Education

B.S.C.E. Lafayette College 1929 (Barge Math prize 1927, Citation of Merit 1966). M.S.C.E. 1933, C.E. 1939 Univ. of Minnesota (plus additional credits).

Experience

Surveyor in N.Y. and with A.A.A.; Inspector, PA highway department, and U.S. Engineers; Detailer, American Bridge Co.: Structural Designer for various architects; Reporter, Engineering News-Record; Training Specialist (Consultant) U.S. Navy CEC; Senior Structural Engineer, North American Aviation, Inc.; Director, Technical Training, First Peace Corps Civil Engineers and Surveyors; Consulting Editor, Civil Engineering Series (and Applied Mechanics), named in 57 textbooks, for International Textbook Co., T. Y. Crowell, and Harper & Row, Publishers.

Teaching

Thirty-three years total at 8 colleges - Univ. of Minnesota, Univ. of Hawaii, W.P.I., Univ. of Southern California, V.P.I. (C.E. Dept. Head 6 years), Univ. of Wisconsin, Texas Western (UTEP), and N.M.S.U. (Dept. Head 4 years).

Military

Rear Admiral, CEC, USNR (Ret.).

Memberships

Tau Beta Pi, Chi Epsilon, Sigma Xi; ASCE, ACSM, ASEE.

Listings

Who's Who in Engineering, Who's Who in America, Who's Who in the World.

Publications Fifty-seven including 4 textbooks. Also 2 songs. Presently Editor and Contributor THE SURVEYING HANDBOOK (36 Chapters and 34 Contributors), Van Nostrand Reinhold Co.

RUSSELL C. BRINKER

Statement of Professional Qualifications and Experience

.9	Born in Easton, Pennsylvania
.926	Surveyor, Booth & Dickerson, Monticello, N.Y. (Summer)
.928	Inspector, Pennsylvania Highway Department (Summer)
.929	B.S.C.E. Degree, Lafayette College (Earned about 60% of my college expenses)
.929-30	Detailer, American Bridge Company, Philadelphia, Pa.
.930-35	Instructor in Civil Engineering, University of Minnesota
	Taught surveying and structures. Held Research Fellowship for one year. Took
	graduate work in structures, mechanics, hydraulics, and highway materials.
.933	M.S.C.E. Degree, University of Minnesota (Structures Major)
1934	Inspector, U.S. Engineers, on Mississippi River dam at LaCrosse, Wisc. (Summer)
1935-36	Instructor in Engineering, University of Hawaii
1937-40	Assistant Professor of Engineering, University of Hawaii
	Taught surveying, structures, mechanics, mathematics, drawing, and hydraulics.
	Also designed for architects; made surveys for A.A.A.; and was a reporter for
006 00	Engineering News-Record.
.936-37	Exchange Teacher in Civil Engineering, Worcester Polytechnic Institute
1939	Taught highways, surveying, and structures
1940-41	C.E. Degree, University of Minnesota (Structures Thesis)
1940-41	Assistant Professor of Structural Engineering, University of Minnesota
1941-46	Taught structures. Took graduate work in structures toward doctorate
1347-40	Lieutenant (jg) to Commander, Civil Engineer Corps, USNR
•	Training Officer, Public Works Officer, and Executive Officer for Naval Base
	having up to 7,000 officers and enlisted men. Engineer Officer for Military Government unit on Leyte, Samar, Ie Shima, and Okinawa. Now Rear Admiral,
	CEC, USNR (Ret).
19-47	Associate Professor of Civil Engineering, University of Minnesota
.,	Taught surveying and hydraulics. Reorganized surveying division.
1947-50	Associate Professor of Civil Engineering, University of Southern California.
	Taught surveying, highways, structural detailing, and seminar.
1948	Consultant (Training Specialist), U.S. Navy Civil Engineer Corps, Port
	Hueneme, California (9 months)
1950-57	Professor of Civil Engineering, Virginia Polytechnic Institute
1951-57	Head of Civil Engineering Department, Virginia Polytechnic Institute
	Administered department of approximately 400 students, 8 faculty members and
	several graduate assistants.
	Taught contracts and specifications, surveying, estimating, and Civil Engineer-
	ing problems. Reorganized department.
1955	Visiting Professor, University of Wisconsin Summer Surveying Camp (Summer)
1956	Senior Structural Engineer, North American Aviation Inc., Los Angeles,
1000 00	California (Summer)
1957-58	Editorial Director, Engineering Books, The Ronald Press Company, New York,
1060 61	N.Y. (Offered a Vice-Presidency to remain with the company)
1958-61	Professor of Civil Engineering, Texas Western College. Taught contracts and
	specifications, engineering economy, surveying, statics and engineering
1959-	orientation.
±7J7"	Consulting Editor, Civil Engineering Series, International Textbook Company,
1961-	T. Y. Crowell, and Harper & Row, Publishers, Inc. (Total of 57 books).
2704	Professor of Civil Engineering, New Mexico State University

