

The Institution of Engineers, Australia: Sydney Division
Engineering Heritage Committee

Oral History Program: Biographical Notes

Ron Campbell (1927-)
Civil Engineer

Birth and Family: Born 4 February 1927. Father held administrative positions with M.W.S. & D.B., finally Assistant Secretary. Mother English, nee Edith Harpham. Has two sisters. Married Gloria Ogle in 1953.

Education: Attended Kogarah Primary and then 2 years at Opportunity classes at Hurstville. Canterbury High School in 1937. Studied languages, strong in Maths and interest in Physics taking Mechanics in final year. Applied for a Teachers College scholarship and a Public Exhibition; achieved both but took up the latter.

Qualifications: Bachelor of Engineering (Civil Engineering) - Sydney University 1944 -1947.

Graduate Diploma Economics - University of New England 1990 - 1993.

Various courses run by NSW Institute of Management.

Memberships: Fellow - Institution of Engineers

Australian Chartered Professional Engineer

President, NSW Branch, Australian Federation of Construction Contractors

Awards:

Work History: January 1948 to November 1950 worked for Sydney Metropolitan Water, Sewerage & Drainage Board as Assistant Engineer. Main project assisted in investigations for and design of Warragamba Dam.

December 1950 to September 1953, Commonwealth Department of Works. Engaged on the design of reinforced concrete and multi storey steel framed buildings and field supervision of the construction phase. Two projects were the Commonwealth Bank, George & Market Sts, Sydney and Commonwealth Bank, Hobart.

In October 1953, accepted a position with the British Colonial Service. He was Assistant Engineer for the Public Works Department of Malaya in two districts, until November 1956.

In North Kedah was involved in operation of quarries, road and building maintenance and supervision of contracts for bridges and buildings. Reconnaissance for and construction of pioneer roads and bridges in jungle areas during the Emergency.

In Central Pahang involved in construction of highway between Temerloh and Maran. Operation of quarries, performance of earthworks, pavement construction and supervision of bridge contracts.

Operation of ferry across Pahang River.

Returning to Australia on leave at the end of 1956, he decided to stay, and took a position in January 1957 with Concrete Industries (Monier) Ltd. Villawood, NSW. This was initially as Manager of the subsidiary, Monier Prestressed Concrete P/L. He finally became Acting Chief Engineer of the Group. Early project was a Mixing Tower for M.W.S.&D.B., the first design in Australia using prestressed concrete. Designed and produced prestressed concrete beams for D.M.R.'s small road bridges, to 50 foot span. The largest individual project undertaken was for manufacture and installation of precast components for the Tasman Bridge, Tasmania. Involved in the conversion of tram tracks to roadway on Sydney Harbour Bridge.

In July 1967 joined Crooks, Michel, Peacock & Stewart, Consulting Engineers at Chatswood, becoming Resident Engineer on the Alcan Aluminium Smelter project at Kurri Kurri - a 16 month project from on-site commencement to completion.

In December 1968 accepted position of Chief Estimator with Project Development Construction P/L, Civil Engineering Contractors of Crows Nest, NSW. Found work challenging and interesting, finding he had a flair for innovative solutions to construction problems. Was responsible for analysis of resource requirements, construction planning and cost estimating for major works in Australia, New Guinea and Fiji.

In April 1971 was invited to join Curtis & Clifton Pty Ltd as Chief Estimator. Tenders and construction for water supply tunnel and water reticulation and treatment works including Emerald Tunnel (Water Supply) Victoria, and waste water treatment works and pipe reticulation systems (\$6.5million) in Sydney.

In November 1974 his next career move was to the position of Senior Engineer with Vallentine Laurie & Davies, Consulting Engineers, in Miranda. Participated in International Bank for Regional Development Project of engineering and economic appraisal of 300 km of rural roads in Northern and Central Thailand. Business promotion trip for four months to Kenya, Saudi Arabia, United Arab Emirates, Bahrain, Kuwait, Sudan and Egypt to obtain consulting work for company.

April 1976 to April 1980 was Senior Construction Expert for United Nations Department of Technical Co-operation for Development, based in Kabul, Afghanistan. His responsibilities were mainly with the field activities, which involved labour-intensive construction, often with primitive equipment. Involved in roads, bridges and dams for small communities using local labour and materials. Introduced monitoring systems for progress against time schedules and expenditure against budgets.

