

PAP 190

3573

July, 1963

~~PAP 188~~  
PAP 190

HY 4

Journal of the  
HYDRAULICS DIVISION

Proceedings of the American Society of Civil Engineers

BIBLIOGRAPHY ON THE HYDRAULIC  
DESIGN OF SPILLWAYS

Progress Report

Task Force on Hydraulic Design of Spillways,  
Committee on Hydraulic Structures, Hydraulic Division

HYDRAULICS BRANCH  
OFFICIAL FILE COPY

INTRODUCTION WHEN BORROWED RETURN PROMPTLY

The Task Force on Hydraulic Design of Spillways originally was formed in 1954 by the Committee on Design to advance and disseminate knowledge of the "Hydraulic Aspects of the Design and Operation of Spillways and Crest Gates." In the period 1954 through 1956, the task force stimulated the preparation of papers for publication and presentation at sessions of the Division. In 1957, the task force was reorganized and assigned the objective of preparing an annotated bibliography on the subject of "Hydraulic Design and Operation of Spillways." The scope of the assignment was again changed in 1960 and its assigned objective became the preparation of a selected rather than an annotated bibliography on the subject of Hydraulic Design of Spillways. Although the original subject included operation of spillways, this phase of the assignment was deleted because of the difficulty in evaluating spillway operation. The accompanying bibliography, therefore, constitutes the report of this task force's activities for its latest assignment.

This bibliography is not intended to be exhaustive. It is limited to material of primary value and lists only carefully selected articles which are current and useful in present (1963) design. Coverage of the principal references was sought from sources known to the task force. No doubt important references

Note.—Discussion open until December 1, 1963. Separate discussions should be submitted for the individual papers in this symposium. To extend the closing date one month, a written request must be filed with the Executive Secretary, ASCE. This paper is part of the copyrighted Journal of the Hydraulics Division, Proceedings of the American Society of Civil Engineers, Vol. 89, No. HY4, July, 1963.

PAP 190

were inadvertently overlooked. No attempt was made to include translations of foreign references which are listed in ASCE Manual of Engineering Practice No. 35. Also excluded are unpublished academic theses and articles on the hydrologic aspects of spillway design.

The list of references is arranged alphabetically by authors. A subject index is also provided and is cross-referenced to the list by authors.

The following members were at one time on the task force and have contributed to this project: W. R. Barrows, F. ASCE; A. J. Peterka, F. ASCE; E. R. Schultz, F. ASCE; and M. J. Webster, F. ASCE. The assistance of these former members is gratefully acknowledged. This report is respectfully submitted by the Task Force on Hydraulic Design of Spillways, Committee on Hydraulic Structures, Hydraulics Division.

D. R. F. Harleman, M. ASCE

W. E. Wagner, F. ASCE

S. M. Barnes, M. ASCE, Chairman

RECEIVED  
JUL 10 1963

13770

FILE COPY

HYDRAULIC ENGINEERING

## SUBJECT INDEX

*General References:*

- ASCE (List of translations of foreign literature on hydraulics)  
 Albertson, M. L., Barton, J. R., and Simons, D. B.; *Fluid Mechanics for Engineers*, Prentice-Hall, Inc., 1960  
 Barrows, H. K.; *Water Power Engineering* Bunyan, J. E.  
 Chow, V. T.; *Open Channel Hydraulics*, McGraw-Hill Book Company, Inc., 1959  
 Creager, W. P., Justine, J. D., and Hinds, J.; *Engineering for Dams*  
 Creager, W. P., and Justin, J. D.; *Hydroelectric Handbook*  
 Davis, C. V.; *Handbook of Applied Hydraulics* Escande, L.  
 Guyten, B.  
 Houk, Ivan E.; *Irrigation Engineering*, Volume II  
 Huff, A. N.  
 Jaeger, C.; *Engineering Fluid Mechanics*  
 King, H. W., and Prater, E. F.; *Handbook of Hydraulics*  
 Lamb, Owen P. (Incl. bibliography on air entrainment)  
 Lee, C. C. (Bibliography on weirs 1882-1940)  
 Leliavsky, S. (2); *Irrigation and Hydraulic Design*  
 Linsley, R. K., et al.; *Applied Hydrology*  
 Linsley, R. K., and Franzini, J. B.; *Elements of Hydraulic Engineering*  
 Mermal, T. W.; *Register of Dams in the U.S. National Resources Committee*; Low Dams  
 Noy, E. G.  
 Raven, F. A., et al. (annotated bibliography on cavitation)  
 Rich, G. R.  
 Rouse, H.; *Engineering Hydraulics*  
 Slichter, F. B.  
 U. S. Army Corps of Engineers, Office of Chief of Engineers; *Hydraulic Design—Spillways*  
 U. S. Army Corps of Engineers, Waterways Experiment Station; *Hydraulic Design Criteria*  
 U. S. Army Corps of Engineers, Office of Chief of Engineers; *Tainter Gates*  
 U. S. Committee of International Commission on Large Dams (See Mermal, T. W.)  
 U. S. Department of the Interior, Bureau of Reclamation; *Dams and Control Works*  
 U. S. Department of the Interior, Bureau of Reclamation; *Design of Small Dams*  
 U. S. Department of the Interior, Bureau of Reclamation; *Hydraulic design of stilling basins and bucket energy dissipators*, 1963, 2nd Edition

- U. S. Department of the Interior, Bureau of Reclamation; *Hydraulic and excavation tables*  
 U. S. Department of the Interior, Bureau of Reclamation; *Reclamation Project Data*  
 U. S. Department of the Interior, Bureau of Reclamation; *Water measurement manual*  
 U. S. Tennessee Valley Authority; *Technical Report No. 24, Volume I, Civil and Structural Design*  
 Wiley, A. J.; *High Dams—a symposium*  
 Williams, G. S., and Hazen, A.; *Hydraulic Tables*  
 Woodward, S. M., and Posey, C. J.; *Steady flow in open channels*

*Air Entrainment*

- Frankovic, A.  
 Gumensky, D. B. (2)  
 Halbronn, G., et al.  
 Hall, L. S., et al.  
 Hamid, M. A., et al.  
 Hickox, G. H. (2)  
 Howe, J. W., et al.  
 Kalinske, A. A., and Robertson, J. W.  
 Lamb, O. P.  
 Lane, E. W.  
 Straub, L. G., and Anderson, A. G. (2)  
 Straub, L. G., and Lamb, O. P. (2)

*Cavitation*

- Ball, J. W.  
 Carnegie Institute of Technology (2)  
 Knapp, R. T., and Hollander, A.  
 Lemoine, R.  
 Maitra, B.  
 Poulter, T. C.  
 Raven, F. A., et al. (annotated bibliography)  
 Rouse, H., and Hassan, M. M.  
 Thomas, H. A., and Hopkins, W. J.  
 U. S. Army Corps of Engineers, Waterways Experiment Station (several)  
 Vennard, J. K., et al.

*Closed Conduit Spillways*

- Blaisdell, F. W. (2)  
 Blaisdell, F. W., and Donnelly, C. A.  
 Pradley, J. N., and Thompson, L. R.  
 Silberman, E., and Ripken, J. F.  
 Taylor, G. A., and Elsdon, O.

*Crests and Crest Shapes*

- Blaisdell, F. W.  
 Pradley, J. N. (2)  
 Camp, C. S., and Howe, J. W.  
 Cannell, P. J.  
 Central Board of Irrigation and Power, India

Chitale, S. V.  
 Coleman, G. S., and Smith, D.  
 Collinge, V. K.  
 East, Lewis R.  
 Escande, L.  
 Foster, H. A.  
 Ganguli, M. K., et al.  
 Georgescu, P., et al.  
 Goodrich, R. D.  
 Grzywnski, A.  
 Harkauli, A.  
 Hickox, G. H.  
 Ishihara, T., et al.  
 Jansen, R. B.  
 Kirkpatrick, K. W.  
 McNow, J. S., et al.  
 Nelidov, I. M.  
 Paderi, F.  
 Puls, L. G.  
 Rajaratman, N.  
 Rand, W.  
 Robinson, A. R.  
 Rouse, H.  
 Rouse, H., and Reid, L.  
 Schonfeld, J. D.  
 Scimeni, E.  
 U. S. Army Corps of Engineers (several)  
 U. S. Department of the Interior, Bureau of  
 Reclamation (several)  
 Vitols, A.

#### *Discharge Coefficients*

See Crests and Crest Shapes

#### *Drop-Inlet Entrances*

See Morning-Glory Shaft Spillways

#### *Emergency Spillways*

See Fuse Plug

#### *Energy Dissipators (See also Hydraulic Jump)*

Ahmad, N. (4)  
 Balloffet, A.  
 Barr, D. I. H.  
 Barr, D. W., and Rosene, R. W.  
 Beichley, G. L., and Peterka, A. J. (2)  
 Blaisdell, F. W. (2)  
 Bose, N. K., and Pramanik, H. R.  
 Bradley, J. N., and Peterka, A. J.  
 Bryant, J. W.  
 Cabelka, J.  
 Campus, F.  
 Chitale, S. V.  
 Dooge, J. C. I.  
 Fergusson, F. F.  
 Fiala, G. R., and Albertson, M. L.  
 Framji, K. K.  
 Gandolfo, J. S., and Cotta, R. D. (2)  
 Gedney, R. H.  
 Harleman, D. R. F.  
 Hathaway, G. A.  
 Hellstrom, B.  
 Hickox, G. H.  
 Keener, K. B.  
 Keim, S. R.

Kuttiyamm, T. P., and Rao, J. V.  
 Lenz, A.  
 Levi, E., and Escamilla, G. G.  
 Liskovec, L.  
 Luthra, S. D. L.  
 Marchi, G. de  
 Martin, H. M., and Carlson, E. J.  
 McPherson, M. B., and Karr, M. H.  
 Meyer-Peter, E., and Muller, R.  
 Moore, W. L.  
 Narasimham, R. K. Y. (2)  
 Norby, J. V.  
 Novak, P.  
 Poggi, B.  
 Rhone, T. J., and Peterka, A. J.  
 Roberts, D. F.  
 Rohatgi, D. P.  
 Scimeni, E.  
 Tison, L. J.  
 Tonini, D.  
 U. S. Department of the Interior, Bureau of  
 Reclamation (several)  
 U. S. Army Corps of Engineers, Waterways  
 Experiment Station (several)  
 U. S. Army Corps of Engineers, Bonneville  
 Hydraulic Laboratory  
 Warnock, J. E.  
 Wen-Hsiung, Li

#### *Entrance Conditions*

Allen, J., and Taylor, G. A.  
 Ball, J. W.  
 Binnie, A. M., and Wright, R. K.  
 Blaisdell, F. W.  
 Bloomer, N. T., et al.  
 Engel, F. V. A., and Stainsby, W.  
 Foster, H. A.  
 Paderi, F.  
 Rouse, H., and Hassan, M. M.

#### *Erosion*

See Energy Dissipators

#### *Fuse Plug*

Tinney, E. R., and Hsu, H. Y.  
 U. S. Army Corps of Engineers, Waterways  
 Experiment Station (Misc. Paper 2-374)

#### *Gates, General*

Ball, J. W.  
 Boissonnault, F. L. (estimating data)  
 Boucher, P. C.  
 Buzzell, D. A.  
 Engineering News-Record (anonymous)  
 Escande, L.  
 Halliday, B. A., and Hoffman, C. J.  
 Kohler, W. H.  
 Lenz, A.  
 Madany, M. el  
 Maitre, R.  
 Niederhoff, A. E.  
 Roberts, K. C.  
 Simmons, W. J., Jr.

#### *Gates, Bascule*

Hollingshead, W. E.

*Gates, Cylinder*

Ball, J. W.  
Martin, H. M., and Ball, J. W.

*Gates, Roller*

U. S. Army Corps of Engineers, St. Paul District (2)

*Gates, Flashboards*

Engineering News-Record (Anonymous)  
Marsh, F. D.  
Walton, J.  
Wright, C. A., and Betts, C. A.

*Gates, Drum*

Bradley, J. N.  
Engineering News-Record (Anonymous)

*Gates, Radial*

See Gates, Tainter

*Gates, Tainter (or Radial)*

Angelin, S. A.  
Buzzell, D. A.  
Engineering News-Record (Anonymous)  
Kenigsberg, A. H.  
Rhone, T. J.  
Ripley, T. M.  
Schuster, J. C.  
Streiff, A.  
Toch, A.  
U. S. Army Corps of Engineers, St. Paul District  
U. S. Army Corps of Engineers, Office of Chief of Engineers

*High Velocity Flow (See also Air Entrainment)*

Ball, J. W.  
Hall, L. S.  
Ippen, A. T., and Knapp, R. T., et al.  
Keener, K. B.

*Hydraulic Jump (See also Energy Dissipators)*

Advani, R. M. (2)  
Argyropoulos, P. A.  
Betters, F.  
Chitale, S. V.  
Diskin, M. H.  
Forsters, J. W., and Skrinde, R. A.  
Hickox, G. H.  
Howell, D. D.  
Kindsvater, C. E.  
Lin, K-M, and Priest, M. S.  
Moore, W. L., and Morgan, C. W.  
Rouse, H., Siao, T. T., and Nagarantam, S.  
Shukry, A.  
Smith, C. D.

*Hydraulic Models*

Allen, J.  
American Society of Civil Engineers  
Askin, F. R.  
Brown, F. R. (2)  
Commonwealth Engineering (Anon.)  
Davis, L. M.  
Harrison, E. S., and Kindsvater, C. E.

Lane, E. W., and Lee, J. D.

Offitzeroff, A. S.

Peterka, A. J.

Straub, L. G.

Thomas, C. W.

U. S. Department of the Interior, Bureau of Reclamation (several)

U. S. Army Corps of Engineers, Waterways Experiment Station (several)

Warnock, J. E., Dewey, H. G., Jr., et al.

*Hydraulic Model Studies and Design Memoranda of Specific Projects*

Anderson, Sigurd H.; Holcombe Dam, St. Anthony Falls Spillway

Barnes, G. E., and Jobes, J. G.; Muskingum Water-Shed Project

Farr, D. I. H.; Kincardine Power Station  
Bermel, K. J., and Sanks, R. L.; Prown Canyon Debris Barrier

Blaisdell, F. W., and Donnelly, C. A.; Whiting Field N.A.A.

Pryce, J. B.; Stewartville

Carnegie Institute of Technology; Pluestone Dam, Virginia, Bonneville Dam, Oregon-Washington, Crooked Creek Reservoir Dam, Pa., Tionesta Creek Reservoir Dam, Pa., Tygart River Reservoir Dam, West Va., Yaughigheny River Dam, Pa.

Case Institute of Technology; Mahoning Dam, Pa., Mount Morris Dam, N. Y.

Chitale, S. V.; Hanumannagar Farrage, Kosi River

Commonwealth Engr. (Anon.); Cairn Curran Dam, Victoria

Copper Union, N. Y.; Popolopen Water Supply Dam, N. Y.

Cornell University; Almond Dam, N. Y., Arkport Dam, N. Y., Whitney Point Dam, N. Y.

