

Engineering Heritage Queensland oral histories

Accession number 33397

Date 1996; 2011.

Author / Creator

Engineers Australia, curator

Abstract This collection contains oral histories of engineers that aim to capture the value and contribution of engineers to the development of Queensland.

System of arrangement Arranged into 1 series.

Description online resource (1 sound recording, 1 video recording).

Guides A series and item list is available.

Administrative / Biographical history Engineers Australia is the peak body of the engineering profession and through an active program has sought to capture the historic value and contribution of engineers in the development of Queensland through recorded oral histories across diverse themes and engineering disciplines. The program preserves the stories of these individuals to pass on to present and future generations, and provides a significant data-base accessible to a wide range of researchers, biographers, historians, journalists, social scientists, and members of the public.

Access restrictions Unrestricted access.

Copyright status In copyright.

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Preferred citation

33397, Engineering Heritage Queensland oral histories, John Oxley Library, State Library of Queensland

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Series 1: Oral histories

Series number 1

Series title Oral histories

Scope and content

This series contains a number of oral histories describing the value and contribution of engineers to the development of Queensland. The Engineering Heritage Project made possible by Engineers Australia, the University of Queensland and the University of South Australia.

Description

Description 2 digital oral histories

Locate OMDIG

Access

Access restrictions Unrestricted access.

Copyright status In copyright

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Items in this series:

Peter Cardno Brooks (31 Jan 1996)

Unit ID 33397/1

Date 31 Jan 1996

Scope and content

This item contains an interview of chemical engineer Peter Cardno Brooks about his career. The interview was conducted on the 31 January 1996. The interviewer is unknown. Peter Cardno Brooks (1917-) is the son of a Scottish immigrant. Peter grew up on his father's cane farm and attended secondary school at Thornburgh College, Charters Towers. He studied chemistry for half of each year from 1935-1938 at Singleton College in Brisbane working in the sugar mills in the Mackay area for the remaining 6 months of each year. Peter then worked as a chemist at Castlemaine Perkins Brewery studying teaching in the evening at Teachers Training College before studying industrial chemistry at the University of Queensland (U.Q.) from 1940-1943. Peter worked for Timrol Ltd. in Rhodes, Sydney, between about 1944-1946

and joined the army during World War 2. In about 1945, he started work at U.Q. as a lecturer and researcher and remaining at U.Q. became involved with the Queensland sugar industry from 1946-1949. In 1952, Peter then studied industrial chemistry at U.Q. before winning a Fulbright Scholarship which him to work and study in the U.S.A. between 1952-1954. While overseas, Peter completed further study in chemical engineering at the Massachusetts Institute of Technology (M.I.T.). Peter was a member of the Queensland branch of the Australian Chemical [Institute], serving as their president in 1957. Peter married in 1958. Peter retired from U.Q. in 1982 after 37 years of service.

Author / Creator

Brooks, Peter Cardno, 1917-

Description

Description 2 digital sound recordings

[View the items](#)

[Listen to the audio](#)

Other

Biographical history

Peter Cardno Brooks attended primary school at Sarina State School between 1922-1929. Following secondary school he went on to study chemistry [first at Singleton College in Brisbane]. He continued his studies at the University of Queensland earning a Bachelor of Applied Science in Industrial Chemistry in 1944 and a Masters of Applied Science in Industrial Chemistry in 1952. Peter then won a Fulbright Scholarship enabling him to work and study in the U.S.A.. While in the U.S.A., he earned a Masters in Chemical Engineering in 1954 from the Massachusetts Institute of Technology (M.I.T.) titled ['The effect of mass transfer on the rate of heat transfer in the turbulent boundary layer on a flat plate']. While at M.I.T., Peter was assistant to Professor McAdam who influenced his professional development. He was a member of both the Institute of Chemical Engineers and the Australian Chemical Institute from 1943. [Description supplied with collection.]