In September 1980 he was offered role as Chief Technical Adviser of a new World Bank project in Sierra Leone. Advisor on Infrastructure Planning in the Central Planning Unit of the Ministry of Development and Economic Planning. Sectors covered were road construction, maintenance and transport, ports, airports, water, posts and telecommunications, energy supplies and sanitation. Established liaison with the appropriate Ministries in these areas for the collection of proposals for inclusion in annual and medium term plans and for monitoring progress of on-going projects. Co-ordinated foreign assistance for projects.

In February 1984, while still Chief Technical Adviser with United Nations Development Projects, was offered job 1988 offered to complete a project in Malawi, Central Africa. Set up and directed projects in Ministry of Works, Malawi, to construct by labour intensive methods - 205km earth roads, 60 road bridges and 106 foot bridges.

Last job before finishing with United Nations in December 1988 was a project formulation mission to Pakistan, to prepare rural a development project for Afghanistan to be commenced across the border. Was disappointed to note that fighting in this area had destroyed a great deal of the work done there by his earlier project.

Went to New York after Malawi seeking more UN work but nothing was available. Gained Graduate Diploma in Economics in 1993.

Prepared by Freda Garnsey, 23 October 2002 from oral history interview conducted on 18 January 2000.

NAME: Ronald Frank Campbell
DATE OF BIRTH: 4.2.27
NATIONALITY: Australian
EDUCATION: Leaving Certificate - Canterbury Boy's
High School 1939-1943
Public Exhibition to Sydney University
Bachelor of Engineering
(Civil Engineering)
Sydney University 1944-1947
Graduate Diploma Economics - University
of New England 1990-1993
OTHER TRAINING: Various courses run by NSW Institute
of Management

MEMBERSHIP OF PROFESSIONAL SOCIETIES -

Fellow - Institution of Engineers, Aust.
Chartered Professional Engineer

EMPLOYMENT RECORD:

February 1984 - December 1988

Chief Technical Adviser United Nations Development Projects
MLW/80/041 and MLW/86/019

Set up and directed projects in Ministry of Works, Malawi,
to construct by labour intensive methods --

205 km earth roads
60 road bridges
106 foot bridges

in the Northern Region of Malawi, Central Africa.

Supervised procurement of equipment and materials, design of
structures and training of staff.

Liased with government officials, political party officers
and traditional chiefs to finalise the project programme and
incorporate villager volunteer input.

After successful completion of the Northern Region project,
the last nine months were spent setting up the second
project in the Central Region.

Prepared reports on project and methods developed.

Liased with visiting missions from UN and other aid
agencies.

July 1988 - UNDP -

Project formulation mission Pakistan

Prepare rural development project for Afghanistan to be commenced across the border

September 1980 - September 1983 - WORLD BANK (IBRD)

Seconded Officer (Grade U)

Project SIL/79/004 - Infrastructure Planning, Sierra Leone.

Chief Technical Adviser

Adviser on Infrastructure Planning in the Central Planning Unit of the Ministry of Development and Economic Planning.

Sectors covered were road transport, road construction and maintenance, air transport, water transport and port facilities, posts and telecommunications, energy supplies, water supplies and sanitation.

Established liason with Ministries of Works, Transport and Communications and Energy & Power for the collection of proposals for inclusion in annual and medium term plans and for monitoring progress of on-going projects. Coordinated ministries' efforts to negotiate foreign assistance for projects. Participated in inter-ministerial committees on energy and water supply projects.

Prepared draft investment programmes for the infrastructure sector in the Second National Development Plan.

Advised the Ministers of Development, Energy & Power and Transport & Communications on matters related to planning and development.

Liased with visiting UN and bilateral missions. Joined the mission to Sierra Leone led by Dr. Farah, Under Secretary of UN, as a coopted member.

April 1976 - April 1980

United Nations, Department of Technical Cooperation for Development. Senior Construction Expert (Grade P5 IX), Kabul, Afghanistan

UNDP Project AFG/76/003 - Strengthening the Rural Development Department

Examined existing methods and prepared proposals for new procedures of resource management and of construction techniques in labour and equipment intensive sub-projects.