1962-66	Head of Civil Engineering Department, New Mexico State University Administered a department of approximately 245 undergraduate students, 22 Masters and Doctoral candidates, 9 faculty members, 3 part-time instructors, and 10 graduate assistants. Taught surveying, highways, construction methods, and engineering economy.
1966-67	Professor of Civil Engineering, University of Hawaii
1967-69	Taught surveying and photogrammetry Professor of Civil Engineering. New Mexico State University
	Taught surveying, route surveying, engineering economy
1969 - 1975	Visiting Professor of Civil Engineering, New Mexico State University Professor of Civil Engineering, University of Hawaii Taught surveying and route surveying (Spring Semester)
Publicatio	ns Fifty-seven including 3 books and 1 booklet. Also, 2 songs.
Registrati	Professional registration as a Civil Engineer in Texas and New Mexico (Dropped registration as Civil Engineer and Structural Engineer in Minnesota, and Civil Engineer in Virginia, when I moved to Arizona).
Membership	American Society of Civil Engineers, American Society for Engineer- ing Education, and American Congress on Surveying and Mapping. Sigma Xi, Tau Beta Pi and Chi Epsilon
Listings	American Men of Science; Who's Who in the South and Southwest; Who's Who in Engineering; Who's Who in America; and Who's Who in the World.
Editor	THE SURVEYING HANDBOOK to be published by Van Nostrand Reinhold in 1986. It will have 36 chapters and 30 Contributors.

PUBLICATIONS

Russell C. Brinker

- 1. "The Text-Book Question", Society for Promotion of Engineering Education Journal, March, 1935, p. 475-477.
- 2. Discussion of article, "Relation of Analysis to Structural Design" by Hardy Cross, Proceedings, A.S.C.E., Dec., 1935. Transactions, Oct., 1936.
- 3. "When in Hawaii ...", Minnesota Techno-Log, February, 1936.
- . "Creosoted Poles Prove Value in Hawsii", Wood Preserving News, July, 1936, p. 81-82,
- 5. Discussion of Symposium, "Structural Applications of Steel and Lightweight Alloya", Proceed., A.S.C.E., March, 1937. Transactions, October, 1937.
- 6. W'The Function of an Engineering Teacher", S.P.E.E., Journal, January, 1938, p. 402-
- 7. W'Graphical Analysis of a Level Circuit", Engr. News-Record, 3 March, 1938. Also, "The Practical Pocket Guide for Field and Office". New York, Engineering News-Record, 1939, p. 63-65. (Book)
- 8. *"Jack Setup for Pile Test", Engineering News-Record, 3 March, 1938.
- 9. #"Fastening Acoustical Blocks", Engineering News-Record, 4 August, 1938.
- 10. * Preventing Wall Cracks", Engineering News-Record, 16 February, 1939.
- 11. Discussion of article, "Specification and Design of Steel Gusset Plates" by T.H. Rust. Proceed., A.S.C.E., April 1940. Transactions, October, 1940.
- 12. "Sidelights on Construction in Hawaii", Civil Engineering, April, 1941., p. 201-204.
- 13. "Concrete Rockers for Hawaiian Bridges", Engr. News-Record, March, 1942., 111-112.
- 14. "Quonset Huts", 1942, A Navy booklet prepared while in service
- 15. Discussion of article, "Some Thoughts on Engineering Education" by D.M. Baker, Proceedings, A.S.C.E., September, 1946.
- 16. "An Engineer in Military Government", U.S. Navy Civil Engineer Corps Bulletin, August 1947; September, 1947, p. 231-234, p. 272-275, respectively.
- 17. "Surveying Field Notes", 1948; 1949; 1954. (Co-author with D.F. Griffin). Printed by Edwards Brothers, Inc., Ann Arbor, 61 p. (Booklet)
- 18. "A Study of Surveying Schools and Camps in the United States and Canada", Amer. Soc. for Engr. Education Journal, Jan., 1949. C.E. Bulletin, Feb. 1949.
- 19. "Disaster Relief", 1949, (in collaboration). Manual for a Navy course. About 2,000 p.
- 20. "Plane Table Pointer", Engineering News-Record, 15 June, 1950.
- 21. "The Engineer and Disaster Relief", Virginia Tech Engineer, Feb., 1951, p. 9-10,26,28
- 22. "A Study of the Status of Photogrammetry in the Engineering Schools of the United States and Canada", Photogrammetric Engineering, June, 1951; American Society for Engineering Education, C.E. Bulletin, May, 1951.
- 23. "1313 Review Questions for Surveyors", March, 1951. A 101-page mimeo. book. 24. "1575 Review Questions for Surveyors", Aug., 1951. A 107-page litho. book.
- 25. "Summer Surveying Camp Problems", Proceedings, Third National Surveying-Teachers' Conference. August. 1952.
- 26. "2020 Review Questions for Surveyors", Dec., 1952. A 149-page panto. book.
- 27. "Review Questions for Surveying Short Courses", Dec., 1952. A panta book.
- 28. "A Bit More Mauka ... A Few Feet Makai", The Surveyor's Notebook. 1953.
- 29. "2222 Review Questions for Surveyors", June, 1954. A 170-page panto. book.
- 30. "A Method for Computing Charges for Land Surveys", Surveying & Mapping Journal, April-June, 1954; Proceed., 1954 Florida Highway & Surveying Conference, University of Florida Bulletin, Series 69, 1955.
- 31. "Problems from Recent E.I.T. and Professional Engineering Examinations". An 80-page mimeographed book co-authored with L.G. Rich and W.W. Payne.
- 32. "Architectural Engineering in the Southeast and its Relationship to Civil Engineering", Arch. Engr. Bulletin, A.S.E.E., Co-author with Poulton., 1954.
- 33. "Elementary Surveying", Scranton, International Textbook Company, 1955, 550 p. 3rd edition. (Book).

