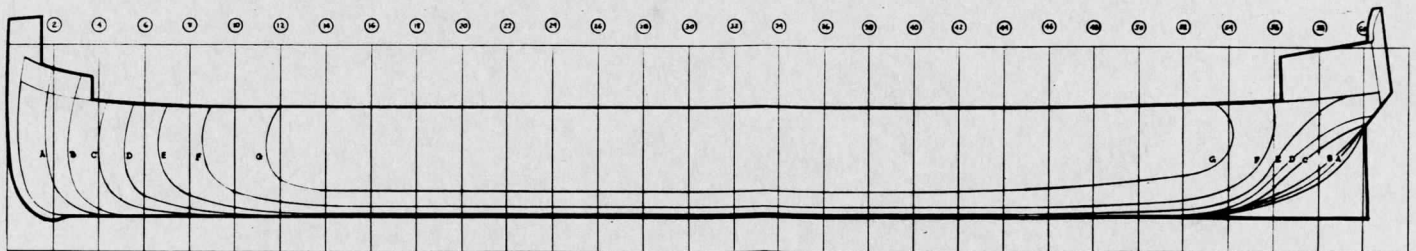


AMERICAN CANAL SOCIETY

Canal Boat Construction Index 1993



A comprehensive reference for the design and construction of canal boats authentic to their place and time in American Canal History.

Preface

- Origin** Published by the Canal Boat Committee of the American Canal Society, William J. McKelvey, Jr., Chairman, 103 Dogwood Lane, Berkeley Heights, NJ 07922. Original publication 1975, Second Edition 1979, Third Edition 1993. Editor, Carroll M. Gantz, 5030 Fifth Ave., Suite 211, Pittsburgh, PA 15232-2178. Copies are available from Keith Kroon, ACS Sales, 2240 Ridgeway Ave., Rochester, NY 14626
- Purpose** The Canal Boat Construction Index is intended to encourage and assist in the re-construction of Canal Boats that are authentic in design, construction, and operation to their historical context of place and time. Canal boat reconstructions insensitive to this authenticity are not in the general interest of canal appreciation or education by the public. The Index includes information regarding canal boat books, photographs, drawings, remains, models, plans, re-constructions (including many in operation), rides (not necessarily authentic re-constructions), planned reconstructions, and potential sites. Corrections and additions are welcomed to keep this Index timely and useful.
- Publications**
- AC "American Canals", bulletin of the American Canal Society
 - AC & TC American Canal & Transportation Center, 809 Rathton Rd., York, PA, 17403
 - CC "Canal Currents", bulletin of the Pennsylvania Canal Society
 - CCP Canal Captain's Press, 103 Dogwood Lane, Berkeley Heights, NJ 07922.
 - CP "Canal Publications", publication of AC & TC
 - LT "The Locktender", Publication of Hugh Moore Historical Park and Museums
 - TL "The Tiller", quarterly publication of the VC & NS
 - TP "Towpaths", publication of the Canal Society of Ohio
- Associations**
- ACS American Canal Society, 968 Chapel Road, Monaca, PA 15061
 - CSNJ Canal Society of New Jersey
 - CSNYS Canal Society of New York State
 - CSI Canal Society of Indiana
 - CSO Canal Society of Ohio
 - C & O CA Chesapeake & Ohio Canal Association, P.O. Box 366, Glen Echo, MD 20812
 - Cu & Ox CA Cumberland & Oxford Canal Association
 - ICS Illinois Canal Society
 - MCA Middlesex Canal Association
 - PCS Pennsylvania Canal Society
 - VC & NS Virginia Canals and Navigations Society
- Canal Museums**
- Alexandria Maritime Museum, 44 Canal Center, Alexandria, VA 22314
 - Allegheny Portage Railroad Museum, Lemon House, Cresson, PA
 - C & O Canal Museum, Great Falls Tavern, 11710 MacArthur Blvd., Potomac, MD 20854
 - C & O Canal Visitors Center, Hancock, MD; also in Cumberland, MD
 - Canal Society of New Jersey Museum, Waterloo Village, Stanhope, NJ
 - Chesapeake & Delaware Canal Museum, Chesapeake City, MD
 - Erie Canal Museum, Syracuse, NY
 - The Great Lakes Historical Society, Vermillion, OH
 - Harpers Ferry Museum, Harpers Ferry, WV
 - C. Howard Helster Canal Center, Reading, PA
 - Hugh Moore Historical Park & Museums, Easton, PA
 - James River & Kanawha Museum, Richmond, VA. (Now closed.- materials held by VC & NS)
 - Old Canal Days Museum, Canal Fulton, OH
 - Roscoe Village Canal Museum, Coshocton, OH
 - Shelburne Museum, VT
 - Susquehanna Museum, Havre de Grace, MD
 - Valentine Museum, Richmond, VA

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- United States** **Report** : An excellent reference to canal boats in New York, Ohio, New Jersey, Pennsylvania, Maryland, and Virginia, is an 1882 publication by the U.S. Bureau of the Census, entitled "Report on the Ship Building Industry of the U.S.", by Henry Hall, Special Agent. Relevant pages are pp. 223-233, entitled Chapter VI- "Canal-Boats". It includes numbers and classes of boats; construction sites, costs and materials; typical dimensions and tonnages; and other interesting details. **Books** : "Champlain to Chesapeake", 1978, by William J. McKelvey, Jr., 224 pages, contains many photos and information on many canals on the East Coast, including the Delaware & Raritan, the Chesapeake & Delaware, and the Champlain Canals. (Available from CCP). **References** : Indexes to many publications listed on p. 1 are available from the respective Canal Associations, or on computer disk from William Dzombak, 621 Spring St., Latrobe, PA 15650. • Printed copies of AC Indexes are available from Keith Kroon, AC Sales, 2240 Ridgeway Ave., Rochester, NY 14626.
- Connecticut** **Canals** : Farmington Canal (New Haven & Northampton Canal). **Drawings** : Original watercolors of canal boats by Raymond Holden are on display at the Plainville Historical Society (PHS), 29 Pierce St., Plainville, CT 06062. **Plans** : The PHS also has model plans drawn by the late Douglas Drysdale, of Plainville, for his model of canal freight boat 'Ceres'. **Models** : The PHS has this Drysdale model of the 'Ceres', as well as 2 other models he built of a farm boat and a packet.
- Illinois** **Canals** : Hennepin Canal (Illinois & Mississippi Canal) (100' x 18' Locks). **Photos** : Illinois and Michigan boats: AC # 76 p. 12, • Hennepin Boats: AC # 64 p. 7, AC # 26 p. 4, AC # 25 p. 6 (1912 'Peerless') AC # 24 p. 5, AC # 11 p. 7 ('Elizabeth'), **Remains** : Remains of 5 canal boats were found in the I & M Canal in 1978 by Dave Carr, site supervisor of the I & M State Trail near the Armstrong Street Crossing in Morris, IL. The boats are believed to have operated 1918-1933. (Photo, AC # 27 p. 8) • Hearsay places another wreck near Channahon, just east of lock-tender's house, reportedly that of the 'City of Pekin'. **Plans** : 1937 WPA plans at Smithsonian Institution, U.S. National Museum, Div. of Transportation (Historic American Merchant Marine Survey No. 14-19) shows 'The City of Henry' built in 1875. She was 99.2' long, 17.4' wide, and 6.9' deep. Some of the 6 sheets are 1/4" = 1' scale; the others are 1/2" = 1' scale, and show stern and bow framing, deck beam arrangement, and a mid-section sheet. When plans were drawn, boat was in existence near Channahon. In 1911 the barge was converted to steam, and re-named 'City of Pekin' (Photo AC # 73 p.5) **Models** : Model of the 'City of Pekin', built by Bruce Anderson, ACS, is on display at the visitor center of the Hennipin Canal at Sheffield, IL (Photo, AC # 27 p. 2) • John Lamb, ACS, has model of Steam Barge 'Niagara', built by Sam Cash in 1976. **Planned Constructions** : In town of Lockport in 1973, a 2 mile stretch of canal was being cleared, and a boat based on the 'City of Pekin' was in planning stage.
- Indiana** **Canals** : Wabash & Erie Canal ; Whitewater Canal. **Remains** : A short piece of keel excavated in the old canal basin in Cambridge City, IN, is in basement of Wayne County Historical Museum, Richmond, IN. **Drawings** : Sketch of a 3-cabin