Crump, E. S.; Fassideri Project, Greece  
DeLapp, Warren; Chippewa River Reservoir Dam

Douma, J. H.; Green Mountain Dam  
Nagler, F. A., and Davis, A.; Keokuk Dam, Iowa

O'Shaughnessy, P. S.; Madden Dam

Peter, Y.; Kishon Weir

Peterka, A. J.; Fontana Dam

Sowers, G. F.; Mount Morris Dam

U. S. National Bureau of Standards; Indian Rock Dam, Savage River Dam

U. S. Army Corps of Engineers  
Binghamton District; Arkport side-channel spillway

Bonneville Hydraulic Laboratory; Bonneville Dam (3), Chief Joseph Dam, Dorena Dam (2), Hartland Dam (side channel), Mud Mountain Dam

Denison District; Denison Dam  
Garrison District; Garrison Dam, Townshend Dam

Los Angeles District; Prado Flood Control Dam, Santa Fe Flood Control Dam, Salinas Dam

- Missouri River Division; Marshall Creek Dam
- New England Division; Otter Brook Dam
- Providence District; Union Village Dam
- St. Paul District; Baldhill Dam, Coralville Reservoir, Dam No. 1, Mississippi River, Homme Reservoir, Orwell Reservoir
- Waterways Experiment Station; Allatoona Dam, Arkabutla Dam, Belton Dam, Benbrook Dam, Berlin Dam, Big Bend Dam, Bluestone Dam, Buford Dam, Buggs Island Dam, Bull Shoals Dam, Canton Dam, Center Hill Dam, Cheat-ham Lock and Dam, Clark Hill Dam, Columbia Dam, Conchas Dam, Cone-maugh Dam, Delaware Dam, Denison Dam, Detroit Dam, Dewey Dam, Dillon Dam, East Branch Reservoir, Enid Dam, Eufaula Dam, Folsom Dam, Fort Gibson Dam, Fort Randall Dam, Gar- rison Dam, Gavins Point Dam, Gene- gantslet Dam, Great Salt Plains Dam, Greenup Locks and Dam, Harlan Coun- ty Dam, Hartwell Dam, Jackson Dam, Jim Woodruff Dam, Markland Locks and Dam, John Martin (Caddoa) Dam, Maxwell and Opekiska Locks and Dam, McGee Bend Dam, Narrows Dam, New Cumberland Locks and Dam, Norfolk Dam, Old River Overbank Structure, Old River Low-Sill Control Structure, Osceola Dam, Philpott Dam, Pike Is- land Locks and Dam, Pine Flat Dam, Possum Kingdom Dam, St. Lucie Canal, Santee River Dam, Sardis Dam, Savage River Dam, Stewarts Ferry Dam, Ta- ble Rock Dam, Townsend Dam, Wap- papello Dam, Warrior Dam, Whitney Dam, Wolf Creek Dam
- U. S. Department of the Interior, Bureau of Reclamation; Alamogordo Dam, Anchor Dam, Anderson Ranch Dam, Angostura Dam, Bhakra Dam, Boca Dam, Bonny Dam, Boulder Canyon Project Studies, Boysen Dam, Cachuma Dam, Canyon Fer- ry Dam, Capilano Dam, Cascade Dam, Casitas Dam, Cedar Bluff Dam, Cherry Creek Dam, Cleveland Dam, Davis Dam, Deer Creek Dam, Dickinson Dam, Ele- phant Butte Dam, Enders Dam, Falcon Dam, Fontenelle Dam, Fresno Dam, Glen Ann Dam, Glen Canyon Dam, Gorge High Dam, Grassy Lake Dam, Green Mountain Dam, Heart Butte Dam, Horse Mesa Dam, Horseshoe Dam, Hungry Horse Dam, Key- hole Dam, Kortes Dam, Medicine Creek Dam, Moon Lake Dam, Navajo Dam, Nimbus Dam, Ochoco Dam, Olympus Dam, Owyhee Dam, Palisades Dam, Paonia Dam, Prineville Dam, Robles Diversion Dam, Ross Dam, Sanford Dam, Scofield Dam, Shadehill Dam, Shadow Mountain Dam, Sherburne Lake Dam, Sly Park Dam, Stewart Mountain Dam, Tiber Dam, Tieton Dam, Trinity Dam, Unity Dam, Webster Dam, Willow Creek Dam, Wu- Sheh Dam, Yanhee Dam, Yellowtail Dam, U. S. Tennessee Valley Authority; Boone Project—TVA, Fontana Project, Fort Patrick Henry Project
- Uppal, H. L.; Bhakra Dam
- Warnock, J. E.; Grand Coulee
- Worcester Polytechnic Institute; Knightville Dam, Mass., Surry Mountain Dam, N. H., Union Village Dam, Vermont
- Zaky, H.; Gebel Aulia Dam
- Hydraulics of Open Channels*
- Bakhmeteff, B. A.
- Bauer, W. J.
- Chow, V. T.
- Gumensky, D. B.
- Hill, R. A., and McConaughy, D. C.
- Iowa, State University of
- Mayer, P. G.
- Thomas, H. A.
- Tracy, H. J., and Carter, R. W.
- U. S. Army Corps of Engineers, Los Angeles District
- U. S. Department of the Interior, Bureau of Reclamation
- Viparelli, M.
- Information on Specific Projects or Areas*
- Brace, H. P.; Kurra Falls, Nigeria
- Cochrane, R. B.; Northwest projects
- Davis, C. V., and Meyer, A. A.; Fontana, TVA
- Dickinson, M. L.; Chatuge and Nottely
- Dienhart, A. V.; St. Anthony Falls
- Engineering News-Record (anon.); Horseshoe Dam, Arizona, Grand Coulee Spillway, Ohio River, Lake Burnt Mills Reservoir
- Engstrom, U. V.; Enders Dam
- Fraps, J. A.; Arizona Dam Code
- Goodhue, H. W., et al.; Apalachia and Ocoee No. 3, TVA
- Hardin, J. R., et al.; Old River—Mississippi
- Hickox, G. A.; TVA Projects, Norris Dam
- Hoeffler, H. J.; Fort Randall Dam, Missouri River
- Holden, O., and Soare, J. L.; Niagara
- Keener, K. B.; Grand Coulee Dam, Shasta Dam, Boulder Dam Spillway Tunnel
- Knappen, T. T.; Muskingum Project
- Leonard, G. K., and Mattern, D. H.; Watauga Project, TVA
- Mattern, D. H.; Wilbur Project
- Meyer, A. A.; Fontana Dam
- Mundall, T.; Watts Bar and Fort Loudoun
- Myburgh, R. I. D. M.; Ebenezer Dam Spillway
- Niederhoff, A. E.; Tonoyama Dam, Japan
- Norby, J. V.; Holleforsen Power Plant
- Nowell, J. C.; Cherokee and Douglas, TVA
- Oliver, G. C. S.; Eye Brook Reservoir Siphon Spillway
- O'Shaughnessy, P. S.; Madden Dam
- Pearce, C. E.; Hiwassee Dam
- Puls, L. G.; Hungry Horse Dam, Wilson Dam, Alabama
- Randolf, R. R., Jr.; Madden Dam



- Rich, G. R.; TVA Projects  
 Rohatgi, D. P.; Ramganga Weir, India  
 Singh, S., et al.; Bhakra Dam  
 Smith, L. G.; Owyhee Dam  
 Streiff, A.; Villacampo Dam, Spain  
 U. S. Army Corps of Engineers, Waterways Experiment Station; Chief Joseph Dam, Pine Flat Dam, McNary Project, Norfolk Dam  
 U. S. Department of the Interior, Bureau of Reclamation; Boysen Dam, Cachuma Dam, California, Canyon Ferry Dam, Cedar Bluff Dam, Colorado Big Thompson, Davis Dam, Eklutna Dam, Enders Dam, Glendo Dam, Heart Butte Dam, Hungry Horse Dam, Jamestown Dam, Kortes Dam, Medicine Creek Dam, Monticello Dam, California, Nimbus Dam, O'Sullivan Dam, Palisades Dam, Platoro Dam, Rogue River Basin Project (Includes Howard Prairie Dam, Keene Creek Dam, and Emigrant Dam), Tiber Dam, Trenton Dam  
 U. S. Tennessee Valley Authority; Apalachia, Ocoee No. 3, Nottely and Chatuge, Cherokee Project, Chicamauga Project, Douglas Project, Fontana Project, Fort Loudoun Project, Guntersville Project, Hiwassee Project, Kentucky Project, Norris Project, Pickwick Landing Project, Upper Holston Projects, Watts Bar Project, Wheeler Project  
 Warnock, J. E.; Grand Coulee  
 Webster, Marvin J.; Pacific Northwest Projects  
 Weileman, E. H.; Kentucky Project
- Lateral Spillways*  
 See Side-Channel Spillways
- Morning-Glory Shaft Spillways*  
 Abecasis, F. M.  
 Blaisdell, F. W., and Donnelly, C. A. (2)  
 Bradley, J. N., Wagner, W. E., and Peterka, A. J.  
 Dodge, E. R.  
 Lencastre, A.  
 Luigi, M. L.  
 Mortara, M.  
 Myburgh, R. I. D. M.  
 Nelson, G. H.  
 Smith, L. G.  
 Stimson, L. M.  
 Taylor, G. A., and Elsdon, O.  
 Williamson, James
- Piers (See also Crests and Crest Shapes)*  
 Escande, L., and Sabathe, G.
- Sediment Control*  
 See Energy Dissipators
- Side Channel Spillways*  
 Camp, T. R.  
 Coleman, G. S., and Smith, D.  
 Collinge, V. K.  
 De Marchi, G.
- Farney, H. S., and Markus, A.  
 Favre, H.  
 Frazer, W.  
 Hinds, J.  
 McCormack, A. L.  
 Nimmo, W. H. R.  
 Peter, Y.  
 Tults, H.  
 U. S. Army Corps of Engineers, Binghamton District (Arkport Project)  
 U. S. Army Corps of Engineers, Bonneville Hydraulic Laboratory (Hartland Dam)  
 U. S. Department of the Interior, Bureau of Reclamation
- Side Weirs*  
 See Side-Channel Spillways
- Siphons*  
 Benfrattello, G.  
 Borelli, M.  
 Civil Engineering, London (Anon.)  
 Doddiah, D.  
 Joglekar, D. V.  
 Joglekar, D. V., et al.  
 Lamoen, J., et al.  
 McBirney, W. B.  
 Naylor, A. H.  
 Nelidov, I. M.  
 Oliver, G. C. S.  
 Rao, N. S. G.  
 Rock, E.  
 Stevens, J. C. (2)
- Ski-Jump*  
 See Energy Dissipators
- Submerged Flow*  
 See Weirs, Submerged
- Stable Channels*  
 See Energy Dissipators
- Stilling Basins*  
 See Energy Dissipators
- Vibration in Hydraulic Structures*  
 Ball, J. W.  
 Campbell, F. B.  
 Engineering News-Record (Anon.)  
 Fisher, H.  
 Naudascher, E.  
 Pariset, E.  
 Petrikat, K.
- Weirs, Broadcrested*  
 Delleur, J. W.  
 Doeringsfeld, H. A., and Barker, C. L.  
 Fathy, A.  
 Kandaswamy, P., et al.  
 Long, L. W., and Conner, N. W.  
 Tracy, H. J.
- Weirs, General*  
 Lee, C. C.  
 Mavis, F. T.

*Weirs, Special Designs*

Gerritsen, F.  
 Gordier, R. L.  
 Grush, D. I.  
 Jameson, A. H.  
 Kindsvater, C. E., and Carter, R. W.  
 Lenz, A. T.  
 Thomas, A. R.

*Weirs, Submerged*

Angelin, S. A.

Blaisdell, F. W., and Donnelly, C. A.  
 Bradley, J. N.  
 Cox, G. N.  
 Mavis, F. T.  
 Smith, R. A.  
 U. S. Department of the Interior, Bureau of Reclamation  
 Vennard, J. K., and Weston, R. F.  
 Villemonte, J. R.

## AUTHOR INDEX

- Abecasis, F. M., "The Behavior of Morning-Glory Shaft Spillways," IAHR Proceedings 6th, The Hague 1955
- Advani, R. M., "Determination of Elements of Hydraulic Jump," India, Central Board of Irrig. & Power, JV 11 n 2 Apr. 1954, p. 248-76
- Advani, R. M., "Generalized Method for Solution of Hydraulic Jump Problems in Rectangular Channels," India J Power & River Valley Development, V 10 n 7 July 1960, p. 11-15
- Ahmad, N., "A Comparative Study of Various Types of Energy Dissipators," IAHR Proceedings 3rd, Grenoble, 1949
- Ahmad, N., "Causes of Retrogression Below Islam Barrage and Remedial Measures to Cause Accretion and Push the Hydraulic Jump to the Toe of the Glacis," IAHR Proceedings 4th, Bombay 1951
- Ahmad, N., "Mechanism of Erosion Below Hydraulic Works," IAHR Proceedings 5th, Minneapolis 1953
- Ahmad, N., "Optimum Dimensions of Energy Dissipators Below Flat Weirs and Falls," IAHR Proceedings 3rd, Grenoble 1949
- Albertson, M. L.; Barton, J. R.; and Simons, D. B., "Fluid Mechanics for Engineers," Prentice-Hall, Inc., 1960
- Allen, J., "Scale Models in Hydraulic Engineering," Longmans, Green & Co., New York, N. Y., 2nd ed 1952, 415 p.
- Allen, J., and Taylor, G. A., "Note on Free Vortices Observed in Scale-Model Tests of Bellmouth Overflow Spillway," Instn. Civ Engrs - Proc V 10 July 1958, Paper n 6292, p. 353-8
- American Society of Civil Engineers, Committee of the Hydraulics Division on Hydraulic Research, Manual of Engineering Practice No. 25, "Hydraulic Models," ASCE, New York, 1942
- American Society of Civil Engineers, "List of Translations of Foreign Literature on Hydraulics," Manual of Engineering Practice, n 35, 1957, 81 pp.
- Anderson, Sigurd H., "Hydraulic Model Studies for the Holcombe Dam," Univ. of Minnesota, St. Anthony Falls Hyd. Lab., Project Report No. 9, 1948, 58 pp. 36 illus. (Sponsored by the Northern States Power Co.)
- Anderson, Sigurd H., "Hydraulic Model Studies of St. Anthony Falls Spillway," Univ. of Minn., St. Anthony Falls Hyd. Lab., Project Report No. 33, 1952, 18 pp., 9 illus. (Sponsored by Northern States Power Co.)
- Angelin, S. A., "A Submergible Type of Tainter Gate," IAHR Proceedings 6th, The Hague 1955
- Argyropoulos, P. A., "General Solution of the Hydraulic Jump in Sloping Channels," Proc. ASCE Vol. 88 (J. Hyd. Div.) HY 4 July 1962 paper No. 3190, 16 pp.
- Askin, F. R., "Use of Small Scale Models in Design of Hydraulic Structures," New Zealand Instn. Engineers, Proc. V 37, 1950-51, p. 113-55 (discussion) 156-65
- Bakhmeteff, B. A., "Hydraulics of Open Channels," McGraw-Hill Book Co., Inc., New York (1932)
- Ball, J. W., "Cavitation and Vibration Studies for a Cylinder Gate Designed for High Heads," IAHR Proceedings 8th, Montreal, 1959
- Ball, J. W., "Hydraulic Characteristics of Gate Slots," ASCE Proc V 85 (J. Hydraulics Div.), n HY 10 Oct 1959, Pt. 1, Paper n 2224, p. 81-114
- Ball, J. W., "Importance of Smooth Surfaces on Flow Boundaries Downstream from Outlet Works Control Gates," U. S. Dept. of Interior, Bureau of Reclamation, Hyd. Lab. Report No. Hyd-448, July 1958
- Ball, J. W., "Why Close Tolerances are Necessary Under High-Velocity Flow," U. S. Dept. of Interior, Bureau of Reclamation, Hyd. Lab. Report No. Hyd-473, Oct. 1960 (unpublished report; copies available on loan only)
- Balloffet, A., "Pressures on Spillway Flip Buckets," ASCE Proc. V 87 (J Hydraulics Div.), n HY 5, Sept 1961, pt. 1, paper 2930, p. 87-98
- Barnes, G. E., and Jobes, J. G., "Construction and Testing of Hydraulic Models, Muskingum Water Shed Project," Transactions



