dated March 15, 1966. The Division Engineer, Lower Mississippi Valley Division, concurred in the findings and recommendations of the District Engineer on April 1, 1966. The Board of Engineers for Rivers and Harbors in its report to the Chief of Engineers dated October 10, 1966 took exception to a number of findings and recommendations of the District Engineer. The Chief of Engineers concurred in the views and recommendations of the Board of Engineers for Rivers and Harbors. The report and recommendations of the Corps of Engineers were received by Governor Connally on November 3, 1966 and considered in detail by the State. The Governor, by letter of April 10, 1967, transmitted official comments of the State, including an order of the Texas Water Rights Commission dated April 10, 1967. Those comments have been transmitted by the Secretary of the Army to the Congress with the report and are a matter of record with this Committee.

## NAVIGATION FACILITIES

The proposed navigation improvements on the Red River from Shreveport to the Mississippi River would be a modification of the existing project for navigation, Red River below Fulton, Arkansas, authorized by the River and Harbor Act of July 13, 1892, as modified by the River and Harbor Acts of July 24, 1947 (authorizing the Overton-Red River Waterway), and July 17, 1950 (authorizing the improvement from mile 31 to Black River). The proposed navigation improvements from Shreveport, Louisiana, to Daingerfield, Texas, would be a modification of the existing project, Cypress Creek and waterway between Jefferson, Texas, and Shreveport, Louisiana, authorized by Act June 10, 1872 and modified by an Act approved June 25, 1910 and by the Flood Control Act approved October 27, 1965.

The proposed navigation project would provide for a channel having a bottom width of 200 feet and a depth of 9 feet from the Mississippi River via Old River and Red River for 31 miles and thence to Shreveport, Louisiana, along and in Red River, and follow an improved channel in Twelve Mile Bayou and Cypress Creek to a turning basin located in the headwaters of Lake

O' the Pines, Texas.

The project would modify and shorten the length of the existing watercourses by 79 miles by the realignment of the river from the present 373 miles to an improved channel length of 294 miles. The project would require the construction of nine locks and seven dams, and would provide a total lift of 224.5 feet. The locks would have a chamber size of 600 x 84 feet.

All reporting elements within the Corps of Engineers have determined that

the project is feasible. Separate analyses were made by the District Engineer and by the Board of Engineers for Rivers and Harbors. Both groups found the entire navigation project to be economically justified, although benefit to cost ratios were different in the two analyses.

Benefits due to transportation savings were computed by the Corps of Engineers by three methods of analyses: current rate, water-compelled rate, and projected rate. Benefits computed on the basis of projected rates take into account the future lowering of competitive truck and rail rates, thus lowering the benefits to be derived from water-borne traffic. With this very conservative approach the Corps of Engineers analyses indicate the total project to be feasible.

Both the District Engineer and the Board of Engineers for Rivers and Harbors analyses considered the Red River to Shreveport, Louisiana and from Shreveport to the vicinity of Daingerfield, Texas for separate and total project analyses. The benefit to cost ratio from these analyses were:

Unit	District engineer	Board of Engineers for Rivers and Harbors
Mississippi River to Shreveport	1. 8 1. 9 1. 8	1. 48 1. 05 1. 30

The benefit to cost analyses of the Board of Engineers for Rivers and Harbors considers the rate savings for the Shreveport to Daingerfield reach to be incre-