freighter (60' x 12' x 9') drawn by Paul Baudenfell appeared in the *Metamora Annual* # 5, in 1975. **Plans** : Plans of 'Wood Duck' of Toledo available from Bern C. Ritchie and Co. Ship Models, 950 Linden Ave. Winnetka, IL, 60013. Original was 60' x 13' and ran on canal about 1845. **Models** : Model of 'Wood Duck' is in Children's Museum of Indianapolis, 3010 N. Meridian St. • Scale model of an 1840 boat 'The 76', designed by Ronald Brunger, and based on 'St. Helena II' of Canal Fulton, OH, was presented to the Allen County-Fort Wayne Historical Society, 1424 West Jefferson St., Fort Wayne, IN 46804. **Reconstructions** : Whitewater Canal boat replica 'Ben Franklin III', was built in November 1989, in Pascagoula, MS, by the Marine and Industrial Fiberglass Corporation. She is 75' long, 11' 11" beam, and draws 5 1/2" of water. She began operation in 1990 in *Metamora* at the Whitewater Canal Historical Site, located near town of Brookville in Franklin Co. IN, and carries 80 passengers. (Photo AC # 71 p. 1) • She replaced the 'Ben Franklin II', a horse-drawn Packet replica, built in 1980, under direction of Amos B. Schwartz. Indiana State engineers prepared specifications. 48' long, 13' wide; weight, 15 tons; capacity 70. (Photos, AC # 57 p.4, AC # 56 p. 6, AC # 43 p. 1, AC # 39 p. 1) **Rides** : During 1972-1979, the 'Valley Belle', a pontoon boat, carried 35 passengers on the Whitewater.

Maine

Canals : Cumberland & Oxford Canal (70' x 10' Locks) **Photos** : AC # 15 p. 5 ('Bluebird'), AC # 14 p. 5, AC # 13 p. 3 ('Champion') **Remains** : Remains of boats which operated on the Cu & Ox canal were found at 2 sites in 1988 by William E. Gerber, VP, ACS. Photos, sketches, and measurements in AC # 66 pp. 4-5. • Remains found in Naples, early this century. (Photo AC # 15 p. 5).

Maryland

Canals : Chesapeake & Delaware Canal; Chesapeake & Ohio Canal. (100' x 15' Locks) **Books** : "Towpath Guide to C & O Canal"; "Life on C & O Canal" (Out of print); "the Chesapeake and Ohio Canal Boatmen" (Out of print); "The Chesapeake and Ohio Canal: An Illustrated History" (Out of print); "The Chesapeake and Ohio Canal: Pathway to the Nation's Capital"; and "Chesapeake and Ohio Canal Old Picture Album", 100 pages (Out of print); all by Capt. Thomas F. Hahn. • NPS Handbook # 142, "Chesapeake and Ohio Canal", contains many photos and drawings, including an excellent cut-away painting of a typical C & O freight boat. Available at Park visitors centers, or from the Superintendent of Documents, Government Printing Office. **Drawings**: C & O Boats; AC # 35 p. 8, AC # 32 p. 2, AC # 30 p. 2, AC # 4 p. 5, **Photos** : C & O Boats; AC # 44 p. 6, AC # 31 p. 3, ACS "Canal Boats of America" #8, CC # 15 p. 5, CC # 21 p. 8, CC # 36 pp. 6-7 (C & O Canal Freight Boat # 57) • Photos of many C & O boats were donated to C & O CA by Capt. Tom Hahn. **Survivor** : Possibly the oldest surviving and still-floating (As of 1992) vessel which once sailed the C & D Canal is the 'Victory Chimes', a Chesapeake Bay Ram or Bald-Headed Schooner (three-masted), built at Bethel, DE in 1900 as the 'Edwin & Maud'. In 1950 she was converted to passenger use for Windjammer Cruises, first on the Chesapeake, and then in Maine, until 1985. (See AC # 24, p. 1 for photo and story). **Plans** : C & O Canal Freight Boat #57 (Built about 1885) was measured by NPS, and plans drawn by Albert Good in 1939. 1 sheet, scale 1/4" = 1', shows dimensions of 93' x 13' 9", with 3 cabins and 2 holds. Location of original plans unknown, but re-drawn plans by Sam Cash are at the Alexandria Maritime Museum. • Harpers Ferry Museum, WV, is reported to have plans for 'August Menkin', a 90' x 14' Freight Boat. • On file at the Valentine Museum, Richmond, VA, are 2 drawings for the C & O Canal, dated 1893. They show plan views scaled from boats 91', and 92 1/2'; both 14 1/2' wide. A letter accompanying plans, also dated 1893, describes cabin dimensions. • Lines of Steam Yacht 'Maryland' (1876), drawn by S.R. Ramsey Co., Builders, Vulcan Iron Works, Baltimore, are available from CP. **Models** : Model of C & D Canal Steamboat 'Lord Baltimore', built by Harold Maston, Jr., was on display in C & D Canal Museum., but was stolen in 1991. • Scale models of C & D boats, ranging from 18"-24", constructed by the late Harold Matson, are at the C & D Canal Museum.. • Three scale models of C & O boats were built in 1983 by Joseph Perry Mose, son of a canal boat captain, and resident of Sharpsburg, for display in C & O museums along the canal. • Models of 3 C & O freight boats, including 'Joseph', 'Ray'; and Steam Packet 'Lockport Lady', are in the Canal Museum in Syracuse (Weighlock Bldg., Erie Blvd. East, Syracuse, NY 13202) • Models of C & O Freight Boat # 57, and of excursion boat 'Louise', are at Great Falls Tavern, C & O Canal National Historical Park. • Model of C & O Freight Boat