- ASCE Vol. 103 (1938), page 230
- Barr, D. I. H., "Hydraulic Model Study of Head Dissipation at Kincardine Power Station," *Instn Civ Engrs - Proc V* 10 July 1958, Paper n 6289, p. 305-20
- Barr, D. W., and Rosene, R. W., "Loose Rock Spillway for Low Head Dam," *Civil Engineering*, Vol 28, 1958, page 246
- Barrows, H. K., "Water Power Engineering," McGraw-Hill Book Co., Inc., 1943
- Bauer, W. J., "Turbulent Boundary Layer on Steep Slopes," *Transactions ASCE Vol.* 119 (1954), pp. 1212-1242
- Beichley, G. L., and Peterka, A. J., "Hydraulic Design of Hollow-Jet Valve Stilling Basins," *Transactions ASCE Vol.* 127 (1962)
- Beichley, G. L., and Peterka, A. J., "Hydraulic Design of Slotted Spillway Buckets," *ASCE Proc V* 85 (J. Hydraulics Div.), n HY 10 Oct 1959, pt 1, paper n 2200, pp. 1-36
- Benfrattello, G., "Experiments on Transient of Self-Priming Siphons," *IAHR Proceedings 6th, The Hague 1955*
- Bermel, K. J., and Sanks, R. L., "Model Study of Brown Canyon Debris Barrier," *ASCE Proc V* 72 n 5 May 1946, p. 613-28 (discussion), n 9, 10, Nov p. 1325-6, Dec p. 1410-16, also V 74 n 2 Feb 1948, p. 171-2
- Bettess, F., "Note on Hydraulic Jump," *Civil Engineering (London)*, V 55, n 647, June 1960, p. 798
- Binnie, A. M., and Wright, R. K., "Laboratory Experiments on Bellmouth Spillways," *Instn. Civ. Engrs.*, JV 15, n 3, Jan 1941, p. 197-219 and (discussion) V 16 n 8 Oct 1941, p. 450-9
- Blaisdell, F. W., "Design of Soil Erosion Control Structures," *Agricultural Engrg.* V 26 n 3 Mar 1945, p. 107-8, 110
- Blaisdell, F. W., "Development and Hydraulic Design, St. Anthony Falls, Stilling Basin," *Transactions ASCE Vol.* 113 (1948)
- Blaisdell, F. W., "Equation of the Free-Falling Nappe," *ASCE Proc. Sep. No.* 482 (1954)
- Blaisdell, F. W., "Hood Inlet for Closed Conduit Spillways," *ASCE Proc.*, No. 2478HY5, 1960
- Blaisdell, F. W., "Hydraulic Fund of Closed Conduit Spillways," *ASCE Proc. Sep. No.* 354, Vol. 79 (1953), 14 pp. 6 illus., also published as Univ. of Minnesota, St. Anthony Falls Hyd. Lab. Technical Paper No. 14-A. Work conducted by Agricultural Research Service, U. S. Dept. of Agriculture.
- Blaisdell, F. W., and Donnelly, C. A., "The box Inlet Drop Spillway and Its Outlet," *Transactions ASCE Vol.* 121 (1956), p. 955-94
- Blaisdell, F. W., and Donnelly, C. A., "Capacity of Box Inlet Drop Spillways Under Free and Submerged Flow Conditions," Conducted by Soil Conservation Service, USDA, published by Univ. of Minnesota, St. Anthony Falls Hyd. Lab., as Technical Paper No. 7-B 1951, 36 pp., 14 illus.
- Blaisdell, F. W., and Donnelly, C. A., "Hydraulics of Closed Conduit Spillways," Univ. of Minnesota, St. Anthony Falls Hyd. Lab., Tech Papers n 12, 18, 19, 20 Series B, 1958, 167 p. Pt. 1 (n 12); Theory and its application, 22 p. Pts. 2-7 (n 18); Tests on several forms of spillway, 50 p. Pts. 8-9 (n 19); Laboratory and field tests, 54 p. Pt. 10 (n 20); Hood inlet, 41 p.
- Blaisdell, F. W., and Donnelly, C. A., "Hydraulic Model Studies for Whiting Field Naval Air Station," Univ. of Minnesota, St. Anthony Falls Hyd. Lab., Project Report No. 23, 1950, 50 pp. 51 illus. (Sponsored by Soil Conservation Service, USDA)
- Bloomer, N. T., Markland, E., and Power, G., "Design of Two-Dimensional Entrances to Hydraulic Channels," *Engineer V* 199 n 5184, June 3, 1955, p. 765-767
- Boissonnault, F. D., "Estimating Data for Reservoir Gates," *ASCE Proc V* 73 n 7 Sept 1947, p. 1027-46, also V 74 n 1 Jan 1948 p. 143-6, n 3 Pt. I, Mar, p. 400-2, n 5 May p. 793-800, n 6 June p. 1029-31
- Borelli, M., "Stability of Aerated Siphons," *IAHR Proceedings 6th, The Hague 1955*
- Bose, N. K., and Pramanik, H. R., "Scour Below Weirs," *IAHR Proceedings 2nd, Stockholm, 1948*
- Boucher, P. L., "Some Types of Modern Sluice Gates," *Civil Engineering (London)* V 37 n 430 Apr 1942 p. 72-5
- Brace, H. P., "Semi-Automatic Floodgates on 600-ft. Spillway (Kurra Falls, Nigeria)," *Engineer V* 187 n 4867 May 6, 1949, p. 509-10
- Bradley, J. N., "Discharge Coefficients for Irregular Overflow Spillways," U. S. Dept. of the Interior, Bureau of Reclamation, Engineering, Monograph No. 9, 1952 (also listed under U. S. Dept. of Interior)
- Bradley, J. N., "Rating Curves for Flow Over Drum Gates," *Transactions ASCE Vol.* 119 (1954)
- Bradley, J. N., "Studies of Flow Characteristics, Discharge and Pressures Relative to Submerged Dams," U. S. Dept. of Interior, Bureau of Reclamation, Hyd. Lab. Report No. 182, 1945 (unpublished report; copies available on loan only)
- Bradley, J. N., and Peterka, A. J., "Hydraulic Design of Stilling Basins," *ASCE Proc. Sep. No.* 1402HY5 (1957). Also see U.S.B.R. Engrg. Monograph No. 25, 1958
- Bradley, J. N., Wagner, W. E., and Peterka, A. J., "Morning-Glory Shaft Spillways: A Symposium," *Transactions ASCE Vol.* 121 (1956), p. 312-409
- Brown, F. R., "Hydraulic Models as Aid to Development of Design Criteria," U.S. Army Corps of Engrs., Waterways Exp. Station, Bulletin No. 37, June 1951 (24 pp.)
- Brown, F. R., "Spillway Research of Waterways Experiment Station," *Civil Engineering*, Vol. 25, No. 4, p. 41, April 1955
- Bryant, J. W., "Spillway Apron Paved with Soil-Cement," *Engrg. News-Record V* 1953, p. 6, Aug 5, 1954, p. 32
- Bryce, J. B., "Stewartville Spillway Performance—Model and Prototype," *Engrg. J V* 34,

- n 2, Feb. 1951, p. 76-9
- Bunyan, J. E., "Some Aspects of Design of Hydraulic Structures," *Instn. Civ. Engrs., Proc V 10*, June 1958, paper n 6265, p. 145-62
- Buzzell, D. A., "Tainter Gates of Simplified Design," *Engrg. News-Record V 140*, n 14, Apr 1, 1948, p. 500-1
- Buzzell, D. A., "Trends in Hydraulic Gate Design," *Transactions ASCE*, Vol. 123 (1958), p. 27-42
- Cabelka, J., "The Losses of Mechanical Energy of the Overfall Jet on the Spillway Section of Dams," *IAHR Proceedings 6th*, The Hague 1955
- Camp, C. S., and Howe, J. W., "Tests of Circular Weirs," *Civil Engineering (N. Y.)*, V 9 n 4, p. 247-8, April 1939
- Camp, T. R., "Lateral Spillway Channels," *Transactions ASCE* Vol. 105 (1940), p. 606
- Campbell, F. B., "Vibration Problems in Hydraulic Structures," *Transactions ASCE* Vol. 127 (1962)
- Campus, F., "Two Studies of Dispositions Destined to Prevent or to Reduce Erosion Downstream of Dams," *IAHR Proceedings 2nd*, Stockholm, 1948
- Cannell, P. J., "Method of Determining Lip of Circular Pipe Spillway," *Civil Engineering*, N. Y., V 10 n 7, July 1940, p. 450-1
- Carnegie Inst. of Tech., Conducted for U. S. Army Corps of Engrs., Huntington District, August 1942, "A Report of Model Studies on Cavitation Bluestone Dam, New River, Hinton, West Virginia"
- Carnegie Inst. of Tech., Conducted for U. S. Army Corps of Engrs., North Pacific Division, March 1943, "Report on Model Studies on Cavitation, Bonneville Dam, Bonneville, Oregon"
- Carnegie Inst. of Tech., Conducted for U. S. Army, Corps of Engineers, Pittsburgh District, Nov 1938, "Report, Hydraulic Model Tests of Spillway and Outlet Works for Crooked Creek Reservoir Dam, Armstrong County, Pennsylvania"
- Carnegie Inst. of Tech., Conducted for U. S. Army Corps of Engrs., Pittsburgh District, Unnumbered report, Sept 1938, Supplemental report May 1940, "Report, Hydraulic Model Tests of Spillway and Outlet Works for Tionesta Creek Reservoir Dam, Tionesta, Pa."
- Carnegie Inst. of Tech., Conducted by Carnegie Tech. for U. S. Army, Corps of Engrs., Pittsburgh District, Unnumbered report May 1937, "Report, Hydraulic Model Tests of Spillway and Outlet Works for Tygart River Reservoir Dam, Grafton, West Virginia"
- Carnegie Inst. of Tech., Conducted for U. S. Army Corps of Engrs., Pittsburgh District, March 1941, "Report on Hydraulic Model Tests of Spillway and Outlet Works of Youghiogheny River Dam, Confluence, Pa."
- Case Inst. of Tech., conducted for U. S. Army Corps of Engrs., Pittsburgh District, May 1938, "Report on Hydraulic Model Studies on the Spillway and Outlet Works of Mahoning Dam on Mahoning Creek, near Punxsutawney, Pa."
- Case Inst. of Tech., conducted for U. S. Army Corps of Engrs., Buffalo District, 3 unnumbered reports, March 1946, June 1946; Addenda A Oct 1947, "Report of Hydraulic Model Studies for Spillway and Outlet Works of Mount Morris Dam on the Genesee River at Mt. Morris, N. Y."
- Central Board of Irrigation and Power (India), "Symposium on Spillway Capacity of Dams," Publication No. 65, New Delhi, June 1958
- Chitale, S. V., "Energy Dissipation in Hydraulic Jump Below Weirs and Falls," *Irrigation and Power (India)* V 16 n 4 Oct 1959, p. 465-77
- Chitale, S. V., "Model Experiments for Estimation of Discharge Coefficient of Proposed Hanumannagar Barrage on Kosi River," *Irrigation and Power*, J. Central Board of Irrig. and Power (India), V 14 n 2 Apr 1957, p. 184-212
- Chow, V. T., "Open-Channel Hydraulics," McGraw-Hill Book Co., Inc., 1959
- (Anonymous), "Experiments on Self-Regulating Spillway Siphon," *Civil Engrg. (London)*, V 51 n 603 Sept 1956, p. 1006-7
- Cochrane, R. B., "Operation of Spillways in Northwest Projects," *ASCE Proc V 85 (J. Hydraulics Div.)*, n HY8 Aug 1959, Pt. 1, Paper n 2127, p. 7-38
- Coleman, G. S., and Smith, Dempster, "Discharging Capacity of Side Weirs," *Instn of Civ. Engrs.*, Vol 6, 1923, London
- Collinge, V. K., "The Discharge of Side Weirs," *Proc. Inst. of Civil Engrs.*, London, Vol. 6, 1957
- (Anonymous), "Tests on Hydraulic Model of Dam Spillway (Cairn Curran Dam, Maldon, Victoria)," *Commonwealth Engr.*, V 37 n 1, Aug 1, 1949, p. 11-13
- (Anonymous), "Use of Models in Design of Spillways," *Commonwealth Engr.*, V 34, n 12, July 1, 1947, p. 477-82
- Cooper Union, New York, conducted for U. S. Army Corps of Engrs., New York District, June 1946, "Report on Model Study of Spillway of Popolopen Water Supply Dam, West Point, N. Y."
- Cornell University, conducted for U. S. Army Corps of Engrs., Binghamton District, 1939, "Model Study, Spillway Investigation, Almond Dam, Canacadea Creek, N. Y."
- Cornell University, conducted for U. S. Army Corps of Engrs., Binghamton District, 1939, "Model Study, Spillway and Outlet Works, Arkport Dam, Canisteo River, N. Y."
- Cornell University, conducted for U. S. Army Corps of Engrs., Binghamton District, 1939, "Model Study, Spillway and Outlet Works, Whitney Point Dam, Otsego River, N. Y."
- Cox, G. N., "The Submerged Weir as a Measuring Device," *Univ. of Wisconsin, Engrg. Experiment Station, Bulletin No. 67*, 1928

