were bottlenecks for the first six months of 1948. Currency reform in June solved these problems, but another obstacle arose—lack of finances. When price controls were lifted on ship repairs, costs soared to twice the corresponding 1938 prices. Sometimes shipyards have been compelled to accept work other than ship repair in order to keep their yards open.

An even more critical problem, however, is the old age of the fleet. Eighty percent of the fleet is between 20 and 40 years old. Seventy percent of the fleet's engines are beyond 20 years of age. The present fear is that these ancient craft will drop out of service at a faster rate than new ones can be built. Virtually no new vessels have been built since the end of the war.

**I**N ALL, however, 1948 was considered a good navigational year. It was assuredly a better year than 1947, when the Rhine became so low it was almost possible to walk across it in some places. This prolonged drought nevertheless brought several advantages that improved transportation conditions for future years: it was possible to work on certain locks that ordinarily would be difficult to

repair and when water levels were at their lowest, bombs and other live ammunition were revealed to disposal squads.

The biggest bottleneck in the entire west German canal system, the Minden aqueduct, was virtually removed in 1948. Engineering work on this immense project ranks as one of the top inland waterway transportation accomplishments for the year. A gigantic overhead span that reaches across the Weser river, the Minden aqueduct was destroyed during the war.

It served as a vital link on the Mittelland canal, and German engineers rebuilt a neighboring embankment when the allied bombing hammered it out of commission in 1943, but destroyed the aqueduct itself in 1945. The German engineers did a thorough job of useless destruction. When it fell, a giant slab of girder and concrete 164 feet long and 98 feet wide crashed down at right angles across the river.

Mittelland canal traffic then slowly bypassed the aqueduct by using the Weser, entrance to which was possible through connecting locks previously constructed. The first two months of 1949 saw the completion of the rebuilding project. Final tests have been conducted and the Minden aqueduct opened for traffic in February.

**R**ECONSTRUCTION of damaged canals, locks and gate structures claimed a great deal of attention from transportation engineers. This work

took priority over debris clearance, which already was largely finished by January 1948. The Dortmund-Ems canal, serving as a Ruhr outlet to the port of Emden, was restored, but lack of adequate maintenance, war damages and sinking of canal foundations because of coal mining operations beneath the canal are problems yet to be solved.

Varying degrees of improvements were conducted on other important bizonal canals—the Wesel-Datteln, Rhine-Herne, Datteln-Hamm, Kiel, Kusten, Dortmund-Ems and Mittelland canals. The Ludwig Canal in southern Germany is of interest to historians but a present offers little practical use to bizonal inland shippers. Built from 1836 to 1846 by King Ludwig of Bavaria it connects the Rhine with the Danube by way of the rivers Main and Altmuehl. Craft capacity on this historic canal is a mere 120 tons. Long range plans for expanding its capacity were considered by German authorities before the war, but because of limited postwar resources, the Ludwig project is of too great a scope to be initiated at present.

The Soviet blockade had few adverse effects on bizonal waterway transportation, except for the Elbe river fleet. Berlin had been supplied on the Elbe river route and there had been a mutually beneficial exchange of industrial goods between the Bizone and the Soviet Zone via the Mittelland canal as well the Elbe. This of course was cancelled and Berlin airlift planes are now carrying the



*Barges carrying food into Berlin were brought to a standstill when Soviets imposed the blockade on the four-power city.* (US Army photo)



*Western Sector police check papers of transit lighter for illegal goods.* (DENA)

goods that formerly went by inexpensive barge routes.

Fortunately, most Elbe vessels are suited for use on other bizonal waterways and half the fleet has been transferred. There are occasional local runs which the rest of the fleet makes up and down the 60 mile portion of the Elbe lying in the Bizone. The Russians originally detained 107 bizonal vessels but later released all but 27. Meanwhile 22 inland waterway craft from the Soviet Zone are being used in the Bizonal Area.

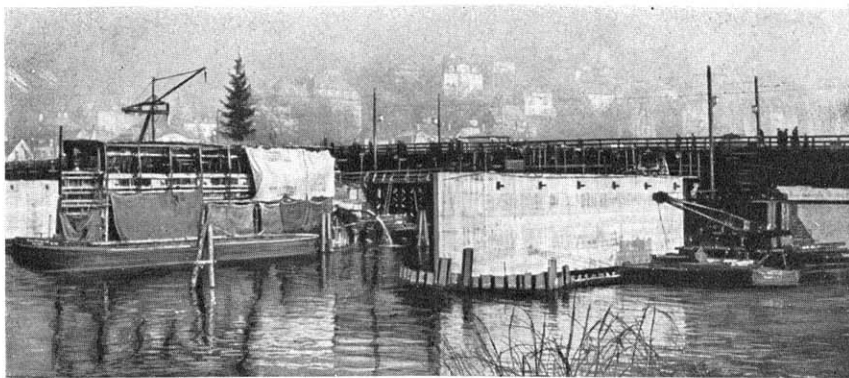
For the future, plans are being formulated to solve the most pressing problems of inland water transportation. A repair program has been drawn up, providing for repair of all war-damaged craft by the end of 1951. Work is thus concentrated on repair, and provides a more rapid increase in the fleet's capacity than a program of building new vessels. After 1951, it is estimated, there will be a surplus of shipbuilding facilities, and this surplus can then be devoted to building new craft. +END

## Police Reserve Banned

Several German radio stations and newspapers, on the basis of a statement said to have been made by a Bavarian official, reported in November that the establishment of a German police reserve was to be expected. The reports alleged that such reserves were to be established with the approval of Military Government and would eventually take over the policing functions of the occupation forces.

Military Government released a statement to the press, inviting attention to MG policy which prohibits the existence of any police auxiliary or reserve and stating that no change in this policy was contemplated. A subsequent investigation conducted by members of the Bavarian press revealed that a German press agency, which caused circulation of this rumor, had misquoted the German official to whom the story was attributed. — *From Military Governor's Monthly Report No. 41.*

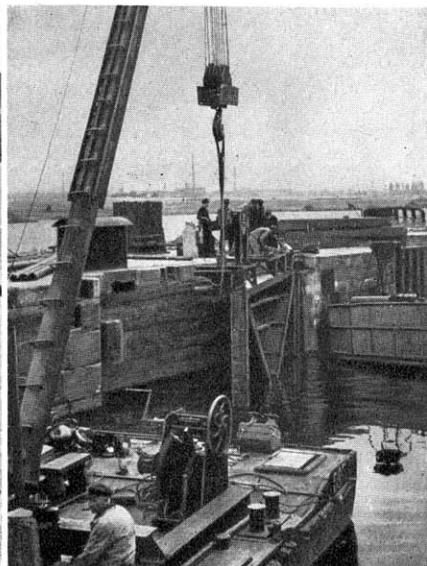
APRIL 19, 1949



*Wreckage left by retreating Germans had to be cleared from the Neckar river during reconstruction of this bridge in Heidelberg.*



*Main river traffic halted by damaged lock on channel near Fechenheim.*



*Workmen repairing lock before coal shipments resumed to Frankfurt area.*



*Wuerzburg depended on barge shipments of sand from several miles up river to start reconstructing war damage in city.*

(US Army photos)