57, built by Sam Cash from Albert Good plans, and model of steam yacht *'Maryland'*, built by Sam Cash in 1976, are on display at the Alexandria Maritime Museum, donated by Capt. Thomas F. Hahn, ACS. **Reconstructions** : C & O replica *'Georgetown'* is operated by the NPS out of the Georgetown Visitor's Center, 1057 Thomas Jefferson St., Georgetown, DC, phone 202-472-4376 and 202-653-5844 (Wed.-Sun. from mid-Apr. through Oct., 1 1/2 hr. ride through lock). She was christened and began mule-drawn operations in September 1982, and was built by Fiber Glass Fabricators, Inc., of Pasagoula, MS, with plans prepared by William G. Preston, of Marine Power, Inc., Gulf Breeze, FL, based on 1939 C & O Freight Boat #57 measurements in Hancock, MD, and consultation with Capt. Tom Hahn, ACS and Carroll Gantz, ACS. Length is 87' 2", beam 12', and draft is 1'5" (Photos, AC # 43 p. 10). • C & O replica *'Canal Clipper'* was launched in Georgetown about 1976, and moved in 1979 to the C & O Canal Museum, Great Falls Tavern, 11710 MacArthur Blvd. Potomac, MD 20854, phone 301-299-2026 or 301-299-3613 (Operated by the NPS week-ends mid-Apr. to mid-Jun., and mid-Sept. through Oct.; Wed.-Sun. from mid-Jun. through mid-Sept.; 1 1/2 hr. ride through lock). (Photos: AC # 81 p.12, AC # 69 p.10, AC # 35 p. 2). The current *'Canal Clipper'* is the third boat of that name to operate in the Park. The first, a converted Navy barge, ran from 1941 to about 1961, when it was replaced by a second boat, which lasted till about 1972. For operations information on both boats, contact NPS Ranger Edith Raudebush at Great Falls Museum. • C & O land-based 93' replica *'Cumberland'*, based on Freight Boat # 57, was built by members of the Naval Reserve Seabee Unit in 1975, and completed about 1979 at Lock # 75, 5 miles south of Cumberland, MD on Rt. 51, as a land-based exhibit (Photo AC # 79 p. 1). Contact John B. Millar, 300 North Bel Air Dr., Cumberland, MD 21502. **Rides**: The *'John Quincy Adams'* operated previously with one mule out of Great Falls from about 1966, but was lost in 1972 flood. (Photo of boat at Swain's Lock may be available from Government Services, Inc., 1135 21st St., NW, Washington, DC.) **Potential Sites** : The NPS in 1993 was restoring sections of the C & O Canal at Williamsport, MD, (Includes a working lock), and Hancock, MD. When re-watered, these sites will be suitable for boat operations, and it is hoped that local interests will undertake construction and operations. Contact Supt. Thomas O. Hobbs, C & O Nat'l. Historical Park, P.O. Box 4, Sharpsburg, MD 20782.

Massachusetts

Canals : Middlesex Canal. **Drawings** : AC # 51 p. 11 **Photos** : AC # 69 p.11. **Plans** : Plans of the flat, rectangular canal boats used on the Middlesex Canal drawn by Theodore Haxall in 1981 were given by Arthur W. Sweeton III, ACS, to the MCA archives in 1993. They include specifications on framing and construction. **Reconstructions** : Horse-drawn replica of 1803 Middlesex Canal Packet Boat *'Colonel Baldwin'*, built with white oak frame and spruce planking in 1976 by the Woburn Historical Commission, began 1977 operation along a restored stretch of the canal, from the Baldwin Mansion (Rts. 38 and 128) in Woburn, to a point just below Nichol's Bridge in North Woburn. Length 40' 3", width 9' 6", height 8', draft 6", and seating capacity 40 (Photos, AC # 23 p. 2, #85 p. 3).

New Jersey

Canals : Delaware & Raritan Canal; Morris Canal. **Books** : "The Morris Canal : A Photographic History", by James Lee, contains over 250 photos. (Available from CCP) **Drawings** : Morris Canal Boats; AC # 37 p. 6. **Remains** : Remains of a section of a Morris Canal Boat were found during construction of Route 20 in Patterson, NJ in 1973 (Photos, CC # 26 p. 8) • In 1975, remains of the *'New Jersey'*, were found in Chesapeake Bay near the mouth of the Choptank River. Built in Baltimore in 1862, she was 166' long, 23' wide, and 8' 9" deep, with a tonnage of 494, constructed of wood with a round stern, propeller-driven, to transport cargo from the Bay to the Delaware River via the C & D Canal, and from the Delaware to New York via the D & R Canal. In 1870, bound for Norfolk out of Baltimore, she caught fire and sank. In 1987, the remains were surveyed by the National Geographic Society's remotely-operated vehicle (ROV) *'SeaROVER'*. • 96.9' x 21.5' wood hull remains of the *'J.B. Wright'*, built in 1919, which worked on the D & R Canal till it closed in 1932, were disposed of in 1979 on Raccoon Creek near Swedesboro, NJ (Photo AC # 32 p. 8) **Photos** : Morris Canal Boats, AC # 76 p. 4, CC # 29 p. 6, CC # 26 p. 8, CC # 15 p. 4 **Plans** : Boonton Plane Boat plans of these hinged, 2-section boats (Each 44' x 10'), from the Bureau of Geology and Topography, PO Box 1889, Trenton, NJ, 08625. 2 sheets, dwg. no.'s 617 and 618, drawn by Cornelius C. Vermule, Jr., are 1 1/2" = 1' scale, and are good for

models or actual construction. **Models** : Morris Canal hinge boat model in 1/4"=1' scale, built by N.F. Beacham, is on display in CSNJ Museum at Waterloo Village, NJ. Also there, is a model of the '*F.W. Brune*', a steam canal freight boat built by Sam Cash. • Morris Canal boat models are in the collection of James Lee, RR 1, Box 489, Stewartsville, NJ 08886-9745. • A 1/10th full size model of the '*Robert F. Stockton*', an iron hull screw propeller canal tug, built in 1838 to serve on the D & R Canal, is in the Smithsonian Institution collection, and was constructed there. Original was 63' 5" long, 10' beam, 7' depth, was actually used on the Delaware River, and was re-named '*New Jersey*' in 1840.