- Creager, W. P., Justin, J. D., and Hinds, J., "Engineering for Dams," Vol. I, II, III, John Wiley and Sons, 1945, 929 pp., illustrated
- Creager, W. P., and Justin, J. D., "Hydroelectric Handbook," John Wiley and Sons, 1950
- Crump, E. S., "Model Test on Bellmouth Spillway and Outfall of Fassideri Project (Greece)," *Instn. Civ. Engrs., Proc. V 1 n 3, Pt. 2*, Oct 1952, p. 573-98 (discussion), p. 599-611
- Davis, C. V., and Meyer, A. A., "The Design of Recent TVA Projects V Fontana Project," *Civil Engrg., Vol. 13*, 1943, p. 305
- Davis, C. V. (Editor), "Handbook of Applied Hydraulics," McGraw-Hill Book Co., Inc., 1952, 1,272 pp., illustrated
- Davis, L. M., "Model Tests on Structures for Hydroelectric Developments," *Transactions ASCE Vol. 108* (1943)
- De Lapp, Warren, "Hydraulic Model Studies for Chippewa River Reservoir Dam," Univ. of Minnesota, St. Anthony Falls, Hyd. Lab. Project Report No. 2, 1947, 36 pp., 19 illus. (Sponsored by Northern States Power Co.)
- Delleur, J. W., "The Boundary Layer Development in Open Channels," *Proc. ASCE Vol. 83 (J. Engrg. Mech. Div.)*, No. EM1, Jan 1957, Paper 1138
- De Marchi, G., "Theoretical Considerations Regarding the Functioning of Lateral Spillways," *L'Energia Elettrica*, Vol. 11, 1934, English translation on file at NBS
- Dickinson, M. L., "The Design of Recent TVA Projects VII, Chatuge and Nottely," *Civil Engrg., Vol. 13*, 1943, p. 413
- Dienhart, A. V., "Chute Spillway Preserves, St. Anthony Falls," *Civil Engrg., Vol. 26*, No. 1, Jan 1956, p. 44-46
- Diskin, M. H., "Hydraulic Jump in Trapezoidal Channels," *Water Power*, V 13, n 1, Jan 1961, p. 12-17
- Doddiah, D., "Design of Siphon Spillways for Dams," *Fifth International Congress on Large Dams*, Vol. IV, p. 701-738, 1955
- Dodge, E. R., "Verification of Drop-Inlet Hydraulic Model Studies by Field Tests," *Civil Engrg. (N. Y.)*, V 11, n 8 and 11, Aug 1941, p. 496-7 and discussion, Nov., p. 671
- Doeringsfeld, H. A., and Barker, C. L., "Pressure Momentum Theory Applied to Broad-Crested Weir," *Transactions ASCE Vol. 106* (1941)
- Donnelly, C. A., and Blaisdell, F. W., "Straight Drop Spillway Stilling Basin," conducted by Agricultural Research Service, USDA, published by St. Anthony Falls Hyd. Lab. as Technical Paper No. 15-B 1954, 35 pp., 12 illus.
- Dooge, J. C. I., "Stability of Jets from Ski-Jump Sluices," *IAHR Proceedings 7th, Lisbon 1957*
- Douma, J. H., "Model Study of Green Mountain Dam Spillway," *Civil Engrg. (N. Y.)*, V 10, n 3, Mar 1940, p. 153-6
- East, L. R., "Spillway Discharge Calculations," *Civil Engrg., Vol. 2*, 1932, p. 34
- Engel, F. V. A., and Stainsby, W., "Velocity-of-Approach Factors in Unified Weir Equations," *Instn. Civ. Engrs. Proc V 9*, Paper n 6247, Feb 1958, p. 165-79
- (Anonymous), "Biggest Radial Gates Work Automatically" (Horseshoe Dam, Arizona), *Engrg. News-Record*, V 145, n 11, Sept 14, 1950, p. 44-45
- (Anonymous), "Eleven Drum Gates to Control 1,000,000 sec. ft. Flow Over Grand Coulee Spillway," *Engrg. News-Record*, Feb 6, 1941, p. 198-9
- (Anonymous), "Improved Metal Wickets for Deeper Ohio River," *Engrg. News-Record*, V 144, n 10, Mar. 9, 1950, p. 34-35
- (Anonymous), "Semi-Circular Spillway in Action (Lake Burnt Mills Reservoir)," *Engrg. News-Record*, V 135, n 20, Nov. 15, 1945, p. 653
- (Anonymous), "Vibration Damage to Spillway Gates," *Engrg. News-Record*, V 136, n 12, Mar. 21, 1946, p. 420-1
- Engstrom, U. V., "Enders Dam Completed," *Civil Engrg., Vol. 21*, No. 1, Jan. 1951, p. 35
- Escande, L., "Spillways for Dams of High Head," *IAHR Proceedings 4th, Bombay 1951*
- Escande, L., "Spillways with Suction Slots," *Le Genie Civil*, Vol. 129, No. 8, 1952, Translation—WES Tr. No. 53-12, Dec. 1953
- Escande, L., "Studies on the Simultaneous Functioning of Overflow and Bottom Discharge of movable Weirs," *IAHR Proceedings 2nd, Stockholm, 1948*
- Escande, L., and Sabathe, G., "On the Use of Aerodynamic Profiles for Piers of Overfall Weirs, Movable Dams, and Bridges," *Revue Generale de l'Hydraulique*, No. 10, July-August 1936, Translation WES Tr. No. 40-11, Sept. 1940
- Farney, H. S., and Markus, A., "Side-Channel Spillway Design," *Proc. ASCE Vol. 88 (J. Hyd. Div.)*, No. HY3, May 1962, Paper No. 3143, 24 pp.
- Fathy, A., Amin, M. S., "Hydraulics of the Free Overfall," *ASCE Proc. Sep. No. 564* (1954)
- Favre, H., "Velocity Distributions and the Hydraulic Design of Side-Channel Intakes and Spillways, and Tailraces," *Publications du laboratoire de Recherches, Hydrauliques*, 1933, Transl. by D. C. McConaughy, USBR TM No. 536
- Fergusson, F. F., "Dissipation of Energy of Flow Over Dam Crest (Jawal River Dam)," *India Central Board of Irrigation*, J V 5 n 1 Jan. 1948, p. 73-5, 84
- Fiala, G. R., and Albertson, M. L., "Manifold Stilling Basin," *ASCE Proc. Vol. 87 (J. Hydraulics Div.)*, n HY4 July 1961, Paper No. 2863, 28 pp.
- Fisher, H., "Vibration in Overflow or Spillway Type Dams," *Le Genie Civil*, 1938, Transl. by S. P. Wang, USBR Tr.
- Forsters, J. W., and Skrinde, R. A., "Control of Hydraulic Jump by Sills," *ASCE Proc. V 75*, n 4, April 1949, p. 469-83 (discussion),

- n 7 Sept. p. 1080-4, n 8 Oct. p. 1231-41, n 10 Dec., p. 1511-6
- Foster, H. A., "Construction of the Flow Net for Hydraulic Design," Transactions ASCE Vol. 110 (1945)
- Framji, K. K., "Scour Below Weirs," IAHR Proceedings 2nd, Stockholm, 1948
- Frankovic, A., "Headloss and Air Entrainment by Flowing Water in Steep Chutes," IAHR Proceedings 5th, Minneapolis 1953
- Fraps, J. A., "Arizona Adopts a Code for Dams—Part I," Civil Engrg., Vol. 3, 1933, p. 195
- Frazer, W., "The Behavior of Side Weirs in Prismatic Rectangular Channels," Proc., Inst. of Civil Engrs., London, Vol. 6, 1957
- Gandolfo, J. S., and Cotta, R. D., "Dissipator of Energy," IAHR Proceedings 6th, The Hague 1955
- Gandolfo, J. S., and Cotta, R. D., "Kinetic Energy Dissipation on Apron for Gate Dams," IAHR Proceedings 7th, Lisbon 1957
- Ganguli, M. K., and Roy, S. E., "On the Standardization of the Relaxation Treatment of Systematic Pressure Computations for Overflow Spillway Discharges," Journal of Central Board of Irrigation and Power, Vol. 9, No. 2, India, 1952
- Gedney, R. H., "Stilling Basin Damage at Chief Joseph Dam," ASCE Proc. Vol. 87 (J. Hyd. Div.), No. HY2, March 1961, Paper No. 2777, 24 pp.
- Georgescu, P., Latus, M., and Zarea, S., "Laboratory Research on the Works of a Large Dam," IAHR Proceedings 7th, Lisbon 1957
- Gerritsen, F., "Velocities on Very Long Weirs," IAHR Proceedings 6th, The Hague 1955
- Goodhue, H. W.; Meyer, A. A., and Smart, R. L., "The Design of Recent TVA Projects VIII Apalachia and Ocoee No. 3," Civil Engrg., Vol. 13, 1943, p. 465
- Goodrich, R. D., "Rapid Calculation for Reservoir Discharge," Civil Engrg., Vol. 1, 1931, p. 417
- Gordier, R. L., "Weir of Special Design for Grit Channel Velocity Control," Water and sewage works, V 103, n 3, Mar. 1956, p. 118-21
- Grush, D. I., "Removable Weir Plate Assembly for Weir Installations," AWWA J V 35, n 7, July 1943, p. 900-1
- Grzywnski, A., "Anti-Vacuum Profiles for Spillways of Large Dams," Trans. 4th Congress, Vol. 2, Intern. Commission on Large Dams of the World Power Conf., India, 1951
- Gumensky, D. H., "Air Entrained in Fast Water Affects Design of Training Walls and Stilling Basins," Civil Engrg., Vol. 19, 1949, page 830
- Gumensky, D. B., "Design of Side Walls in Chutes and Spillways," Transactions ASCE Vol. 119 (1954), p. 355-372
- Guyton, Benson, "Field Investigations of Spillways and Outlet Works," Transactions ASCE Vol. 124 (1959), pp. 491-506
- Halbronn, G.; Durand, R., and Cohen De Lara, G., "Air Entrainment in Steeply Sloping Flumes," IAHR Proceedings 5th, Minneapolis 1953
- Hall, L. S.; Kalinske, A. A., and Robertson, J. M., "Entrainment of Air in Flowing Water," Transactions ASCE Vol. 108 (1943)
- Hall, L. S., "Open Channel Flow at High Velocities," Trans. ASCE, Vol. 108 (1943), pp. 1394-1434 and 1494-1513
- Halliday, B. A., and Hoffman, C. J., "Types of Gates, Valves and Control Equipment Used for Bureau of Reclamation Spillways and Outlets," 4th Congress on Large Dams, New Delhi, 1951, Vol. 2, p. 169, 1952
- Hamid, M. A.; Farrant, R. F. T., and Ahmad, M., "Air Entraining Devices and Their Use in Correcting Flow Conditions at Weirs and Canal Falls," IAHR Proceedings 5th, Minneapolis 1953
- Hardin, J. R., Graves, E. A., et al., "Old River Diversion Control: A Symposium," Transactions ASCE Vol. 123 (1958), p. 1130-1181
- Harkauli, A., "Direct Solutions for Spillway Designs," Colorado A & M College Special Report, 1948
- Harleman, D. R. F., "Effect of Baffle Piers on Stilling Basin Performance," Jr. Bos. Soc. of Civil Engineers, V 42, n 2, April 1955, p. 84-99
- Harrison, E. S., and Kindsvater, C. E., "Dam Modifications Checked by Hydraulic Models," Transactions ASCE Vol. 119 (1954), pp. 73-92
- Hathaway, G. A., "Determination of Spillway Requirements for High Dams," 4th Congress on Large Dams, Vol. II, 1951, p. 301-347 (Corps of Engineers)
- Hathaway, G. A., "Observations on Channel Changes, Degradation, and Scour Below Dams," IAHR Proceedings 2nd, Stockholm 1948
- Hellstrom, B., "Measures to Reduce Scour Below Dams," IAHR Proceedings 2nd, Stockholm, 1948
- Hickox, G. H., "Aeration of Spillways," ASCE Trans. Vol. 109 (1944), p. 537-566
- Hickox, G. H., "Air Entrainment on Spillway Faces," Civil Engineering, Vol. 15, 1945, page 562
- Hickox, G. H., "Graphical Solution for Hydraulic Jump," Civil Engineering, Vol. 4, 1934, page 270
- Hickox, G. H., "Performance of TVA Structures Studied," Civil Engineering, Vol. 15, 1945, p. 465-8
- Hickox, G. H., "Prevention of Erosion Below TVA Dams," IAHR Proceedings 2nd, Stockholm, 1948
- Hickox, G. H., "Spillway Coefficients, Norris Dam, Tennessee River, Tennessee," ASCE Trans. Vol. 109 (1944), p. 68-76
- Hill, R. A., and McConaughy, D. C., "Design of Spiral Spillway Chutes," Civil Engineering Magazine, Vol. 15, p. 499-500, Nov. 1945
- Hinds, J., "Side Channel Spillways: Hydraulic Theory, Economic Factors and Experimental

- Determination of Losses," ASCE Trans. Vol. 89, 1926, page 894
- Hinds, J., Creager, W. P., and Justin, J. D., "Engineering for Dams," Vol. I, II, III, John Wiley & Sons, 1945, 929 pp.
- Hoeffler, H. J., "Fort Randall Dam to Provide More Storage on Missouri River," Civil Engineering Magazine, Vol. 22, No. 7, p. 38, July 1952
- Holden, O., and Soare, J. L., "Gated Structure Controls Niagara Flow," Civil Engineering, Vol. 27, 1957, page 536
- Hollingshead, W. E., "Bascule-Type Crest Gates Simplify Pond-Level Control," Engrg. News-Record, V 144, n 3, Jan. 19, 1950, p. 44-45
- Houk, I. E., "Irrigation Engineering, Vol. II," John Wiley & Sons, Inc., New York, 1956, Chapter 15, Spillways and outlet works at dams, Chapter 16, Gates and valves at irrigation structures
- Howe, J. W.; Sheih, G. C., and Obadia, Arturo, "Aeration Demand of a Weir Calculated," Civil Engineering, May 1955, p. 59 (Vol. p. 289)
- Howell, H. H., "Hydraulic Jump in Irregular Cross Sections Computed by Time-Saving Method," Civil Engineering (N. Y.), V 23, n 11, Nov. 1953, p. 64
- Huff, A. N., under direction of Ramser, C. E., "The Hydraulic Design of Rectangular Spillways," U. S. Dept. of Agriculture, Soil Conservation Service, Oct. 1943
- Iowa, State University of, "The Development of the Turbulent Boundary Layer on Steep Slopes," conducted for U. S. Army Corps of Engrs., Aug. 1951
- Ippen, A. T., Knapp, R. T., et al., "High-Velocity Flow in Open Channels," Transactions ASCE Vol. 116 (1951)
- Ishihara, T., Iwasa, Y., and Iida, K., "Basic Studies on Hydraulic Performances of Overflow Spillways and Diversion Weirs," Disaster Prevention Research Institute, Kyoto University, Kyoto, Japan, Bulletin No. 33, March 1960
- Jaeger, C., "Engineering Fluid Mechanics," Transl. from German by P. O. Wolf, Blackie & Son, Ltd., 1956
- Jameson, A. H., "Flow Over Sharp-Edged Weirs: Effect of Thickness of Crest," J. Instn. Civ. Engrs., Vol. 31 (1948-149), p. 36; Vol. 32, p. 525
- Jansen, R. B., "Flow Characteristics on the Ogee Spillway," ASCE Proc. Sep. No. 1452HY6 (Dec. 1957)
- Joglekar, D. V., "Siphon Spillways," Irrigation and Power (India), V 16, n 4, Oct. 1959, p. 441-63
- Joglekar, D. V., Guha, S. K., and Luthra, S. D. L., "High-Head Siphons, Their Behavior and Characteristics," IAHR Proceedings 6th, The Hague 1955
- Justin, J. D., Hinds, J., and Creager, W. P., "Engineering for Dams," Vol. I, II, III, John Wiley & Sons, 1945, 929 pages
- Kalinske, A. A., and Robertson, J. W., "Entrainment of Air in Flowing Water: Closed Conduit Flow," Trans. ASCE Vol. 108 (1943), p. 1435-1447
- Kandaswamy, P. K., and Rouse, H., "Characteristics of Flow Over Terminal Weirs and Sills," Proc. ASCE Journal, Hydraulics Div., Vol. 83, No. HY4, 1957
- Keener, K. B., "Spillway Erosion at Grand Coulee Dam," Engrg. News-Record V 133 n 2, July 13, 1944, p. 41-7
- Keener, K. B., "The Design of Shasta Dam," Civil Engineering, Vol. 13, 1943, Part II, Overflow Section, page 317, Part III, Spillway Control by Drum Gates, page 427
- Keener, K. B., "Erosion Causes Invert Break in Boulder Dam Spillway Tunnel," Engrg. News-Record V 131 n 21, Nov. 18, 1943, p. 762-6
- Keim, S. R., "Contra Costa Energy Dissipator," ASCE Proc. Vol. 88 (J. Hyd. Div.), No. HY2, March 1962, Paper No. 3077, 14 pp.
- Kenigsberg, A. H., "Anchorages for Large Tainter Gates," Trans. ASCE, Vol. 123 (1958), p. 409-418
- Kindsvater, C. E., and Carter, R. W., "Discharge Characteristics of Rectangular Thin-Plate Weirs," ASCE Trans. Vol. 124, 1959, p. 772-822
- Kindsvater, C. E., "Hydraulic Jump in Sloping Channels," ASCE Proc. V 68, n 9, Nov. 1942, p. 1473-86, discussion V 69, n 2, 5, 6 and 7; Feb. 1943, p. 311-5, May p. 719-32, June p. 924-6, Sept. p. 1097-1103; and V 70, n 5, May 1944, p. 669-77
- King, H. W., and Brater, E. F., "Handbook of Hydraulics," McGraw-Hill Book Co., Inc., 1954
- Kirkpatrick, K. W., "Discharge Coefficients for Spillways at TVA Dams," Trans. ASCE, p. 190-210, 1957
- Knapp, R. T., and Hollander, A., "Laboratory Investigations of the Mechanism of Cavitation," Trans. ASME, Vol. 70 (1948), p. 419
- Knappen, T. T., "General Design of the Muskingum Project," Civil Engineering, Vol. 6, 1936, page 7
- Kohler, W. H., "Development of Hydraulic Operation of Gates and Valves," ASME Paper n 56 - F-8, for meeting Sept. 10-12, 1956, 7 pp.
- Kuttiyamm, T. P., and Rao, J. Visweswara, "Bhavani-Type Stilling Basin for Spillways of Large Dams," 4th Congress on Large Dams (India), Vol. II, 1951, p. 397-414
- Lamb, O. P., "Air Entrainment in Flowing Water, a Summary and Bibliography of Literature," Univ. of Minnesota, St. Anthony Falls Hyd. Lab. Project Report No. 19, 1949, 41 pp. (Sponsored by the office of Naval Research, Dept. of the Navy)
- Lamoien, J.; Bonnet, L., and Blockmans, J., "Experimental Investigation of Various Types of Self-Priming Siphons Using Scale Models," IAHR Proceedings 1st, Berlin, 1937
- Lane, E. W., and Lee, J. D., "Prototype Verifies Hydraulic Model Tests," Civil Engi-



