



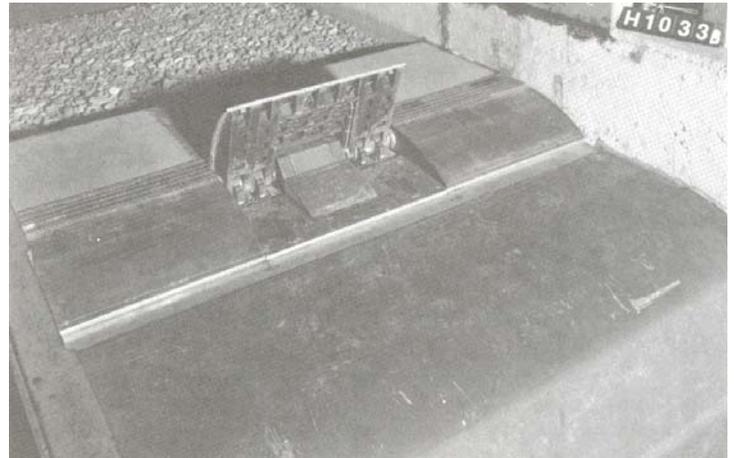
**US Army Corps  
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# Montgomery Point Lock and Dam Gate Study

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**Description** A physical scale model was conducted to determine the hydraulic loadings/ forces on the gated spillway for the proposed Montgomery Point Lock and Dam, Little Rock Arkansas. It was also used to evaluate the hydraulic performance of the spillway, debris circulation potential downstream of the spillway, and to design riprap protection near the spillway.

**Issue** The proposed Montgomery Point Lock and Dam will be located near the mouth of the White River. This portion of the White River is known as the White River Entrance Channel, and is the initial segment of the McClellan-Kerr Arkansas River Navigation.



**Products** At the request of the U.S. Army Engineer District, Little Rock, a 1:15 scale physical model was designed and constructed at the U.S. Army Engineer Research and Development Center by the Coastal and Hydraulics Laboratory. The model reproduces a three-gate section of the navigable pass spillway and sufficient upper pool and tailrace length to reproduce prototype flow conditions near the spillway.

**Physical model of Montgomery Point Lock and Dam, Little Rock, AR**

**Benefits** Model results provided design engineers with hydraulic loadings to finalize the structural design of the gate. Model results also provided a stable riprap design for all anticipated flow conditions.

**Sponsors** U.S. Army Engineer District, Little Rock.

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