New York

Canals : Delaware & Hudson Canal; Erie Canal; Champlain Canal; Erie Barge Canal; Black River Canal; Mott Haven Canal. **Books** : "Canals of New York State," by William Shank (Available from AC & TC). • "Coal Boats to Tidewater", by Manville B. Wakefield, 220 pages, (Out of Print) • "The Old Raging Erie...There Have Been Several Changes", 1984, by Harry L. Rinker, 96 pages, 200+ photos, maps. (Available from CCP) • "Canalboat Primer On The Canals Of New York State", by staff of Canal Museum, Syracuse, 37 pages, illustrated (Available from CCP). • "Canal Boat Children", by Springer and Hahn (Out of print). **Drawings** : Erie Canal; AC # 45 p. 7, AC # 28 p. 3, **Photos** : Erie Canal, AC # 45 p. 2, AC # 12 p. 7 (Steam powered '*Massaga*'), AC #11 p. 6, AC # 4 p. 8, AC #1 p. 5, CC # 16 p.3, • D & H Canal; ACS "Canal Boats of America" #2; • Canal boats '*Pricilla Dailey*', built 1929, and '*Elmer S. Dailey*', formerly '*Claire S. Follette*', built 1915, AC # 18 p. 7 • Black River Canal; AC # 56 p. 7, • Mott Haven Canal; AC # 51 p. 5 • Erie Div. of NYS Barge Canal; AC # 39 p. 11. **Remains** : In 1980, remains of reinforced concrete canal boat '*U.S. # 117*' were found by Bill McKelvey, ACS, on the east bank of the Neshaming Creek, about a mile up from the Delaware River in Croydon, PA. She was built in 1919 in Ithaca, NY, and operated by the New York Canal and Great Lakes Corporation. She was 149.3' long, 21.1' beam, and carried 500 tons. In 1959, she was purchased in Miami and towed to Croydon to serve as a bulkhead and dock. • In 1981, remains were seen by William Dzombak, ACS, on BRC near Hawkinsville, just east of Boonville. Pixley Falls State Park confirmed in 1993 that they have been there many years, but are now badly deteriorated. **Plans** : "Shipwrights Own Book" by George W. Rogers, published in Pittsburgh in 1845 shows general lines purported to be an Erie Canal Packet Boat, but there is some evidence that it is in fact a Pennsylvania canal boat. • The Ohio Historical Society, in their Old Public Works Archives, North High St. at Columbus Ave., Columbus, OH 43210, has 24" x 36" blueprints, or 8 1/2" x 11" photostats of what appears to be an Erie Canal Boat. Scale is 1/2"=1', and good for model building only. Boat is 69' 3" x 14', with 3 cabins and 2 holds. • See Pennsylvania 'Plans' for references to Durham boats on the Delaware River, which influenced the design of Erie Canal boats • Construction plans for an 1840 Erie Packet Boat were developed in 1970 by Robert Hager for Frank and Stein Architects/Engineers, of Lansing, MI, intended for use in Rome, NY. Plans include 2 sheets 24" x 36", with 4 additional detail sheets, and were based on hull plans of '*St. Helena II*'. Scale is 3/8"=1'. Boat is 68' x 12'. Hager plans are featured in an article in a mid-70's issue of the "Nautical Research Journal", by Jack W. Lowe, entitled "Modeling an Erie Canal Packet." Excellent photos of model being built using the Hager plans. • General lines of an Erie 'Laker' Steam Canal Boat are shown in the 1882 U.S. Bureau of the Census Report (See 'United States', first section this Index). Size is 98' long, 17 2/3' wide, and 10' deep • General lines and photos of typical government-built concrete canal barges during WW I for the New York Canal and Great Lakes Corporation to increase inland shipping capacity, are in "Champlain to Chesapeake: A Canal Era Pictorial Cruise", by William J. McKelvey, (Available from CCP). See also NY 'Remains'. **Models** : A model built from the Ohio Public Works Archives plans (See above) was built by Sam Cash for John Lamb, ACS • D & H: A scale model by Dubois Weber, and construction information is referred to in "Coal Boats to Tidewater". Boats were about 88' x 14'. • A 1/4"=1' scale model of an Erie Canal 'Laker' boat built by N.F. Beacham is in the CSNJ Museum at Waterloo Village, NJ. • Jack W. Lowe, of up-state NY, built 1/4" = 1' model of Packet boat using Hager Plans (see Plans) in mid-70's. • Champlain Canal boat models of the '*Golden Age*' and the '*Noah's Ark*', used in the 1880's to move a circus through up-state NY, built by Milo Smith, are on display at the Shelburne Museum in Vermont (Photos in AC #76 p. 2). **Reconstructions** : 18th Century (1792) Mohawk River Batteau named '*Discovery*' was constructed by New York

State Museum (Mr. Philip Lord Jr., New York State Museum, Room CEC 3097, Empire State Plaza, Albany, NY 12230) in August 1992, to be on exhibit at the Urban Cultural Park Orientation Center at Schenectady Museum. Length : 30' 4"; width: 7' 3". (Photo AC # 82, p. 10). • The 'A. Emerson' began operations Fall, 1974, on a restored section of the D & H Canal 4 miles from Honesdale PA, below 'Lonesome' Lock # 34, as a 1/2 scale replica of Boat # 1107, the last boat to leave Honesdale in 1898. She weighed 13 tons, had 10" draft, and a capacity of 50 passengers, was made of redwood, was dry-docked since 1975, and sold in 1977 to the Friends of Hugh Moore Park, Easton, PA (Photos: AC # 28 p. 7, AC # 23 p. 8, AC # 11 p. 1) • The 'Independence' was constructed 1972-73 in Rome, NY, by the Historic Rome Development Authority, (Mr. Curry Bartlett Jr., Project Mgr.), and began horse-drawn operations at 'Erie Canal Village' in July 1973. Capacity : 125 passengers. Dimensions: 69 1/2' x 12'. Capacity: 25 tons. Plans by Robert E. Hager were used. (Photos, CC # 38 p.4-5) **Rides** : Three Lockmaster Canal Boats, styled to resemble English type narrowboats, designed and built by Mid-Lakes Navigation of Skaneateles NY, became available for hire on the New York Canals in 1987. Steel-hulled, 41' long (Photos AC # 69 p. 12, AC # 62 p. 1). **Planned Reconstructions** : 'Lady Carrington II' was expected to be built and operated on the Black River Canal in 1990. Robert E. Hager, of Syracuse NY, built 6' model, (Photo AC # 64 p. 2), and drew up construction plans of the Packet Design .