- neering (N. Y.), V 15, n 12, Dec. 1945, p. 556-7 (related to two structures in Miami Conservancy Dist.)
- Lane, E. W., "Entrainment of Air in Swiftly Flowing Water," *Civil Engineering*, Vol. 9, 1939, page 89
- Lee, C. C., 1315 First North St., Vicksburg, Miss., Oct. 1941, 107 pp., "Weirs, a Bibliography of Books, Periodicals and Society Publications Appearing from 1882 Through 1940," *Engrg. Soc. Lib.*, N. Y.
- Leliavsky, S., "Irrigation and Hydraulic Design," Chapman and Hall, Ltd., London, 1955, Vol. 1
- Leliavsky, S., "Irrigation and Hydraulic Design," Vol. 1, 2, 3, Macmillan Co. (N. Y.), 1960
- Lemoine, R., "Cavitation on Weir Crests," *IAHR Proceedings 6th*, The Hague 1955
- Lencastre, A., "Shaft Spillways, Theoretic Experimental Design," *IAHR Proceedings 6th*, The Hague 1955
- Lentz, A., "Spillway Gate Operation to Prevent Erosion Below Dams," *Modern Power and Engrg.*, V 40 n 10, Oct. 1946, p. 66-9
- Lenz, A. T., "Viscosity and Surface Tension Effects on V-Notch Weir Coefficients," *ASCE Proc.*, V 68 n 3, 6 and 7, March 1942, p. 351-74 and (discussion) June p. 1033-4 and Sept. 1176-98, and V 69 n 1 Jan. 1943 p. 163-5
- Leonard, G. K., and Mattern, D. H., "Planning the Watauga Project," *Civil Engineering*, Vol. 18, 1948, p. 142
- Levi, E., and Escamilla, G. G., "Some Devices for the Dissipation of Energy of High-Velocity Flows," *IAHR Proceedings 7th*, Lisbon 1957
- Lin, K-M., and Priest, M. S., "Hydraulic Jump Over Plane Inclined Bottom," *Alabama Polytechnic Inst., Engrg. Experiment Station*, Bul. n 30, Apr. 1958, 20 pp.
- Linsley, R. K., Kohler, M. A., and Paulhus, J. L. H., "Applied Hydrology," McGraw-Hill Book Co., Inc., 1949, 689 pp., illus.
- Linsley, R. K., and Franzini, J. B., "Elements of Hydraulic Engineering," McGraw-Hill Book Co., Inc., 1955
- Liskovec, L., "A Special Form of the Spillway of a Dam, Enabling the Splitting of the Nappe and the Dissipation of Its Energy in the Stilling Basin," *IAHR Proceedings 2nd*, Stockholm, 1948
- Long, L. W., and Conner, N. W., "Tests on Broad-Crested Weir with Two Different Surface Adhesion Conditions," *North Carolina State College, Engrg. Research School*, Bul. n 61, March 1956
- Luiggi, M. L., "Glory Hole Spillways for Reservoirs," *Giornale del Genio Civile*, 1917, Transl. by R. G. Scott, USBR Tr.
- Luthra, S. D. L., "Dissipation of Energy Below Overfall Dams," *Central Board Irrigation (India)*, J V 7, n 6, Nov. 1950, p. 660-5
- Madany, M. el, "The Nomogrammeter for the Regulation of All Types of Calibrated Regulators and Barrages in Egypt," *Ann. Bul. Int. Commission Irrigation and Drainage* (1952), p. 13
- Maitra, B., "Cavitation on Siphon Spillways," *IAHR Proceedings 7th*, Lisbon 1957
- Maitre, R., "Study of the Functioning of Overflow Spillways with Gates Partly Open," *La Houille Blanche*, Vol. 7, 1952, Transl. by W. W. Geddings, *WES Tr.*, No. 52-6, 1952
- Marchi, G. de, "Experiments on Bed Scouring Downstream of Weirs," *IAHR Proceedings 2nd*, Stockholm, 1948
- Marsh, F. D., "Danger of Fixed Flashboards Shown by Flood at Croton Dam," *Civil Engineering*, V 27, n 6, June 1957, p. 64-65
- Martin, H. M., and Ball, J. W., "Laboratory and Prototype Tests for the Investigation and Correction of Excessive Downpull Forces of Large Cylinder Gates Under High Heads," *IAHR Proceedings 6th*, The Hague 1955
- Martin, H. M., and Carlson, E. J., "Model Studies of Sediment Control Structures on Diversion Dams," *IAHR Proceedings 5th*, Minneapolis 1953
- Mattern, D. H., "Forty-Year-Old Wilbur Hydro Project Rejuvenated," *Civil Engineering*, Vol. 21, No. 8, Aug. 1951, page 46
- Mavis, F. T., "Submerged Thin-Plate Weirs, How to Calculate Flow Over," *Engrg. News-Record*, Vol. 143 (1949), p. 65
- Mavis, F. T., "There's No Mystery in Weir-Flow Calculations," *Engrg. News-Record*, V 142 n 1, Jan. 6, 1949, p. 76-8
- Mayer, P. G., "Roll Waves and Slug Flows in Inclined Open Channels," *Trans. ASCE*, Vol. 126 (1961), Part I, p. 505-64
- McBirney, W. B., "Some Experiments with Emergency Siphon Spillways," *ASCE Proc. Sep. No. 1807HY5* (1958)
- McCormack, A. L., "Hydraulic Design of Side-Channel Spillways," *U. S. Army, Portland District*
- McNown, J. S., Hsu, E. Y., and Yih, C. S., "Applications of the Relaxation Technique in Fluid Mechanics," *Trans. ASCE Vol. 120*, 1955
- McPherson, M. B., and Karr, M. H., "A Study of Bucket-Type Energy Dissipator Characteristics," *ASCE Proc. Sep. No. 1266HY2* (1957), 18 pp.
- Mermal, T. W., "Register of Dams in the United States," McGraw-Hill Book Co., Inc., 1958, sponsored by the U. S. Committee of the International Commission on Large Dams, 429 pp. illustrated (reference also listed under United States Committee of the International Commission on Large Dams)
- Meyer, A. A., "Spillway Designed for Long-Range Savings (Fontana Dam)," *Civil Engineering*, Vol. 16, 1946, page 165
- Meyer-Peter, E., and Muller, R., "Erosion Downstream of Barrages," *IAHR Proceedings 2nd*, Stockholm 1948
- Moore, W. L., "Energy Loss at the Base of a Free Overfall," *ASCE Trans. Vol. 108* (1943)
- Moore, W. L., and Morgan, C. W., "Hydraulic Jump at an Abrupt Drop," *Trans. ASCE*, Vol. 124, 1959, p. 507
- Mortara, M., "Spiral Flow Increases Capacity



- of Vertical Discharge Shaft," *Civil Engineering*, Vol. 18, 1948, page 776
- Mundal, Torald, "The Design of Recent TVA Projects III Watts Bar and Fort Loudoun," *Civil Engineering*, Vol. 13, 1943, page 204
- Myburgh, R. I. D. M., "Shaft Spillway Design as Applied to Ebenezer Dam," *South African Instn. of Civil Engineers*, Trans. V 7, n 5, May 1957, p. 177-94
- Nagler, F. A., and Davis, A., "Experiments on Discharge Over Spillways and Models, Keokuk Dam (Mississippi River, Iowa)," *ASCE Trans*, Vol. 94 (1930), p. 777
- Narasimham, R. K. V., "Dissipators Below Spillways: New Type Evolved for Koilsagar Spillway," *IAHR Proceedings 4th*, Bombay 1951
- Narasimham, R. K. V., "Energy Dissipation Below Spillways," *Instn. Engrs. (India)*, J V 35 n 5 pt. 1, June 1955, p. 494-519
- National Resources Committee, Washington, D. C., 1938, 431 pages, illustrated, "Low Dams—A Manual of Design for Small Water Storage Projects"
- Naudascher, E., "Vibration of Gates During Overflow and Underflow," *Trans. ASCE* V. 127 (1962)
- Naylor, A. H., "Siphon Spillways," E. Arnold & Co., London (1935), 83 pages
- Nelidov, I. M., "Determination of Pressures Within a Siphon Spillway," *Transactions ASCE* Vol. 111 (1946), p. 679-698
- Nelidov, I., "Theoretical Discharge Coefficients for a Weir of Ogee Profile," *Civil Engineering*, Vol. 11, 1941, p. 40
- Nelson, G. H., "Flow Regimes of Drop-Inlet Spillway," *Agric. Engrg.*, V. 37, n 3, March 1956, p. 177-9
- Niederhoff, A. E., "Orifices Pass Floods Through Arch Dam (Tonoyama Dam, Japan)," *ENR* V159, n 14, October 3, 1957, p. 50-52
- Niederhoff, A. E., "Preliminary Design Chart—XI: Vertical Lift Gate Selection," *Western Construction News*, V 19 n 2 Feb. 1944, p. 73-5
- Nimmo, W. H. R., "Side Spillways for Regulating Diversion Canals," *ASCE Trans*, Vol. 92, 1928, p. 1561-1584
- Norby, J. V., "The Stilling Basin at the Holleforsen Power Plant," *IAHR Proceedings 2nd*, Stockholm 1948
- Novak, P., "Study of Stilling Basins with Special Regard to Their End-Sill," *IAHR Proceedings 6th*, The Hague 1955
- Nowell, J. C., "The Design of Recent TVA Projects VI Cherokee and Douglas," *Civil Engineering*, Vol. 13, 1943, page 373
- Noy, E. G., "Spillways and Outlet Works," *Assn. Engrs. and Architects in Israel*, J V 16, n 3, June-Aug. 1956, p. 26-9
- Offitzeroff, A. S., "Model Studies of Overflow Spillway Sections," *Civil Engineering (N. Y.)*, V 10, n 8, 10, 11 and 12, Aug. 1940, p. 523-6 and (discussion) Oct., p. 660, Nov., p. 727, Dec., p. 789-90
- Oliver, G. C. S., "Eye Brook Reservoir Siphon Spillway," *Instn. Water Engrs.*, J V 13 n 3, May 1959, p. 205-27, discussion, p. 227-52
- O'Shaughnessy, P. S., "Conformity Between Model and Prototype Tests—Madden Dam Spillway," *Civil Engineering (N. Y.)*, V 11, n 8 and 10, Aug. 1941, p. 491-3 and (discussion) Oct., p. 614
- Paderi, F., "Coefficient of Discharge and Profile of Overfall Dams with Nonnegligible Velocity of Approach," *IAHR Proceedings 6th*, The Hague 1955
- Pariset, E., "Study of Vibration of Weir Nappes," *IAHR Proceedings 6th*, The Hague 1955
- Pearce, C. E., "Design of Hiwassee Dam—Basic Considerations," *Civil Engineering*, Vol. 10, 1940, page 340
- Peter, Y., "Model Tests for Kishon Weir," *Civil Engineering (London)*, V 48 n 559, 560, Jan. 1953, p. 59-60, and Feb., p. 163-5
- Peter, Y., "Problems of Side Spillways," *Civil Engineering (London)*, V 56, n 656, 657, March 1961, p. 327, 329-30; April, p. 490-2
- Peterka, A. J., "Model and Prototype Studies on Unique Spillway (Fontana Dam)," *Civil Engineering*, Vol. 16, 1946, p. 249
- Peterka, A. J., "Spillway Tests Confirm Model-Prototype Conformance," U. S. Dept. of the Interior, Bureau of Reclamation, Engineering, Monograph No. 16, Oct. 1954. (Also listed under U. S. Dept. of the Interior)
- Petrikat, K., "Vibration Tests on Weirs and Bottom Gates," *Water Power* V. 10, n 2, 3, 4, 5, Feb. 1958, p. 52-7; Mar., p. 99-104; Apr., p. 147-9; May, p. 190-7
- Poggi, B., "Cascade Spillways of Weirs, Design Criteria and Experimental Results," *L'Energia Elettrica*, Vol. 33, 1956, WES Tr. No. 57-5, 1957
- Poulter, T. C., "The Mechanism of Cavitation Erosion," *Trans. ASME*, Vol. 64 (1942), p. A31
- Puls, L. G., "Hungry Horse Dam, Largest Single Contract of USBR Now in Force," *Civil Engineering*, Vol. 20, No. 12, Dec. 1950, p. 26
- Puls, L. G., "Spillway Discharge Capacity of Wilson Dam, Tennessee River, Alabama," *ASCE Trans*, Vol. 95 (1931), p. 316
- Rajaratman, N., "Energy Loss Over Ogee Spillway," *Irrigation and Power*, Vol. XVI, No. 3, p. 338, July 1959
- Rand, W., "Flow Geometry at Straight Drop Spillways," *ASCE Proc. Sep. No. 791* (1955)
- Randolph, R. R., Jr., "Hydraulic Tests on the Spillway of the Madden Dam," *Trans. ASCE* Vol. 103 (1938), p. 1081-1112
- Rao, N. S. Govinda, "Design of Volute Siphon," 4th Congress on Large Dams (India), Vol. II, 1951 (p. 381-396)
- Raven, F. A.; Ferler, A. M.; and Jespersen, A., "An Annotated Bibliography on Cavitation," B.O.T. Tech. Inf. and Doc. Unit, PB91882, 1947
- Rhone, T. J., "Problems Concerning Use of Low Head Radial Gates," *ASCE Journal*,