Dr. Douglas Row Mercer (2 September 2011)

**Douglas
Mercer
Interview
2 September, 2011**

Unit ID 33397/2

Date 2 September 2011

Scope and content

This item contains an interview of electrical and mechanical engineer Dr. Douglas Row Mercer about his career. The interview was conducted on the 2 September 2011 with interviewer Penny Langfield. Dr. Doug Mercer wanted to be an engineer from a young age. After attending secondary school at Brisbane Boys' College (B.B.C.), Doug won a government scholarship to study electrical and mechanical engineering at the University of Queensland (U.Q.) completing the degree with honours in 1945. The course was difficult and through it he had work experience at the Brisbane Tramways workshop on Milton Road; the steel works at Port Kembla, the City Electric Light Company in Brisbane and the Hydro-electric Commission of Tasmania. In [1946], Doug started work at the City Electric Light Company in Brisbane in the drawing office. He then became an assistant test engineer responsible for the testing of equipment. The City Electric Light Company supplied equipment as far south as Murwillumbah, as far north as just past Gympie and as far west as Toowoomba. The job required a lot of driving at all hours. He then became involved in a project for the company measuring the transient voltages that occur during lightning and when high voltage switches were operated. Doug was able to use the research to achieve a Masters in Engineering at U.Q. awarded in 1960. Doug continued researching the effects of lightning on electrical equipment and was able to bring the failure rate of transformers in storms down to best practice levels. Doug remained with the company and its successive organisations the Southern Electric Authority of Queensland, the Queensland Electricity Generating Board and the Queensland Electricity Commission for 40 years retiring in 1986. He continued his research on the effects of lightning on electrical equipment for 8-9 years as an honorary researcher at U.Q.. He then earned a Postgraduate Diploma in Arts at U.Q. followed by a Ph.D. thesis on the history of the protection of power systems from lightning awarded in 2002. Doug received an Award of Merit from Engineers Australia in June 2011. Doug's other interests were tennis, golf and building a variety of boats for his children. Doug died in [2013]. Engineering Heritage Australia (Queensland branch) members Brian Becconsall and Kevin Haley were also present at the interview. The video was directed and produced by Dr. John

Cokley of the University and Queensland.

Author / Creator

Mercer, Douglas Row, 1924-

Langfield, Penny;

Cokley, John

Description

Description 1 digital video recording (sound, colour : 1 hr. 0 min. 4 sec.)

[View the items](#)

[View the item](#)

Other

Biographical history

Doug Mercer (1924-) earned an honours degree in Electrical and Mechanical Engineering in 1945 from the University of Queensland (U.Q.). In 1946, Doug started work at the City Electric Light Company (C.E.L.) remaining with successive organisations the Southern Electric Authority of Queensland (S.E.A.Q.) from 1952-1977, the Queensland Electricity Generating Board (Q.E.G.B.) from 1977-1985 and the Queensland Electricity Commission (Q.E.C.) from 1985-1986. In 1960, Doug earned a Master of Engineering in 1960 for original work on designing lightning proof features into electricity networks. Doug made significant contributions as a longstanding member of international committees for the International Council on Large Electric Systems (C.I.G.R.E.), focusing on international transmission matters.

Much of Doug's early career was spent in the Test Department which required him to travel widely testing and commissioning equipment. He served in the design and development departments of C.E.L. and later the S.E.A.Q. on both the 110 kV network and later the 275kV network for state wide interconnection in the 1970s and 1980s. Doug then became Chief Engineer for the Transmission Development for the Q.E.G.B. and the Q.E.C..

Doug retired in 1986 after 40 years of service. Doug then worked part-time as a consultant and honorary researcher at U.Q. and set arrangements for the future Queensland Institute of Technology High Current Testing Laboratory.

He then earned a Ph. D. from the history department titled '[Thor's Hammer Deflected: A

history of the protection of power systems from lightning, with special reference to Queensland, 1950 to 1995]'. Doug participated in the Engineering Heritage Australia Queensland panel (E.H.A.Q.) and was honored with an Award of Merit (A.O.M.) from Engineering Heritage Australia (E.H.A.) in 2011.

[Description supplied with collection.]

(2 digital)