Ohio

Canals : Columbus Feeder Canal; Miami & Erie Canal (90' x 15' Locks); Ohio & Erie Canal (90' x 15' Locks); Pennsylvania & Ohio Canal; Sandy & Beaver Canal; Walhonding Canal. **Drawings** : Miami & Erie: TP V 18 #4 pp. 41-45, TP V 17 # 3 p. 33 ('West Prince'). **Books** : "A Photo Album of Ohio's Canal Era, 1825-1913", Kent State University Press, 1988, by Jack Gleck, contains many boat photos. **Photos** : General: TP V 17 #1 p. 4, TP V 12 # 3 p. 26, • Columbus Feeder Boats: TP, Sesquicentennial Issue # 4 p. 66 • Ohio-Erie Boats, AC # 33 p. 8, TP V 18 # 3 p. 26, TP V 15 # 4 p. 46, TP V 12 # 4 pp. 47-48, TP V 12 #3 p. 35, TP V 12 # 2 p. 15, TP V 14 # 1 p. 4, TP V 14 # 4 p. 46, TP V 11 #3 p. 33, TP V 11 # 2 p. 15, TP V 11 # 1 p. 7, TP V 10 # 1 pp. 7, 9; TP V 7 # 1 pp. 5, 12; TP V 6 # 1 p. 9, • Miami & Erie boats: ACS "Canal Boats of America" # 4, AC # 18 pp. 4-5, AC # 2 p. 4, TP V 9 # 4 p. 47, TP V 9 #2 pp. 14, 19, 20, TP V 9 #1 p. 12, TP V 7 # 3 p. 43. (Packet # 1831), TP Sesquicentennial Issue # 2 pp. 23, 27. • P & O boats : CC # 35 • Walhonding boats: TP Sesquicentennial Issue, #4 p. 57. • S & B Boats : CC # 47 p. 10. **Remains** : Timbers, thought to be of the 'State of Ohio', generally considered to be Ohio's first canal boat, built in 1827 for the opening of the O & E Canal on July 4, were found in 1896 in Akron, later re-discovered and photographed in 1930 by James T. Black (Photo AC # 63 p. 2). Since 1970, timbers have been located at the Hale Farm and Village, near Akron, operated by the Western Reserve Historical Society. Terry Woods, ACS, measured and prepared drawings in 1977. • In 1987, hull timbers believed to be of the 'Marguerite', an M & E passenger packet of the late 1800's, were excavated in Delphos, OH, and were still in the process of preservation with polyethylene glycol in 1992. The original boat was 80' long, and 14' wide. (See 'Reconstructions'). **Plans** : 1813 Lake Erie Gunboat plans, believed to be the basis of Erie Canal Packet designs, were found by Dave Stevens (see Models) • Drawings of the 'State of Ohio'; 'Allen Trimble'; and 'Pioneer', were prepared in 1977 by Terry Woods, ACS • Plans were developed by Don Hutslar, of the Ohio Historical Society in 1968 in collaboration with Dallas Harder, AIA, Columbus Architect, and used to build 'The General Harrison'. Very similar design was developed by John Murphy, of Kettering OH. • 1970 (Vol. 17 # 4) issue of Nautical Research Journal published lines of an O & E canal boat submitted by Lewis Richardson, depicting a 60' x 14' hull with flat stern. • Construction plans for 'Monticello II' prepared by Marshall Jacobs, Coshocton, OH • Plans developed 1967 by Carroll Gantz ACS, and used for construction of 'St. Helena II'. Total 4 sheets, 36" x 48", scale 1/2" = 1', details 1" = 1', excellent for construction. • Plans of model of original O & E Freight Boat 'St. Helena' prepared in 1967 by Carroll Gantz, ACS, as measured from model on display at the Stark Co. Historical Society, Canton, OH (See 'Models') . Plans available in two scales; 1/4" = 1', on 17" x 23" sheet; and 1/2" = 1', on 36" x 48" sheet. • Plans of 1889 'O & E State Service Boat # 5' were developed from memory in 1966 by A.P. Swany of Dublin OH. Plans are crudely drawn and not recommended for models or construction. Plans include 4 sheets, scale 1/2" = 1', some details 1" = 1' scale,

Ohio (Cont.)

some full scale • The Ohio Historical Society, in their Old Public Works Archives, North High St. at Columbus Ave., Columbus, OH 43210, has 24" x 36" blueprints, or 8 1/2" x 11" photostats, of what appears to be an Erie Canal Boat. Scale is 1/2" = 1', good for model building only. Boat is 69' 3" x 14', with 3 cabins and 2 holds.

Models : Dave Stevens, a professional model builder and Secretary of the Committee of Model Shipwrights of the GLHS in Vermillion, OH, began building a group of 5 canal boat models, typical of Ohio's later boat design, in 1983. The first, completed in 1986, a 'Boarding Boat', is 1/2" = 1' scale (Photos in AC # 57 p. 10). Location of these models is unknown • A scale model of 'St. Helena II' is on display at the Summit County Historical Society, Akron, OH. • Model of original O & E Freight Boat 'St. Helena', scale 1/2" = 1', built by W. J. McLaughlin, ships carpenter, in 1933, is on display at Stark Co. Historical Society, 729 Hazlett Ave., NW, Canton, OH. • 1/4 scale model of Ohio Canal boat was built by Herb Dosey ACS, for the Western Reserve Historical Society. Many of his models are in the GLHS Museum, Vermillion, OH. • 6' long model of a 'family' canal boat is at Roscoe Village Canal Museum, Coshocton, OH.

Reconstructions : Replica of the 'State of Ohio' was built in 1925, to take part in Akron's Centennial Parade (Photo AC # 63 p. 2). • O & E Canal boat replica 'St. Helena II' was designed by Carroll Gantz, ACS, and built 1969-70 by volunteers directed by Gantz for the Stark County Historical Society, was dedicated and began operations July 1970, on a 1/4 mile stretch of the O & E canal in Canal Fulton, OH. and was the first authentically constructed mule-drawn canal boat to be built in the USA in the Twentieth Century. Length 65', width 13' 2", capacity 60. Operations transferred in 1976 to Canal Fulton Heritage Society (CFHS), 103 Tuscarawas St., Canal Fulton OH 44614, Phone 216-854-3808 (Photos AC # 67 p. 1, AC # 43 p. 4, AC # 20 p. 7, AC # 22 p. 2, AC # 20 p. 7) and was scuttled in 1988, due to leakage. It is intended to be restored in the E.J. McLaughlin dry dock in Canal Fulton, built in 1830, the only one known to be original and operational; and will be used as a museum and second boat. The CFHS in 1989 began construction of a similar replacement with a ferro-cement hull, and resumed operations with it as 'St. Helena III', in May, 1992. The new design by Hartel and Brookes Boat Designs, 5370 Cuba Road, Wilmington, OH, 45177, is based on the Gantz plans, and is 60' long, 13' wide, and weighs 22 tons. Capacity is 65, and construction costs were \$150,000. • Canal boat replica 'Monticello II' was built 1969-1971 by Marshall Jacobs based on his memory of one excavated in 1959, and began operations in September 1972 in Roscoe Village in Coshocton, OH. She was 78' x 14 1/2', and carried 120 people horse-drawn on 1-mile stretch of O & E Canal (Photos: AC # 79 p.12, AC # 13 p. 8, TP V 17 pp. 28, 30). She operated until about 1988. New plans were developed by Jonathan Sandvich of Planning Resources, Inc., of Cleveland, OH, and a boat was constructed by Marine Builders, Inc., of Utica, NY, at a cost of \$169,665. The new boat, named 'Monticello III', started operations June 1990, and is owned and operated by the Coshocton City and County Park District. It has a stainless steel hull and the appearance of an authentic passenger packet, which is 74' long, 14 1/2' wide, weighs 25 tons, and can carry 125 passengers. It is horse-drawn on a 1 1/4 mile stretch of a restored section of the O & E Canal • The 'General Harrison', a replica of an 1840 boat, built by Clint Hoshier for the Ohio Historical Society 1969-1971, began mule-drawn operations in Spring 1973 along a mile-long section of the M & E Canal at the Piqua Historical Area, 9845 North Hardin Rd. Piqua, OH 45756, located just north of Piqua on State Rt. 66. Based on freight boat design, she is 77' x 12', with a capacity of 120. (Photo AC # 9 p. 6, TP V 16 #3 pp. 28, 31, 33) Flood damage to the canal halted operations in 1991 • The 'Sandpiper' was launched in July 1984 onto the Maumee River at Toledo. She is along similar lines to 'St. Helena II', but diesel-powered, and with a steel hull. Built by Anderson Inc. of Maumee, she is 65' long, 16' 6" wide, carries 100 passengers, operates past the old Swan Creek canal outlet to Promenade Park at Toledo's rejuvenated waterfront area, and weighs 37 tons. (Photo AC # 52 p. 7) • The 'Belle of St. Mary's', a full-size stationary reconstruction floating in the M & E Canal in St. Mary's, OH, was completed in 1989. Contact Ray Zunk, 156 Watercrest St., St. Mary's, OH. • In September 1992, a mobile reconstruction, 'Marguerite II', was completed, based on the remains found in Delphos, OH, on the M & E Canal (See 'Remains'), and on photos of the original 'Marguerite'. Built by the Delphos Canal Commission to be transported for educational purposes, the reconstruction is built on a steel frame and mounted on tires. In order to fit on the trailer, the size has been reduced to 65' long, and 12' wide. It is located 2 blocks south of Delphos