- Hydraulics Division, Sep. No. 1935HY2 (1959)
- Rhone, T. J., and Peterka, A. J., "Improved Tunnel Spillway Flip Buckets," *Trans. ASCE*, Vol. 126 (1961), Part 1, p. 1270-91
- Rich, G. R., "Basic Hydraulics of Water Storage Projects III Spillways, Outlets and Surge Tanks," *Civil Engineering*, Vol. 14, 1944, p. 428
- Rich, G. R., "The Design of Recent TVA Projects II General Design," *Civil Engineering*, Vol. 13, 1943, p. 165
- Ripley, Theron M., "Discharge Through Tainter Gate Openings," *Civil Engineering*, Vol. 3, 1933, p. 386
- Roberts, D. F., "Spillway Energy Dissipated on Face of Dam," *Engrg. News-Record*, V 137, n 24, Dec. 12, 1946, p. 783-5
- Roberts, K. C., "Spillway Gates and Equipment on TVA Projects," *Civil Engineering*, Vol. 16, 1946, p. 13
- Robinson, A. R., "Discharge Coefficients and Pressure Distributions for Spillways, Part I," *Colorado A & M College Special Report*, 1950
- Rock, Elmer, "Design of a High-Head Siphon Spillway," *Trans. ASCE* Vol. 105 (1940), p. 1050-1075
- Rohatgi, D. P., "Laying Sheet Piling on Ramganga Weir, U. P.," *Instn. Engrs. (India)*, J V 32 n 2, Dec. 1951, p. 61-73
- Rouse, Hunter, "Discharge Characteristics of the Free Overfall," *Civil Engineering*, Vol. 6, 1936, p. 257
- Rouse, H. (Editor), "Engineering Hydraulics," *Proc. 4th Hydraulics Conf.*, Iowa Institute of Hydraulic Research, 1950, John Wiley & Sons, 1039 pp.
- Rouse, H., and Hassan, M. M., "Cavitation—Free Inlets and Contractions," *Mechanical Engineering*, Vol. 71 (1949), p. 213
- Rouse, H., and Reid, L., "Model Research on Spillway Crests," *Civil Engineering Magazine*, Vol. 5, No. 1, p. 10-14, Jan. 1935
- Rouse, H., Siao, T. T., Nagaratnam, "Turbulence Characteristics of the Hydraulic Jump," *Trans. ASCE*, Vol. 124 (1959), p. 926-966
- Schonfeld, J. C., "Discharge Long and Very Long Weirs," *IAHR Proceedings* 6th, The Hague 1955
- Schuster, J. C., "Model-Prototype Conformance of Radial Gate Discharge Capacity, Canyon Ferry Dam, Montana," *U. S. Dept. of Interior, Bureau of Reclamation, Hyd. Lab. Report No. Hyd-433*, March 1957
- Scimemi, E., "On the Scours Which May Appear Along the Downstream Face of a Dam," *IAHR Proceedings* 2nd, Stockholm 1948
- Scimemi, E., "The Shapes of Overflow Dams," *L'Energia Elettrica*, Vol. 14, 1937, Transl. by H. B. Edwards, *WES Tr.* No. 41-23, 1941
- Shukry, A., "Efficacy of Floor Sills Under Drowned Hydraulic Jumps," *ASCE Proc.* V 83 (J. Hydraulics Div.), n HY3, June 1957, paper n 1260, 18 pp.
- Silberman, E., and Ripken, J. F., "St. Anthony Falls Hydraulic Laboratory Gravity-Flow Free-Jet Water Tunnel," *Univ. of Minnesota, St. Anthony Falls Hyd. Lab., Tech. paper n 24, Series B*, 1959, 45 pp.
- Simmons, W. J., Jr., "Air Model Studies of Hydraulic Downpull on Large Gates," *ASCE Proc.* V 85 (J. Hydraulics Div.), n HY1, Jan. 1959, paper n 1903, p. 41-59
- Singh, S.; Kalha, A. S., and Gill, R. S., "Selection of Type, General Arrangement, Detail of Spillways and Determination of Their Capacities with Reference to Bhakra Dam Project," *4th Congress on Large Dams (India)*, Vol. II, 1951, p. 871-903
- Slichter, F. B., "Spillways as Designed by the Corps of Engineers," *Civil Engineering*, Vol. 25, No. 12, p. 42-43, Dec. 1955 (page 841)
- Smith, C. D., "The Effect of Sidewall Height on the Hydraulic Jump on a Continuously Sloping Chute," *IAHR Proceedings* 8th, Montreal, 1959
- Smith, L. G., "Floating-Ring Gate and Glory-Hole Spillway at Owyhee Dam," *Reclamation Era* V 30, n 8, Aug. 1940, p. 226-31
- Smith, R. A., "Calibration of a Submerged Broad Crested Weir," *ASCE Proceedings*, Sep. No. 1960HY3 (1959)
- Sowers, G. F., "Model Study Develops Stepped Transition for Mt. Morris Dam Stilling Basin (Genesee River, N. Y.)," *Civil Engineering (N. Y.)*, V 17, n 3, March 1947, p. 32-3
- Stevens, J. C., "Characteristics of a Large Throated Siphon," *ASCE Proc.* Sep. No. 1198HY2 (1957)
- Stevens, J. C., "Siphons as Water-Level Regulators," *Trans. ASCE*, Vol. 104 (1939)
- Stimson, L. M., "Factors Governing Selection of a Shaft Spillway for Hungry Horse Dam," *4th Congress on Large Dams (USBR)*, Vol. II, 1951, p. 225-234
- Straub, L. G., and Anderson, A. G., "The Distribution of Air in Self-Aerated Flow in a Smooth Open Channel," *Project Report No. 48*, St. Anthony Falls Hyd. Lab., Minneapolis, Minn., July 1955
- Straub, L. G., and Anderson, A. G., "Self-Aerated Flow in Open Channels," *Trans. ASCE*, Vol. 125 (1960), p. 456-86
- Straub, L. G., and Lamb, O. P., "Experimental Studies of Air Entrainment in Open Channel Flow," *IAHR Proceedings* 5th, Minneapolis 1953. Also published as *Univ. of Minn., St. Anthony Falls Hyd. Lab. Technical Paper n. 4-A*, 1953, 13 pp., 13 illus.
- Straub, L. G., and Lamb, O. P., "Studies of Air Entrainment in Open-Channel Flows," *Trans. ASCE*, Vol. 121 (1956), p. 30-44
- Straub, L. G., "Use of Models in Planning Water Control Works," *Univ. of Minn., St. Anthony Falls Hyd. Lab., Circular No. 4*, 1949, 24 pp., 9 illus. Also *Technical Paper No. 2-A*, 25 pp., 9 illus.
- Streiff, A., "Tainter Gates of Record Size Installed in Spanish Dam (Villacampo Dam)," *Civil Engineering*, Vol. 20, 1950, page 173

- Taylor, G. A., and Elsdon, O., "Investigation of Right-Angle Bend at the Foot of a Vertical Spillway Shaft," Fifth International Congress on Large Dams, Vol. IV, p. 857-874, 1955
- Thomas, A. R., "Contour Waste Weir," India Central Board Irrigation, J V 5, n 2, April 1948, p. 176-7, 180
- Thomas, Ch. W., "Velocity, Scour and Pressure Measurements from Three Models of the Same Structure," IAHR Proceedings 7th, Lisbon 1957
- Thomas, H. A., "The Propagation of Waves in Steep Prismatic Conduits," Proc. Hyd. Conf. Univ. Iowa, Studies in Engrg., Bul. n 20, p. 214, 1940
- Thomas, H. A., and Hopkins, W. J., "Cavitation on Baffle Piers Below Dams," Proceedings of 2nd Hyd. Conf., June 1942, Univ. of Iowa
- Tinney, E. R., and Hsu, H. Y., "Mechanics of Washout of Erodible Fuse Plug," ASCE Proc. V 87 (J. Hydraulics Div.), n HY3, May 1961, pt. 1, paper 2808, p. 1-29
- Tison, L. J., "Erosion Downstream of Movable Barrages," IAHR Proceedings 2nd, Stockholm 1948
- Toch, A., "Discharge Characteristics of Tainter Gates," ASCE Trans. Vol. 120 (1955)
- Tonini, D., "Erosion Downstream of the Barrage in the Brenta at Mignano," IAHR Proceedings 2nd, Stockholm 1948
- Tracy, H. J., "Discharge Characteristics of Broad-Crested Weirs," U. S. Geological Survey, circular n 397, 1957, 15 pp.
- Tracy, H. J., and Carter, R. W., "Backwater Effects of Open Channel Constrictions," ASCE Trans. Vol. 120 (1955), page 993
- Tufts, H., "Flood Protection of Canals by Lateral Spillways," ASCE Proc. V 82 (J. Hydraulics Div.), n HY4, Oct. 1956, paper n 1077
- U. S. National Bureau of Standards Hydraulic Laboratory. Conducted for U. S. Army Corps of Engrs., Baltimore District, April 1940, "Report on Hydraulic Model Tests of Spillway and Outlet Works, Indian Rock Dam, Codorus Creek, York, Pa."
- U. S. National Bureau of Standards Hyd. Lab. Conducted for U. S. Army Corps of Engrs., Washington District, May 1937, "Report on Model Tests of the Spillway for Savage River Dam"
- Uppal, H. L., "Hydraulic Model Study of Spillway and Tunnel of Bhakra Dam," 4th Congress on Large Dams (India), Vol. II, 1951, p. 933-968
- U. S. Army Corps of Engrs., Binghamton District, June 1939, "Hydraulic Model Studies of Arkport Side-Channel Spillway and Outlet Structures (Upper Susquehanna River Basin, N. Y.)"
- U. S. Army Corps of Engrs., Bonneville Hyd. Lab., 3 Vols., June 1937 (unnumbered report), "A Report on Model Studies Made in Connection with the Bonneville Dam and Appurtenant Works"
- U. S. Army Corps of Engrs., Bonneville Hyd. Lab., Report 65-1, July 1958, "Revised Stilling Basin, Bonneville Dam, Columbia River, Oregon and Washington"
- U. S. Army Corps of Engrs., Bonneville Hyd. Lab., Report No. 3-1, July 1941, "Spillway Pressure Head Investigation Bonneville Spillway Dam, Bonneville, Oregon"
- U. S. Army Corps of Engrs., Bonneville Hyd. Lab., Report No. 34-1, Aug. 1956, "Spillway and Stilling Basin for Chief Joseph Dam (Columbia River, Washington)"
- U. S. Army Corps of Engrs., Bonneville Hyd. Lab., Rept 45-1, June 1955, "Flood Control Conduits for Detroit Dam, North Santiam River, Oregon"
- U. S. Army Corps of Engrs., Bonneville Hyd. Lab., Report No. 27-1, May 1953, "Spillway for Dorena Dam (Row River, Oregon)"
- U. S. Army Corps of Engrs., Bonneville Hyd. Lab., Report 11-1, Nov. 1942, "Model Study of the Spillway and Tunnel for Dorena Dam, Row River, Oregon"
- U. S. Army Corps of Engrs., Bonneville Hyd. Lab., Report 86-1, Dec. 1959, "Side-Channel Spillway, North Hartland Dam (Ottauquechee River, Vermont)"
- U. S. Army Corps of Engrs., Bonneville Hyd. Lab., Report No. 1-1, Jan. 1942, "Model Study of the Spillway for Mud Mountain Dam (White River, Washington)"
- U. S. Army Corps of Engineers Office, Chief of Engineers, Engineering Manual, Civil Works Construction, Part CXVI, Chapter 3, March 1953
- U. S. Army Corps of Engrs., Office, Chief of Engrs., Engineering Manual for Civil Works Construction, Part CXXVII, D103.14:127/2, Chapter 2, Tainter Gates, "Tainter Gates"
- U. S. Army Corps of Engrs., Denison District, Dec. 1939, "Report on Chute Spillways, Denison Dam (Red River, Texas)"
- U. S. Army Corps of Engrs., Garrison District, "Missouri River, Garrison Dam and Reservoir (Riverdale, North Dakota), Plans, Spillway, Structures and Gates"
- U. S. Army Corps of Engrs., Garrison District, Design Memo No. 4, "Spillway and Outlet (Connecticut R. Flood), Townshend Dam and Reservoir, West River, Vermont"
- U. S. Army Corps of Engrs., Los Angeles District, Hydraulic Laboratory Report, April 1940, "Hydraulic Model Tests, Spillway and Outlet Works, Prado Flood Control Dam on Santa Ana River, Prado, Calif."
- U. S. Army Corps of Engrs., Los Angeles District, Hyd. Lab. Report, Dec. 1945, "Hydraulic Model Study, Superelevated Flow in Curved Open Channels, Interim Report"
- U. S. Army Corps of Engrs., Los Angeles District, Model Study Report, June 1944, Also report dated Jan. 1943, "Spillway for Salinas Dam (Salinas River, California)"
- U. S. Army Corps of Engrs., Los Angeles District, Hydraulic Lab. Report, March 1942, "Hydraulic Model Study of the Spillway and Outlet Works for the Sante Fe Flood Control