*Also published in "Practical Pocket Guide for Field and Office", Engineering News-Record, 1939.

- 34. 'Municipal Training at V.P.I.", Virginia Municipal Review, Dec., 1955, p. 275.
- 35. "Bidding for Engineering Services", Virginia Engineer, VSPE, Spring, 1956, p. 20.54
- 36. "2525 Review Questions for Surveyors", Sept. 1956. A 200-page pantographed book. Ronald Press.
- 37. "Noteforms for Surveying Measurements", Brinker and Austin. International Textbook Co., 1957, 82 p.
- 38. "3030 Review Questions for Surveyors", June, 1959. A 291-page pantographed book.
- 39. "The Status of Edikation in Surveying", Quarterly Journal, ACSM, March, 1960. p. 55-66.
- 40. "1301 Review Problems from EIT and Engineering Registration Examinations", a coauthored college and trade textbook. International Textbook Company, November, 1960, 388 p.
- 41. "Elementary Surveying, 4th edition. Scranton, International Textbook Company, 1961, 521 pages. (97 college adoptions in 1962-63).
- 42. "Should I Write a Textbook?". American Society for Engineering Education Journal, April, 1962, p. 513-521. Reprinted by International Textbook Company, Addison-Wesley (70,000 copies).
- 43. "Training the First Peace Corps Engineers, Surveyors, and Geologists", Navy Civil Engineer, May, 1962, p. 15-18, 31.
- 44. "3333 Review Questions for Surveyors, October, 1962, 321 p. (Self-published book).
- 45. "First Peace Corps Surveyors and Engineers", Proceedings, American Society of Civil Engineers, June 1963, p. 13-25.