business district. Contact Dave Wannemacher at 419-695-2961, or Delphos Canal Commission, P.O. box 256, Delphos, OH 45833. **Planned Constructions** : The Ohio Canal Sesquicentennial Commission was formed in 1977, to raise money for construction of an operational replica of the 'State of Ohio'. **Potential Sites** : 20 miles of the O & E Canal, including Piney Narrows and a 3-mile stretch along Canal Road, have been designated as a National Landmark, and the site of a Towpath Trail constructed by the Cuyahoga Valley National Recreation Area, under the direction of John Debo, Park Supt. A study of demonstrating the 'art' of canal boat building along the towpath in the village of Boston is expected in 1994. • In 1989 the O & E Canal Corridor Coalition was formed of volunteers to preserve and develop the 85 miles of the canal from Cleveland to Zoar. Contact The Ohio & Erie Canal Corridor Coalition, PO Box 435, Canal Fulton, OH 44614.

Pennsylvania

Canals : Codorus Navigation (95' x18' Locks); Conestoga Navigation (100' x 22' Locks); Delaware River Navigation; Lehigh Canal (100' x 22' Locks); Pennsylvania 'Main Line' Canal (170' x 17' Locks), including Eastern Division (90' x 17' Locks), Western Division (90'x 15' Locks), Juniata Division (90' x 15' Locks), Allegheny Portage Railroad, Susquehanna Division (90' x 17' Locks), North Branch Division (90' x 17' Locks), West Branch Division, Delaware Division (100' x 11' Locks), Beaver & Erie Division (80' x 15' Locks); Schuylkill Navigation Canal (80' x 17' Locks); Susquehanna & Tidewater Canal (170' x 17' Locks); and Union Canal (75' x 8 1/2' Locks) **Books** : "The Amazing Pennsylvania Canals" by William Shank, describes later (1843) sectional Boats which were 82' x 13' x 12', divided into 4 sections, each 20 1/2' long. Also, he cites the average size of double (tandem) boats as 65' x 16' x 8'. Many photos. (Available AC & TC or CCP) • "Canals along the Lower Susquehanna", by Smeltzer, describes S & T boat design details pp. 29-35 and includes many photos. (Out of print) • "The Pennsylvania Mainline Canal," by McCullough and Leuba, contains over 40 drawings and photos of boats and models. (Out of print) • "Canal Boat Children," by Springer and Hahn, has over 10 photos. (Out of print) • "The Schuylkill Navigation : A Photographic History", 1991, by Harry L. Rinker, has over 200 photos. (Available from CCP) • "Delaware and Lehigh Canals", by Ann Bartholomew and Lance Metz, 160 pages, 330 photos (Available from CCP) • "Delaware Canal Journal", by C.P. Yoder, covers canal boats very nicely in Chapter 5, pp. 95-106 (Available from CCP). **Drawings** : "Journey through Pennsylvania- 1835 by Canal, Rail, and Stagecoach", by Phillip Nicklin, has many illustrations by canal illustrator Phillip Hoffman. (Out of print). • "A Picture-Journey Along the Pennsylvania Main Line Canal 1826-1857", by Phillip J. Hoffmann, P.E., edited and published by William H. Shank, ACS 1993, available AC & TC. **Photos** : Lehigh Canal : ACS "Canal Boats of America" # 6 ('Maid of Mist'), AC # 23 p. 2, AC # 46 p. 7, AC # 55 p. 9, AC # 60 p. 8, AC # 63 p. 7, CC # 19 p. 1, CC # 23 p. 5, CC # 25 p. 5, CC # 26 pp. 2 & 7, CC # 31 pp. 1- 2, CC # 40 p. 12 • Pennsylvania Canal Boats: AC # 4 p. 1, AC # 5 p. 3, AC # 14 p. 1, AC # 65 p.10, AC # 72 pp. 3-4, AC # 75 p. 5 , ACS "Canal Boats of America" #3 (typical Freight Boat) and # 7 (1879 Packet) • Eastern Div. : CC # 31 p. 7, CC # 32 p. 1, CC # 33 p. 1, CC # 34 p. 5. • Western Div. : CC # 23 p. 5, Juniata Div.: CC # 24 p. 5, • Allegheny Portage: AC # 6 p. 3, CC # 27 p. 1 • Susquehanna Div. : CC # 41 p. 9, CC # 38 p. 1, AC # 64 p. 6. • North Branch Div. : AC # 14 p. 1 (packet), CC # 23 p. 5, CC # 37 p.7, • West Branch Div. : AC # 4 p. 1, AC # 5 p.1, CC # 24 p. 2 • Delaware Div.: AC # 40 p. 9, CC # 30 p. 7, CC # 42 p. 4, • Beaver & Erie Div. : CC # 34 pp. 5 & 10, CC # 39 p. 5 • Schuylkill Navigation: CC # 24 p. 4, CC # 25 pp. 1- 3, CC # 27 p. 3, CC # 28 p. 4, CC # 30 pp. 3, 4 & 6 • D & H: AC # 64 p. 3, AC # 70 p. 7, CC # 41 pp. 1 & 12. **Remains** : Part of boat exposed Fall 1991 along Beaver River, a slackwater Section of B & E Canal. (Photo AC # 82 p.12.) • Lehigh Canal and Navigation Company boat # 249 was raised from a Northampton County cement quarry in January 1982, by the Tri-boro Sportsman Club after a six year effort. It is one of 40 boats scuttled there in 1921, after canal was closed. It is the only known complete authentic canal boat recovered, and is the front 40' half of a type called 'section boats', 10' wide (Photo, AC # 40 p. 1) • A Union Canal boat hull was discovered in the mud near the old 'Water Works' at the junction of the Union Canal and its 'feeder' from Pine Grove in 1978, by the Lebanon County Historical Society. Boat is 64' x 7' (Photos Harrisburg Sunday Patriot-News, July 29, 1979) • Apparent remains of a canal boat found at Pea Patch Island in Delaware River at site of Fort Delaware in 1975 by Robert J. Purdy, RD#1, Box 81, Pottsville, PA (Photo AC # 14 p. 8) • Canal boat remains were found along the