- Dam, San Gabriel River, California"
- U. S. Army Corps of Engrs., Missouri River Division, 1940, "Model Studies of Spillway, Marshall Creek Dam"
- U. S. Army Corps of Engrs., New England Division, Design Memorandum No. 8, Feb. 1956, "Otter Brook Dam and Reservoir (Otter Brook River, New Hampshire)"
- U. S. Army Corps of Engrs., Providence District, 1938, "Report of Hydraulic Model Tests of Spillway, Union Village Dam (Ompompanoosuc River, Union Village, Vermont)"
- U. S. Army Corps of Engrs., St. Paul District, Report No. 45, Dec. 1940, "Discharge Coefficients for Obstructions to Super-Flood Flows"
- U. S. Army Corps of Engrs., St. Paul District, Report No. 55, Sept. 1950, "Laboratory Tests on Hydraulic Model of Baldhill Dam, Final Report (Cheyenne River, North Dakota)"
- U. S. Army Corps of Engrs., St. Paul District, Hyd. Lab. Report No. 60, Feb. 1957, "Laboratory Tests on Hydraulic Models of Coralville Reservoir Outlet and Spillway Structures (Iowa River, Iowa)"
- U. S. Army Corps of Engrs., St. Paul District, Hyd. Lab. Report No. 63, Aug. 1959, "Spillway Apron for Dam No. 1, Mississippi River"
- U. S. Army Corps of Engrs., St. Paul District, Report No. 58, 1953, "Laboratory Tests on Models of Homme Reservoir, Spillway and Outlet Structures, Final Report (South Branch of Park River, North Dakota)"
- U. S. Army Corps of Engrs., St. Paul District, Hyd. Lab. Report No. 57, Dec. 1953, "Orwell Reservoir Conduit Outlet and Spillway Structures, Otter Tail River, Minn."
- U. S. Army Corps of Engrs., St. Paul District, Hyd. Lab. Report No. 39, Jan. 1940, "Roller Gate Coefficients, Appendix A"
- U. S. Army Corps of Engrs., St. Paul District, Hyd. Lab. Report No. 36, Aug. 1939, "Roller Gate Stilling Basins"
- U. S. Army Corps of Engrs., St. Paul District, Hyd. Lab. Report No. 37, Oct. 1939, "Submergible Tainter Gates"
- U. S. Army Corps of Engrs., Walla Walla District, 1956, "Report on Model-Prototype Conformity, McNary Spillway (Columbia River, Oregon-Washington)"
- U. S. Army Corps of Engrs., Waterways Experiment Station, Misc. Paper 2-97, March 1954, "Analysis of Model and Prototype Data for Hydraulic Design Criteria"
- U. S. Army Corps of Engrs., Waterways Experiment Station, Misc. Paper 2-154, March 1956, "Cavitation at Baffle Piers"
- U. S. Army Corps of Engrs., Waterways Experiment Station, Misc. Paper 2-234, Aug. 1957, "Field Investigations of Spillways and Outlet Works"
- U. S. Army Corps of Engrs., Waterways Experiment Station, Misc. Papers 2-374-1 and 2-374-2, Feb. 1960 and Nov. 1961, "Floods Resulting from Suddenly Breached Dams: Report 1: Conditions of Minimum Resistance, Report 2: Conditions of High Resistance"
- U. S. Army Corps of Engrs., Waterways Experiment Station, Civil Works Investigations-Hydraulics (Item CW604), Vicksburg, Mississippi, 1952-1960, "Hydraulic Design Criteria—Corps of Engineers, General 000, Spillways 100, Gates and Valves 300, Artificial Channels 600"
- U. S. Army Corps of Engrs., Waterways Experiment Station, Misc. Paper No. 2-206, March 1957, "Hydraulic Laboratory Investigations of Spillways"
- U. S. Army Corps of Engrs., Waterways Experiment Station, Bulletin No. 37, June 1951, "Hydraulic Models as an Aid to the Development of Design Criteria"
- "Model Studies By: U. S. Army Corps of Engineers, Waterways Experiment Station"
1. Allatoona Dam, Etowah, Georgia, Tech. Memo. 214-1, Oct. 1944;
  2. Arkabutla Dam, Coldwater River, Tech. Memo. 169-1, Jan. 1941;
  3. Belton Dam, Leon River, Texas, Tech. Memo. 2-363, April 1953;
  4. Benbrook Dam, Clear Fork of Trinity River, Texas, Tech. Memo. 2-269, March 1949;
  5. Berlin Dam, Mahoning River, Ohio, Tech. Memo. 193-1, Nov. 1942;
  6. Big Bend Dam, Missouri River, South Dakota, T.R. 2-605, 1962;
  7. Bluestone Dam, New River, West Virginia, Tech. Memo. 2-243, March 1948;
  8. Buford Dam, Chattahoochee River, Georgia, Tech. Memo. 2-350, Oct. 1952;
  9. Buggs Island Dam, Roanoke River, Virginia and North Carolina, Tech. Memo. 2-281, June 1949;
  10. Bull Shoals Dam, White River, Arkansas, Tech. Memo. 2-448, Nov. 1948; 2-234, June 1947;
  11. Canton Dam, North Canadian River, Oklahoma, Tech. Memo. 190-1, Aug. 1942;
  12. Center Hill Dam, Caney Fork River, Tennessee, Tech. Memo. 202-1, Aug. 1946;
  13. Cheatham Lock and Dam, Cumberland River, Tennessee, Tech. Memo. 2-381, April 1954;
  14. Clark Hill Dam, Savannah River, South Carolina and Georgia, Tech. Memo. 2-229, Feb. 1947;
  15. Columbia Dam, Chattahoochee River, Alabama and Georgia, Tech. Rec. 2-578, Oct. 1961;
  16. Conchas Dam, Tech. Paper 105-1, July 1936;
  17. Conemaugh Dam, Conemaugh River, Pennsylvania, Tech. Memo. 2-272, Apr. 1949;
  18. Delaware Dam, Olentangy River, Ohio, Tech. Memo. 205-1, Feb. 1944;

19. Denison Dam, Red River, Tech. Memo. 177-1, Dec. 1941;
20. Detroit Dam, North Santiam River, Oregon, Tech. Memo. 2-260, Sept. 1948; Tech. Memo. 2-302, Oct. 1949;
21. Dewey Dam, Johns Creek, Kentucky, Tech. Memo. 191-1, Dec. 1942;
22. Dillon Dam, Licking River, Ohio, Tech. Memo. 2-264, Nov. 1948;
23. East Branch Reservoir, Clarion River, Pennsylvania, Tech. Memo. 2-325, July 1951;
24. Enid Dam, Yocona River, Mississippi, Tech. Memo. 2-223, March 1947;
25. Eufaula Dam, Canadian River, Oklahoma, T. R. 2-575, 1961;
26. Folsom Dam, American River, California, Tech. Memo. 2-369, Aug. 1953;
27. Fort Gibson Dam, Grand River, Oklahoma, Tech. Memo. 2-228, Jan. 1947; Tech. Memo. 192-1, Jan. 1943;
28. Fort Randall Dam, Missouri River, South Dakota, Tech. Memo. 2-528, Oct. 1959;
29. Garrison Dam, Missouri River, North Dakota, Tech. Memo. 2-431, March 1956;
30. Gavins Point Dam, Missouri River, Nebraska, Tech. Memo. 2-404, May 1955;
31. Genegantslet Dam, Genegantslet Creek, New York, Tech. Memo. 2-351, Oct. 1952;
32. Great Salt Plains Dam, Tech. Memo. 148-1, Dec. 1938;
33. Greenup Locks and Dam, Ohio River, Kentucky and Indiana, T. R. 2-572, 1961;
34. Harlan County Dam, Republican River, Nebraska, Tech. Memo. 2-236, Sept. 1947;
35. Hartwell Dam, Savannah River, Georgia, Tech. Memo. 2-393, Aug. 1954;
36. Jackson Dam, Tombigbee River, Alabama, Tech. Memo. 2-531, Jan. 1960;
37. Jim Woodruff Dam, Apalachicola River, Florida, Tech. Memo. 2-340, Vicksburg, Miss., May 1952;
38. Markland Locks and Dam, Ohio River, Kentucky and Indiana, T. R. 2-566, 1961;
39. John Martin (Caddoa) Dam, Arkansas River, Tech. Memo. 166-1, Dec. 1940;
40. Maxwell and Opekiska Locks and Dams, Monongahela River, Pennsylvania and West Virginia, T. R. 2-579, Oct. 1961;
41. McGee Bend Dam, Angelina River, Texas, Misc. Paper 2-264, April 1958;
42. Narrows Dam, Little Missouri River, Arkansas, Tech. Memo. 209-1, Oct. 1944;
43. New Cumberland Locks and Dam, Ohio River, West Virginia, T. R. 2-585, Nov. 1961; Tech. Memo. 2-386, July 1954;
44. Norfork Dam, North Fork River, Arkansas, Tech. Memo. 2-387, June 1954; Tech. Memo. 2-389, July 1954;
45. Old River Overbank Structure, Tech. Report N-2-491, Feb. 1959, 15 pp., by C. J. Powell;
46. Old River Low-Sill Control Structure, Tech. Report N-2-447, Report 1, Dec. 1956, 18 pp., 85 plates;
47. Osceola Dam, Osage River, Missouri, Tech. Memo. 2-261, Oct. 1948;
48. Philpott Dam, Smith River, Virginia, Tech. Memo. 2-321, Dec. 1950;
49. Pike Island Locks and Dam, Ohio River, Ohio and West Virginia, T. R. 2-586, Dec. 1961;
50. Pine Flat Dam, Kings River, California, Tech. Memo. 2-375, Dec. 1953;
51. Possum Kingdom Dam, Tech. Memo. 111-1, Oct. 1936 (restricted distribution); Tech. Memo. 111-2, Nov. 1936; Tech. Memo. 111-3, Jan. 1937;
52. St. Lucie Canal, Martin County, Florida, Tech. Memo., paper 14, Sept. 1933; 153-1, June 1939;
53. Santee River Dam, Tech. Memo. 168-1, Aug. 1940;
54. Sardis Dam, near Sardis, Mississippi, Tech. Memo. 132-1, May 1938; 132-2, May 1938;
55. Savage River Dam, Savage River, Maryland, Tech. Memo. 2-378, Jan. 1954;
56. Stewarts Ferry Dam, Stones River, Tennessee, Tech. Memo. 2-239, Sept. 1947;
57. Table Rock Dam, White River, Missouri, Tech. Memo. 2-504, June 1959, Powell, C. J., and Brasfield, C. W.;
58. Townsend Dam and Reservoir, West River, Vermont, Tech. Memo. 2-498 (Tech. Report 2-497), April 1959, Bucci, D. R., Murphy, T. E., and Brown, F. R.;
59. Wappapello Dam, Tech. Memo. 146-1, Oct. 1938;
60. Warrior Dam, Warrior River, Alabama, Tech. Memo. 2-485, July 1958;
61. Whitney Dam, Brazos River, Texas, Tech. Memo. 2-263, Oct. 1948;
62. Wolf Creek Dam, Cumberland River, Kentucky, Tech. Memo. 201-1, Jan. 1944;
- U. S. Army Corps of Engrs., Waterways Experiment Station, Misc. Paper 2-266, April 1958, "Prototype Spillway Crest Pressures, Chief Joseph Dam, Columbia River, Washington"
- U. S. Army Corps of Engrs., Waterways Experiment Station, Tech. Memo. 2-511, June 1959, "Prototype Tests of Spillway Crest and Flip Bucket, Pine Flat Dam, Kings River, California"
- U. S. Army Corps of Engrs., Waterways Experiment Station, Tech. Memo. 2-364, June 1953, "Roughness Standards for Hydraulic Models: Report No. 1, Study of Finite Boundary Roughness in Rectangular Flumes"
- U. S. Army Corps of Engrs., Waterways Experiment Station, Misc. Paper 2-283, Aug. 1958, "The Value of Prototype Tests to Hydraulic Design"
- Sponsored by United States Committee of International Commission on Large Dams (edited by T. W. Mermal), "Register of Dams in the United States," McGraw-Hill Book Co., Inc., 1958, 429 pp., illus. (reference also



- listed under Mermal, T. W.)
- U. S. Department of the Interior, Bureau of Reclamation, Report No. Hyd. -445, 1960, "Baffled Chutes for Canal or Spillway Drops"
- U. S. Department of the Interior, Bureau of Reclamation, Part IV Design and Construction, Bulletin 3: Diversion, outlet and spillway structures; Part VI Hydraulic Investigations, Bulletin 1: Model studies of spillways, Bulletin 3: Studies of crests for overfall dams, 1948, "Boulder Canyon Project Reports"
- U. S. Department of the Interior, Bureau of Reclamation, 1957, "Boysen Dam and Power Plant, Technical Record of Design and Construction"
- U. S. Department of the Interior, Bureau of Reclamation, 1959, "Cachuma Dam, Technical Record of Design and Construction"
- U. S. Department of the Interior, Bureau of Reclamation, "Canyon Ferry Dam and Power Plant, Technical Record of Design and Construction"
- U. S. Department of the Interior, Bureau of Reclamation, 1955, "Cedar Bluff Dam, Technical Record of Design and Construction"
- U. S. Department of the Interior, Bureau of Reclamation (Conducted by USBR for Denver District, U. S. Army Corps of Engrs.), Un-numbered report, July 1944, "Cherry Creek Dam and Reservoir, Cherry Creek and Tributaries, Colorado, Report of Model Studies, Spillways and Stilling Basin"
- U. S. Department of the Interior, Bureau of Reclamation, Volume II, Dams and reservoirs, and Volume III, Waterways, 1957, "Colorado Big Thompson Project, Technical Record of Design and Construction"
- U. S. Department of the Interior, Bureau of Reclamation, Third Edition, 1954, "Dams and Control Works"
- U. S. Department of the Interior, Bureau of Reclamation, 1955, "Davis Dam and Power Plant, Technical Record of Design and Construction"
- U. S. Department of the Interior, Bureau of Reclamation, U. S. Government Printing Office, 1960, 611 pp., illus., "Design of Small Dams"
- U. S. Department of the Interior, Bureau of Reclamation, Engineering Monograph No. 9, 1952 (by J. N. Bradley), "Discharge Coefficients for Irregular Overfall Spillways"
- U. S. Department of the Interior, Bureau of Reclamation, "Eklutna Dam and Power Plant, Technical Record of Design and Construction"
- U. S. Department of the Interior, Bureau of Reclamation, 1958, "Enders Dam, Technical Record of Design and Construction"
- U. S. Department of the Interior, Bureau of Reclamation, Engineering Monograph No. 7, 1951 (By J. N. Bradley and L. R. Thompson), "Friction Factors for Large Conduits Flowing Full"
- U. S. Department of the Interior, Bureau of Reclamation, 1961, "Glendo Dam and Power Plant, Technical Records of Design and Construction"
- U. S. Department of the Interior, Bureau of Reclamation, Nov. 1957, "Guide for Computing Water Surface Profiles"
- U. S. Department of the Interior, Bureau of Reclamation, 1952, "Heart Butte Dam, Technical Record of Design and Construction"
- U. S. Department of the Interior, Bureau of Reclamation, "Hungry Horse Dam and Power Plant, Technical Record of Design and Construction"
- U. S. Department of the Interior, Bureau of Reclamation, Engineering Monograph No. 25, 1958, Second Edition, 1963, "Hydraulic Design of Stilling Basins and Bucket Energy Dissipators"
- U. S. Department of the Interior, Bureau of Reclamation, 11th Edition, "Hydraulic and Excavation Tables"
- U. S. Department of the Interior, Bureau of Reclamation, Engineering Monograph No. 18, March 1953, "Hydraulic Laboratory Practice"
- "Hydraulic Model Studies of Spillways By: U. S. Dept. of Interior, Bureau of Reclamation" (unpublished reports; copies available on loan only)
1. Alamogordo Dam, Carlsbad, New Mexico, Lab. Report Hyd-243, May 1948;
  2. Alamogordo Dam Enlargement, Carlsbad, New Mexico, Lab. Report Hyd-416, Dec. 1956;
  3. Anchor Dam, Missouri River Basin, Wyoming, Lab. Report Hyd-289, Feb. 1951;
  4. Anchor Dam, Missouri River Basin, Wyoming, Lab. Report Hyd-437, May 1957;
  5. Anderson Ranch Dam, Boise, Idaho, Lab. Report Hyd-217, Nov. 1946;
  6. Angostura Dam, Missouri River Basin, South Dakota, Lab. Report Hyd-192, Jan. 1946;
  7. Bhakra Dam, Punjab, India, Lab. Report Hyd-210, Oct. 1946;
  8. Bhakra Dam, Punjab, India, Lab. Report Hyd-367, Jan. 1953;
  9. Boca Dam, Truckee Storage, Nevada-California, Lab. Report Hyd-225, Dec. 1946;
  10. Bonny Dam, Missouri River Basin, Colorado, Lab. Report Hyd-331, Jan. 1952;
  11. Boysen Dam, Missouri River Basin, Wyoming, Lab. Report Hyd-212, Jan. 1952;
  12. Cachuma Dam, Cachuma, California, Lab. Report Hyd-354, Jan. 1954;
  13. Canyon Ferry Dam, Missouri River Basin, Montana, Lab. Report Hyd-197, March 1946;
  14. Capilano Dam, British Columbia, Canada, Lab. Report Hyd-222, Dec. 1946;
  15. Cascade Dam, Boise, Idaho, Lab. Report Hyd-234, Nov. 1947;
  16. Casitas Dam, Ventura River, California, Lab. Report Hyd-404, Dec. 1955;
  17. Cedar Bluff Dam, Missouri River Basin, Kansas, Lab. Report Hyd-330, Jan. 1952;