THESES

- 1. "A Critical Study of Riveted and Pin-Connected Trusses for Moderate Spans."
 December, 1933 (M.S. Degree)
- 2. "Some Interesting Structures in Hawaii", March, 1939 (C.E. Degree)

SONGS

- 1. "Lovin", popular song (Hawaiian) published in 1944.
- 2. Football song used by Easton (Penna.) High School.
- 46. "3701 Review Questions for Surveyors", May 1965. 360 pages.
- 47. "Surveying Textbooks Good or Bad?", Journal, American Congress on Surveying and Mapping. September 1965.
- 48. "1777 Review Problems from EIT and Engineering Registration Examinations", 2nd edition, with Others. International Textbook Company, June 1967. 524 pages.
- 49. "Standard Handbook for Civil Engineers", F.S. Merritt, Editor, McGraw-Hill Book Company, 1968. 1323 pages. Prepared Chapter 12, Surveying, 22 pages.
- 50. "What Should Textbooks Contain for Engineering Surveys?", Proceedings, VI National Surveying Conference, Cornell University, August 1968.
- 51. "Elementary Surveying", 5th edition. Scranton, International Textbook Company, March 1969. 620 pages.
- 52. "Roads and Streets Manual", for the State of New Mexico, 1969.
- 53. "4300 Review Questions for Surveyors", February 1971. 383 pages.
- 54. "4444 Review Questions for Surveyors", November 1976. 399 pages.
- 55. "Elementary Surveying", 6th edition. New York, Harper & Row, Publishers. May, 1977. 568 pages.

Miscellaneous Items - R. C. Brinker

- 1. Barge Mathematical Prize, Lafayette College, 1927.
- 2. Member of Tau Beta Pi, Chi Epsilon and Sigma Xi.
- 3. Prepared Civil Service Examinations for the City & County of Honolulu, and one Territorial Engineering License Examination. Ran surveys for AAA. Designed for Honolulu architects (including frames for Hind-Clark dairy building and addition to Honolulu Cas Company building) in 1935-1940 period.

4. Started and taught the first evening program in engineering at the University of

Hawaii, 1936.

5. Area correspondent for Engineering News-Record, 1938-1940 and 1946-1947.

- 6. Studied international law, anthropology, Japanese at Columbia University, 1944.
- 7. Served as the only Navy Civil Engineer Corps officer with the only Navy Civil Affairs Unit in the Philippines (26 Army units there), 1944.

8. Representative, California-Nevada Joint Commission, 1949.

- 9. Chairman, Committee 8, Surveying & Mapping, American Society for Engineering Education, 1950-1951. (On Committee as a member, 1948-51).
- 10. Chairman, Education Division, American Congress on Surveying & Mapping, 1950-1952. (First chairman of newly formed division).
- 11. Chairman, Education Division, American Society of Photogrammetry, 1951-1952. (First chairman of the newly formed division).

12. Virginia Highway Research Advisory Board, 1950-1957. Chairman, 1951-5952.

13. Member, ad-hoc "Implementing Committee" for Bausch & Lomb annual student award

in Photogrammetry, 1952-1953.

14. Organised, directed and taught part of a new undergraduate option and Master's Degree program in Municipal Engineering and Administration at the Virginia Polytechnic Institute in the Civil Engineering Department, 1954. It is (or was) the only M.S. program of this type in a Civil Engineering Department in the United States designed to prepare persons for City Management and City Engineering.

. Organised, directed and taught part of a special program for employees of the Virginia Highway Department at the Virginia Polytechnic Institute, 1955-1957.

 Editor, Property Surveys Division, American Congress on Surveying & Mapping, 1955-1958.

17. Served on Blacksburg, Virginia, Flanning Committee, 1956.

- 18. Secretary, Civil Engineering Division, American Society for Engineering Education, 1956-1957.
- 19. Chairman, Civil Engineering Divasion, American Society for Engineering Education, 1957-1958.
- 20. General Council, American Society for Engineering Education, Civil Engineering Division, 1960-62.
- 21. Nominated by Texas Western College (now University of Texas in El Paso) to be one of the ten Piper Professors in all the Texas colleges and universities, 1960. (No engineer was included in the final state selection).

22. Member, Publication Policy Committee, American Society for Engineering Education,

1960-64.

23. Directed Technical Training, First Peace Corps Unit of Civil Engineers, Surveyors, and Geologists for the Tanganyika Project, at Texas Western College and in Puerto Riso, 1961.

24. Mayor's Advisory Board, El Paso, Texas, 1961-1962.

- 25. Presented papers at more than 20 technical meetings throughout the United States.
- 26. Made a radio tape for the American Textbook Publishers's Institute as the only "successful engineer author" selected for the 16 participants from about 400 nominees made by publishing firms in the United States, 1964.

27. Received Citation of Merit from Lafayette College, 1966.

28. Arranged Surveying & Mapping Division program for the American Society of Civil Engineers national meeting in Phoenix, Arisona, 1971.