Schuylkill Navigation, at Schuylkill Haven in 1969. **Plans** : Lines drawn by Edward Brownly, after a drawing of John Anderson, show the Durham boat of 1750, used on the Delaware River to transport iron ore, were in an Article by M.V. Brewington in "American Neptune", book of Peabody Museum in Salem, MA. Reference is made to Bucks County, PA Historical Papers IV 1917 p. 282. Scale is 1/8" = 1'. Durham boat designs had an impact on the evolution of Erie Canal boats. • Durham boats are mentioned also in an article entitled "Canal Boats" by Norman N. Rubin, in The "Nautical Research Journal", Vol. 15, p. 71, 1968. • "Shipwrights Own Book", by George W. Rogers, published in Pittsburgh in 1845, shows general lines purported to be an Erie Canal Packet Boat, but there is some evidence that it is in fact a Pennsylvania canal boat. • Model plans for the Express Packet Boat 'John Adams-Western Transportation Co. D. Leech & Co.', were drawn in 1968 by W. J. Hoffman, and show a flat-topped Packet 77' x 13'. Scale is 5/16" = 1'. Source unknown. The Leech Bros. were among the number of transportation companies formed to operate boats on the PA Canals. • Plans of a Lehigh 'chunker' 2-section coal boat were obtained via Sam Cash from the Trojan Powder Company, 17 North 7th St., Allentown, PA. which are titled "Lehigh Coal and Navigation Company Canal Dept, Mauch Chunk, Pa. December 7, 1909". These plans appear in the back of "Proceedings of the Lehigh County Historical Society", 1958. Scales are 1/4" = 1' and 1/2" = 1', and include plan, elevation, and sections of a standard wooden-hinged boat 87 1/2' long, 10 1/2' deep, and 100 ton capacity. • 1910 plans of 'Producer Gas' canal tugs, from Vol. 26 # 5 issue of 'The Rudder' magazine, are available from CP. Three 8" x 10" photos, from negative no.'s 210, 211, and 212. • Diagrams and cross-sections of Union Canal boats (c. 1851) are in Vol. 5, pp. 274-277 (1st Series) of the "Journal of the Franklin Institute", in Lehigh University Library, Bethlehem, PA • A 7-plate supplement to "Proceedings of the Lehigh County Historical Society", by Williams, containing 1/4" = 1' and 1/2" = 1' scale plans for a 1909 hinged 2-section Lehigh Canal Boat is available from the Society in Allentown, PA. **Models** : Models of tandem canal boats, built by a former canal boat captain who lived near Lock #2 of the S & T Canal at Long Level, PA, are in the Canal Museum at the Outlet Lock in Havre de Grace, MD (Photo AC # 65 p. 12) • Model of Pennsylvania Canal Freighter, built by Elmer Ellsworth in 1890, is in Lycoming Co. Historical Society Museum, (Photo, AC # 32 p. 8) • Pennsylvania Canal Packet Boat model, and a model of Sectional Canal Freight Boats, used on the APRR, and Philadelphia and Columbia Railroads, built by Fred Connacher, of Cresson, PA, are in the Lemon House, at the APRR Museum in Cresson, PA (Photos, AC # 29 p. 3). • 3/8" scale model of Lehigh section boat 'L. C. & NAV. Co.' built by Sam Cash, of Northampton, England, is at the Canal Museum, Easton, PA (Photo CC # 41 p. 12). Another model of the same by Cash was built in 1977 for the J R & K Canal Museum, which is 6/16" = 1' scale. • 1/4" = 1' models, built by N.F. Beacham, of a Lehigh/Delaware 'Stiff' boat, a "Main Line" boat, and a typical Schuylkill Navigation boat, are at the CSNJ Museum at Waterloo Village, NJ • Models of PA Canal Boats #347 and #348, built in 1885 by John Sheets, of Liverpool, PA, for the Ex-Canal Boatmen's Association, are in the PCS in Easton. • Joe Sharga, PCS, built several models of Lehigh section boat 'L.C. & NAV. Co.' for Canal Museum in Easton. Scales are 1/4" = 1', 1/2" = 1', and 1" = 1'. • William Etzel, 325 Denniston Ave. Pittsburgh PA 15206, builds canal boat models. One was the 'Star of Freeport' • Mrs. Estella Eby, of York, PA, has, what in all probability, are the patent models of the McCreary boat steering apparatus (1872) for connecting pairs of canal boats • Delaware Canal models of Section Boat 'Camelback Bridge', and a workman's Scow, built by Horace S. Sigafoos, a shipwright at the Uhlertown Boat Yard until the canal stopped operating in 1931, were donated to the Canal Museum in Easton upon his death in 1977 (Photos CC # 42 p. 12) • A model of Lehigh boat built by J. Harold Maston Jr., is on display at the C & D Canal Museum • Model of Lehigh boat 'The Swan' built by N.F. Beacham, is at the Canal Museum, Forks of the Delaware (Photo in CC # 34 p. 13) • Several historic canal boat models are in the collection of Harry Rinker, 5093 N. Vera Cruz Road, Emmaus, PA 18049-9550. **Reconstructions** : Mule-drawn boat 'Junjata', later called the 'Locust', began operations in 1974 on restored 1/4-mile portion of the Junjata Division of the Main Line Canal at the Locust Campground west of Lewistown off Rt. 22. Phone 717-248-3974. Rebuilt by Dave Knox of John Knox & Sons, PO Box 388, Lewistown, PA 17044 (Photos AC # 14 p.2, AC # 21 p. 1) from a renovated sand dredge barge, 50' x 10'. (Photo AC # 11 p. 1) • Mule-drawn Lehigh

Pennsylvania (Cont.)

Canal Boat replica, '*Josiah White*', at Hugh Moore Park, 200 S. Delaware Dr., Easton PA 18044-0877, Phone 215-250-6700. Operations began July 1978 on Glendon level of Lehigh Canal. Weight, 13 tons. Capacity, 49. Size: 45' x 14'. (Photos, AC # 77 p. 1; AC # 74 p. 10; AC # 73 p. 2, CC # 51 p. 1, CC # 46 p. 2, CC # 43 p. 9, CC # 39 p. 10). Formerly was the '*A. Emerson*', a 1/2-scale replica of D & H Canal Boat #1107, constructed of redwood which operated on the D & H Canal in Honesdale, PA. • **Planned Constructions** : In 1979, the Roxborough-Manayunk Wissahickon Historical Society was interested in building a barge/packet for a 1/2 mile section of the Schuylkill Canal in Manayunk. • A new vessel to replace the '*Josiah White*', patterned after a coal-carrying 19th Century canal boat, was in planning stages in 1992 by Steve Humphrey, Executive Director of the Hugh Moore Historical Park and Museums, who was working with John Heffernan, of MARSERV, Inc., Towson, MD. The new boat is to have a steel hull, and wood superstructure, and is to be approximately 20' x 50' in order to seat 150 passengers on two levels. Cost is estimated at \$135,000. • The Supt. of the APPR National Historical Park, in Cresson, PA, Pete Nigh, plans construction of a full-scale replica of a section boat for static display on land, when funding is available. **Rides** : Mule Barge Excursions have been operating on Delaware Canal at New Hope, PA. since about 1950 (Photo AC # 14 p. 2). Phone 215-862-2842 **Potential Sites** : Lock 12 Historic Area, Lake Aldred, Holtwood, PA, has lock, a rebuilt lime kiln, and a saw-mill site. • Susquehanna Museum of Havre de Grace is located in restored lock tenders House, and is by an Outlet Lock with an 1839 construction plaque. • Several miles north of Havre de Grace, Susquehanna State Park, operated by Maryland Dept. of Forests and Parks, contains over 3 miles of canal bed, passing by Rock Run Grist Mill, restored in 1970. Nearby is a restored 1856 Jersey Toll House, a restored spring house, carriage house, and manor house. • In 1989, The NPS prepared a site concept plan for a canal park in Saltsburg, PA, on the Western Division of the Main Line Canal, as part of it's America's Industrial Heritage Project (AIHP) in southwestern PA. The plan would include a full-scale, land-based canal boat model, a visitor's center, a canal park, and a 1/2 mile ride on an 'old-fashioned' canal boat pulled by mules or horses. Contact Randy Cooley, Project Director, America's Industrial Heritage Project, P.O. Box 565, Hollidaysburg, PA 16648.