18. Cleveland Dam, Greater Vancouver Water District, British Columbia, Lab. Report Hyd-369, May 1953;
  19. Davis Dam, Parker-Davis, Arizona, Nevada, Lab. Report Hyd-169, April 1945;
  20. Davis Dam, Parker-Davis, Arizona, Nevada, Lab. Report Hyd-232, July 1947;
  21. Davis Dam, Parker-Davis, Arizona, Nevada, Lab. Report Hyd-255, Jan. 1949;
  22. Deer Creek Dam, Missouri River Basin, Utah, Lab. Report Hyd-215, Nov. 1946;
  23. Dickinson Dam, Missouri River Basin, North Dakota, Lab. Report Hyd-267, Dec. 1949;
  24. Elephant Butte Dam, Rio Grande, New Mexico, Lab. Report Hyd-173, June 1945;
  25. Enders Dam, Missouri River Basin, Nebraska, Lab. Report Hyd-252, Dec. 1948;
  26. Falcon Dam, Falcon, Texas, Mexico, Lab. Report Hyd-276, July 1950;
  27. Fontenelle Dam, Seedskaadee, Wyoming, Lab. Report Hyd-486, Feb. 1962;
  28. Fresno Dam, Milk River, Montana, Lab. Report Hyd-177, July 1945;
  29. Glen Ann Dam, Cachuma, California, Lab. Report Hyd-360, March 1953;
  30. Glen Canyon Dam, Colorado River Storage, Arizona, Utah, Lab. Report Hyd-469;
  31. Gorge High Dam, Skagit Project, Washington, Lab. Report Hyd-403, Sept. 1955;
  32. Grassy Lake Dam, Upper Snake River, Idaho, Lab. Report Hyd-226, Dec. 1946;
  33. Green Mountain Dam, Colorado-Big Thompson, Colorado, Lab. Report Hyd-229, Feb. 1947;
  34. Heart Butte Dam, Missouri River Basin, North Dakota, Lab. Report Hyd-326, Jan. 1952;
  35. Heart Butte Dam, Missouri River Basin, North Dakota, Lab. Report Hyd-332, June 1952;
  36. Horseshoe Dam, Salt River, Arizona, Lab. Report Hyd-248, Oct. 1948;
  37. Horse Mesa Dam, Salt River, Arizona, Lab. Report Hyd-249, Nov. 1948;
  38. Hungry Horse Dam, Hungry Horse, Montana, Lab. Report Hyd-355, April 1954;
  39. Keyhole Dam, Missouri River Basin, Wyoming, Lab. Report Hyd-271, Jan. 1952;
  40. Kortes Dam, Missouri River Basin, Wyoming, Lab. Report Hyd-206, Aug. 1946;
  41. Medicine Creek Dam, Missouri River Basin, Nebraska, Lab. Report Hyd-279, July 1950;
  42. Moon Lake Dam, Moon Lake, Utah, Lab. Report Hyd-158, Oct. 1944;
  43. Navajo Dam, Colorado River Storage, Colorado, New Mexico, Lab. Report Hyd-458, Nov. 1961;
  44. Nimbus Dam, Central Valley, California, Lab. Report Hyd-431, June 1957;
  45. Ochoco Dam, Deschutes, Oregon, Lab. Report Hyd-339, Feb. 1953;
  46. Olympus Dam, Colorado-Big Thompson, Colorado, Lab. Report Hyd-278, April 1952;
  47. Owyhee Dam, Owyhee, Oregon-Idaho, Lab. Report Hyd-159, Nov. 1944;
  48. Palisades Dam, Palisades, Idaho, Lab. Report Hyd-350, June 1956;
  49. Paonia Dam, Paonia, Colorado, Lab. Report Hyd-444, June 1959;
  50. Prineville Dam, Crooked River, Oregon, Lab. Report Hyd-452, June 1959;
  51. Robles Diversion Dam, Ventura River, California, Lab. Report Hyd-427, Nov. 1956;
  52. Ross Dam, City of Seattle, Washington, Lab. Report Hyd-207, Aug. 1946;
  53. Ross Dam, City of Seattle, Washington, Lab. Report Hyd-375, June 1953;
  54. Sanford Dam, Canadian River, Texas, Lab. Report Hyd-491, Dec. 1962;
  55. Scofield Dam, Scofield, Utah, Lab. Report Hyd-160, Dec. 1944;
  56. Shadehill Dam, Missouri River Basin, South Dakota, Lab. Report Hyd-329, Jan. 1952;
  57. Shadow Mountain Dam, Colorado-Big Thompson, Colorado, Lab. Report Hyd-162, Jan. 1945;
  58. Sherburne Lake Dam, Milk River, Montana, Lab. Report Hyd-454, Aug. 1959;
  59. Sly Park Dam, Central Valley, California, Lab. Report Hyd-370, May 1953;
  60. Stewart Mountain Dam, Salt River, Arizona, Lab. Report Hyd-247, Sept. 1948;
  61. Tiber Dam, Missouri River Basin, Montana, Lab. Report Hyd-288, March 1952;
  62. Tieton Dam, Yakima, Washington, Lab. Report, Hyd-343, July 1952;
  63. Trinity Dam, Central Valley, California, Lab. Report Hyd-447, April 1960;
  64. Trinity Dam, Central Valley, California, Lab. Report Hyd-467, Aug. 1960;
  65. Unity Dam, Burnt River, Oregon, Lab. Report Hyd-211, Oct. 1946;
  66. Webster Dam, Missouri River Basin, Kansas, Lab. Report Hyd-390, Nov. 1954;
  67. Willow Creek Dam, Colorado-Big Thompson, Colorado, Lab. Report Hyd-356, June 1954;
  68. Wu-Sheh Dam, Taiwan, China, Lab. Report Hyd-430, Feb. 1957;
  69. Yanhee Dam, Yanhee, Thailand, Lab. Report Hyd-428, June 1957;
  70. Yellowtail Dam, Missouri River Basin, Montana, Wyoming, Lab. Report Hyd-414, Aug. 1961 (preliminary);
  71. Yellowtail Dam, Missouri River Basin, Montana, Wyoming, Lab. Report Hyd-483 (final studies)
- U. S. Department of the Interior, Bureau of Reclamation, "Jamestown Dam, Technical Record of Design and Construction"
- U. S. Department of the Interior, Bureau of Reclamation, "Kortes Dam and Power Plant, Technical Record of Design and Construction"

- U. S. Department of the Interior, Bureau of Reclamation, 1955, "Medicine Creek Dam, Technical Record of Design and Construction"
- U. S. Department of the Interior, Bureau of Reclamation, "Monticello Dam, Technical Record of Design and Construction"
- U. S. Department of the Interior, Bureau of Reclamation, 1960, "Nimbus Dam, Power Plant, and Fish Hatchery, Technical Records of Design and Construction"
- U. S. Department of the Interior, Bureau of Reclamation, 1954, "O'Sullivan Dam, Technical Records of Design and Construction"
- U. S. Department of the Interior, Bureau of Reclamation, 1961, "Palisades Dam and Power Plant, Technical Records of Design and Construction"
- U. S. Department of the Interior, Bureau of Reclamation, 1954, "Platoro Dam, Technical Record of Design and Construction"
- U. S. Department of the Interior, Bureau of Reclamation, 1961, "Reclamation Project Data"
- U. S. Department of the Interior, Bureau of Reclamation, 1962, "Rogue River Basin Project, Technical Records of Design and Construction (includes Howard Prairie Dam, Keene Creek Dam and Emigrant Dam)"
- U. S. Department of the Interior, Bureau of Reclamation, Engineering Monograph No. 16, 1954 (by A. J. Peterka), "Spillway Tests Confirm Model-Prototype Conformance"
- U. S. Department of the Interior, Bureau of Reclamation, Report No. Hyd-409, 1956, "Stilling Basin Performance Studies—An Aid in Determining Riprap Sizes"
- U. S. Department of the Interior, Bureau of Reclamation, Bulletin 3, Part VI, Hydraulic Investigations, Boulder Canyon Project, Final Reports, 1948, "Studies of Crests of Overfall Dams"
- U. S. Department of the Interior, Bureau of Reclamation, Hyd. Lab. Report No. 182, 1945 (by J. N. Bradley), "Studies of Flow Characteristics, Discharge and Pressures Relative to Submerged Dams"
- U. S. Department of the Interior, Bureau of Reclamation, 1961, "Tiber Dam, Technical Records of Design and Construction"
- U. S. Department of the Interior, Bureau of Reclamation, 1957, "Trenton Dam, Technical Record of Design and Construction"
- U. S. Department of the Interior, Bureau of Reclamation, U. S. Government Printing Office, May 1953, "Water Measurement Manual"
- U. S. Tennessee Valley Authority, Technical Report No. 5, Vol. 2, 749 pp., 284 illus., 1947, "The Apalachia, Ocoee No. 3, Nottely and Chatuge Projects"
- U. S. Tennessee Valley Authority, Technical Monograph No. 74-1954, "Boone Project Hydraulic Model Studies"
- U. S. Tennessee Valley Authority, Technical Report No. 7, 411 pp., 138 illus., 1946 "The Cherokee Project"
- U. S. Tennessee Valley Authority, Technical Report No. 6, 451 pp., 97 illus., 1942, "The Chicamauga Project"
- U. S. Tennessee Valley Authority, Civil Engineering, Vol. 13, 1943, "The Design of Recent TVA Projects," II General Design, p. 165; Rich, G. R., III Watts Bar and Ft. Loudoun, p. 204; Mundal, Torald, IV Kentucky Project, p. 257; Welleman, E. H., V Fontana Project, p. 305; Davis, C. V., Meyer, A. A., VI Cherokee and Douglas, p. 373; Nowell, J. C., VII Chatuge and Nottely Projects, p. 413; Dickinson, M. L., VIII Apalachia and Ocoee No. 3, p. 465; Goodhue, H. W., et al.
- U. S. Tennessee Valley Authority, Technical Report No. 24, Vol. 1, 1952, "Design of TVA Projects, Vol. 1: Civil and Structural Design"
- U. S. Tennessee Valley Authority, Technical Report No. 10, 438 pp., 158 illus., 1948, "The Douglas Project"
- U. S. Tennessee Valley Authority, Technical Report No. 12, 695 pp., 251 illus., 1949, "The Fontana Project"
- U. S. Tennessee Valley Authority, Technical Monograph No. 68, 1953, 384 pp., "Fontana Project Hydraulic Model Studies"
- U. S. Tennessee Valley Authority, Technical Report No. 11, 521 pp., 187 illus., 1949, "The Fort Loudoun Project"
- U. S. Tennessee Valley Authority, Technical Monograph No. 87, 1960, "Fort Patrick Henry Project Hydraulic Model Studies"
- U. S. Tennessee Valley Authority, Technical Report No. 4, 423 pp., 113 illus., 1941, "The Guntersville Project"
- U. S. Tennessee Valley Authority, Technical Report No. 5, Vol. 1, 367 pp., 116 illus., 1946, "The Hiwassee Project"
- U. S. Tennessee Valley Authority, Technical Report No. 13, 877 pp., 307 illus., 1950, "The Kentucky Project"
- U. S. Tennessee Valley Authority, Technical Report No. 1, 840 pp., 375 illus., 1939, "The Norris Project"
- U. S. Tennessee Valley Authority, Technical Report No. 3, 431 pp., 114 illus., 1941, "The Pickwick Landing Project"
- U. S. Tennessee Valley Authority, Technical Report No. 14 (1957), "The Upper Holston Projects"
- U. S. Tennessee Valley Authority, Technical Report No. 9, 545 pp., 215 illus., 1948, "The Watts Bar Project"
- U. S. Tennessee Valley Authority, Technical Report No. 2, 362 pp., 147 illus., 1940, "The Wheeler Project"
- Vennard, J. K., et al, "Cavitation in Hydraulic Structures: A Symposium," Trans. ASCE, Vol. 112, paper No. 2295 (1947)
- Vennard, J. K., and Weston, R. F., "Submergence Effect on Sharp-Crested Weirs," Engrg. News-Record, Vol. 130 (1943), p. 814, Vol. 131, p. 187
- Villemonte, J. R., "Submerged Weir Discharge

- Studies," *Engrg. News-Record*, V 139, n 26, Dec. 25, 1947, p. 866-9
- Viparelli, M., "Fast Water Flow in Steep Channel," *IAHR Proceedings* 7th, Lisbon 1957
- Vitols, A., "Vacuumless Dam Profiles," *Wasserbau und Wasserwirtschaft*, Vol. 31, 1936. Transl. by E. F. Wilsey, USBR Report No. HYD-22
- Walton, J., "Flashboards Release Flood Like 'House of Cards' (Belton Dam)," *Elect. World* V 115 n 8, Feb. 22, 1941, p. 51 and 124
- Warnock, J. E., "Experiments Aid in Design at Grand Coulee," *Civil Engineering*, Vol. 6, 1936, p. 737
- Warnock, J. E., "Spillways and Energy Dissipators," *Proceedings of Hydraulics Conference*, State Univ. of Iowa, p. 142-159, March 1940
- Warnock, J. E., Dewey, H. J., Jr., et al., "Conformity Between Model and Prototype," *Trans. ASCE* Vol. 109, p. 3 (1944)
- Webster, M. J., "Spillway Design for Pacific Northwest Projects," *ASCE Hyd. Div. Journal*, p. 63-85, Aug. 1959
- Weileman, E. H., "The Design of Recent TVA Projects IV Kentucky Project," *Civil Engineering*, Vol. 13, 1943, p. 257
- Wen-Hsiung, Li, "Criteria for Similitude of Scour Below Hydraulic Structures," *IAHR Proceedings* 6th, The Hague 1955
- Wiley, A. J., "High Dams—A Symposium," *Trans. ASCE* Vol. 95, 1931, p. 129
- Williams, G. S., and Hazen, A., "Hydraulic Tables, 1933, 115 pp.
- Williamson, J., "Round-Crest, Siphon and Trumpet Shaft Spillways," 4th Congress on Large Dams (Great Britain), Vol. II, 1951, p. 267-299
- Woodward, S. M., and Posey, C. J., "Steady Flow in Open Channels," John Wiley & Sons, Inc., New York, 1941
- Worcester Polytechnic Inst., conducted for U.S. Army Corps of Engrs., New England Division, June 1938, "Report of Hydraulic Model Tests of Spillway, Knightville Dam, Westfield River, Knightville, Mass."
- Worcester Polytechnic Inst., conducted for U.S. Army Corps of Engrs., New England Division, June 1938, "Report of Hydraulic Model Tests of Spillway, Surry Mountain Dam, Ashuelot River, Surry, N. H."
- Worcester Polytechnic Inst., conducted for U.S. Army Corps of Engrs., New England Division, May 1938, "Report of Hydraulic Model Tests of Spillway, Union Village Dam, Ompompanoosuc River, Union Village, Vermont"
- Wright, C. A., and Betts, C. A., "Flash-Board Pins," *Trans. ASCE* Vol. 105, 1940
- Zaky, H., "Model Experiments on Gebel Aulia Dam," *Instn. Civ. Engrs. J* V 16 n 7, June 1941, p. 351-3

KEY WORDS: bibliography; cavitation; crest gates; hydraulics; models; spillways

ABSTRACT: The Task Force on Hydraulic Design of Spillways of the Committee on Hydraulics has prepared a selected bibliography on the hydraulic design of spillways. The bibliography is limited to material of primary value and lists only carefully selected articles that are current and useful in present design. The references are listed alphabetically, and a subject index cross-referenced by authors is also provided.

REFERENCE: "Bibliography on the Hydraulic Design of Spillways," Progress Report of the Task Force on Hydraulic Design of Spillways of the Committee on Hydraulic Structures of the Hydraulic Division, Journal of the Hydraulics Division, ASCE, Vol. 89, No. HY4, Proc. Paper 3573, July, 1963, pp. 117-139.