Tennessee

Rides : Tennessee Scenic Rivers Association, Inc., constructed and in 1976 began operating two 22' x 8' flatboats between Kingsport and Nashboro, on the Cumberland River. A third boat, 27' x 8', was planned in 1979.

Virginia Canal Boats

Canals : Goose Creek and Little River Navigation (52' x 11 1/2' locks) ; James River and Kanawha Canal, incl. North River Navigation, (100' x 15' locks); Rivanna Navigation, (100' x 15' locks) **Descriptions** : General boat sizes reported up to 90'-93' length, 14 1/2' width, with draft of 4'. **Books** : River Atlases and publications available from VC & NS Sales, R.A. Davis, Rt. 2, Box 254, Lexington, VA 24450. • Also, see AC Guide #5. **Drawings** : JR & K Canal ; AC # 24 p. 3, AC # 48 p. 2 • Pantograph drawings from photos of '*Marshall*' and other packets were prepared by Theodore Haxall in 1977, and are in Valentine Museum. • Woodcuts & photos in "Waterway to the West", available from AC & TC or VC & NS Sales **Photos** : JR & K Boats: AC # 20 p. 2 (Packet Boat '*Marshall*'), AC # 20 p. 8, AC # 25 p. 8, AC # 27 p. 8, AC #36 p. 4. Photo in VA State Library, Richmond, shows Packet in '*Marshall*' class, possibly the '*Joseph C. Cabell*'. Negative #A9-1435 (25680), photo # 12522, in Library of Congress, taken 1865, shows excellent construction detail of a packet boat of the '*Marshall*' class, a decked freighter, and an open freighter. • Photo from VA Historical Society, 428 North Blvd., Richmond, VA 23221, shows packet of '*Marshall*' class. • More photos of the '*Marshall*' are in the Jones Memorial Library, Lynchburg, VA • JR & K Packet, AC # 25 p. 8. **Remains** : Remains of only boat ever built on GR & LRN are in river by water gauge tower above Ball's Mills, now Evergreen Mills. Size estimated at 46' x 10', so that two could be put into one C & O Canal lock. (See "Goose Creek Scenic River Atlas", by VC & NS) • On JR & K Canal, in Riverside Park near Lynchburg, VA, lay the remains of the steel-hulled Packet '*Marshall*', which was 90' x 14' (Photo AC # 20 p. 2). There are also remains of boat hulls near Lexington, one of which has been recovered (see TL, Fall 1991, p. 12). • Remains of two iron-hulled Packet boats and several wooden freighters were excavated in Richmond's canal basin in 1983-1985 • JR & K canal boat skeleton found in the bank of the canal at Maymont

Park, Richmond ACS (Photo, AC # 24 p. 2). • Well-preserved remains of a Rivanna boat fitted with side paddles run by a threshing machine have been measured, and a model of it built by the late Theodore Haxall, of Richmond, is in the Valentine Museum there. Original boat has since been lost in floods. **Plans** : Plans of Packet 'Marshall' were drawn by Martin Johnson and Edley Craighill of Lynchburg. Copy is in the Canal Museum, Syracuse, NY. **Models** : A series of over 20 models used on the JR & K, and UAN have been constructed by the late Theodore Haxall, and are in the Valentine Museum, Richmond, together with Haxall's files on VA canal boat photos, drawings, and descriptions. • A canal boat model is reported to be at the Mariners Museum in Newport News, VA. **Potential Sites** : JR & K Canal : The city of Richmond in 1975 opened a Bicentennial Park at the Great Ship Lock at the downstream entry to the canal (See AC # 12 p. 7) and restoration of a 9-mile section through the city is planned. • The NPS has restored Battery Creek Lock (# 7) at this Blue Ridge Parkway Park. • T.G. Hobbs Jr., 3204 Landon St., Lynchburg, VA 24504, is working toward the restoration of the canal in Lynchburg. • Rivanna Navigation received Scenic River status in 1979 (See American Canal Guide # 5). Efforts are underway to restore a 4-mile canal section on the Rivanna at Columbia, and to construct a replica of the side-wheel boat used on this navigation.

Virginia Batteaux

River Navigations : Rappahannock Navigation (74' x 11' locks); Roanoke/ Dan / Staunton River Navigation; Upper Appomattox Navigation (60' x 9' locks). **Books** : For historical details see "The James River Bateau", by and available from Bruce G. Terrell, 1919 Arlington Ridge Rd., Arlington, VA, 22202 for \$12.50 ppd., 199 pp., ill., published by the Program in Maritime History and Nautical Archaeology, East Carolina University, Greenville, NC 27858. • Also see publications from VC & NS, and AC Guide #5. **Remains** : Sixty James River Batteaux (Double-ended pole boats) were found in Richmond's canal basin in 1983-85 by members of ACS and VC & NS. They ranged from 45' to 60' long, 7' to 8' wide, and 1 1/2' to 2' high; and included a batteau probably built in 1789-1800 • Part of a RN batteau is in Fauquier County's Old Jail Museum at Waterloo and Ashby St., Warrenton, VA. It is 9' 9" wide, about 2' 6" high, with a 45° pointed bow. (See the "Scenic Rappahannock River Atlas", from VC & NS) • UAN batteau steering oar is on display in the Reynolds Metals Canal Park at 11th and Byrd St., Richmond, VA. • A complete batteau is reported to be in Lake Chesdin, above Petersburg. **Reconstructions** : The first batteau replica was built by Joe Ayers, founder of the James River Batteau Festival (JRBF). She is 40' long. Photos: National Geographic, June 1987, p.716 and Cover (on Potowmack Canal). Built in 1984, designed using photos of remains found in Richmond, she was named 'Columbia' in honor of the town in which she was built. (Photo in AC # 50 p. 1) She was scrapped and replaced in 1986 by the more authentic 'Minnie Lee'. • As of 1992, 42 James River Batteau replicas have been built and navigated (See TL, Summer 1992, p.6 for list of names, dates, lengths, and present status.) See AC # 66 p. 10 for photo of 'Lord Chesterfield'. A guidebook to building authentic batteau replicas, and copies of the annual JRBF program with photos of all the boats, of varying authenticity, are available from The James River Batteau Festival, c/o Sue Pechman, Sec'y, 33 Moorman Rd., Madison Heights, VA 24572. **Potential Sites** : Scenic River status was obtained for Staunton River Navigation, between Long Island and Brookneal (See AC # 12 p. 7, and AC Guide # 5). There is historic mention of Batteaux operating as far as Salem. • A batteau would also be appropriate for Parks in Petersburg, Fredericksburg, and Great Falls, VA.

Miscellaneous

Unidentified Photos : AC # 27 p. 8