Introduced monitoring systems for progress against time schedules and expenditure against budgets. Prepared organization charts and job descriptions for departmental staff.

Prepared proposals for new associated projects.

Prepared specifications for equipment and materials procurement. Liaised with government officials and visiting missions from UN and bilateral aid agencies.

Acting Project Manager during periods of absence of Project Manager.

November 1974 - January 1976

Vallentine Laurie & Davies - Consulting Engineers, Miranda, NSW, Australia.

Senior Engineer

Participated in IBRD Project of engineering and economic appraisal of 300 kms of rural roads in Northern and Central Thailand. Detailed engineering design, construction cost estimation, tender documentation and construction scheduling of five roads from those appraised.

Comparative studies for labour intensive construction of these roads.

Business promotion trip for four months to Kenya, Saudi Arabia, United Arab Emirates, Bahrain, Kuwait, Sudan and Egypt to obtain consulting work.

April 1971 - October 1974.

Curtis & Clifton Pty. Ltd. - Civil Engineering Contractors,
Mount Street, North Sydney, NSW, Australia.
General Manager and Executive Director

Management of this specialised construction company which
was a subsidiary of C & C Constructions, Fort Wayne,
Indiana, USA.

Preparation of tenders for civil engineering projects and
construction of works including -

- a) Emerald Tunnel (Water Supply) Victoria, Australia
22 ft horseshoe tunnel, partly lined, 9000 ft. long
- b) Waste Water treatment works and pipe reticulation
systems (value \$6.5 million) in Sydney and surrounding
areas.

President, NSW Branch, Australian Federation of Construction
Contractors.

December 1968 - March 1971

Project Development Construction Pty. Ltd. - Civil
Engineering Contractors - Pacific Highway, Crows Nest, NSW,
Australia.

Chief Estimator

Responsible for analysis of resource requirements,
construction planning and cost estimating for major works in
Australia, New Guinea and Fiji. Projects included roads
(rural and urban) bridges, railways, multistorey buildings,
hospitals, factories, wharves and mining projects.

July 1967 - November 1968

Crooks, Michel, Peacock & Stewart - Consulting Engineers,
Chatswood, NSW, Australia.

Resident Engineer - Alcan Aluminium Smelter Construction,
Kurri Kurri, NSW, Australia.

Supervision of construction contractors for earthworks,
buildings and equipment installation of this new smelter
valued at \$200 million.

January 1957 - June 1967

Concrete Industries (Monier) Ltd. Monier Square, Villawood, NSW, Australia.

Initially manager of a subsidiary, Monier Prestressed Concrete Pty.Ltd. and finally Acting Chief Engineer of the Group.

Duties ranged from management of the subsidiary company which manufactured precast prestressed concrete products to the design, construction and establishment of factories for the manufacture of concrete roofing tiles and precast pipes.

The largest individual project controlled was for the manufacture, assembly and delivery of precast concrete components for the Tasman Bridge, Hobart, Tasmania. Units on this project weighed up to 100 tons and required special handling equipment.

Liased with foreign companies on patented products and processes and travelled to Europe, USA and Asia for negotiations.

Prepared joint tenders with foreign companies on major projects i.e. North West Cape Communications Centre, Jindabyne to Island Bend Tunnel and Tullamarine Airport.

October 1953 - November 1956

Public Works Department of Malaya (pre-Independence)

Assistant Engineer in two districts

i) North Kedah, Construction and maintenance of roads and buildings. Operation of quarries. Supervision of contracts for bridges and buildings. Reconnaissance for and construction of pioneer roads and bridges in jungle areas during the Emergency.

ii) Central Pahang - Construction of highway between Temerloh and Maran.

Operation of quarries, performance of earthworks, pavement construction and supervision of bridge contracts. Operation of ferry across Pahang River.

Control of Public Works Dept. workshops.

Supervision and training of technical and day labour staff.

December 1950 - September 1953

Commonwealth of Australia -- Department of Works

Design Engineer

Prepared designs and supervised construction of reinforced concrete and steel framed multi storey buildings.

January 1948 - November 1950

Sydney Metropolitan Water, Sewerage & Drainage Board, Pitt Street, Sydney . Assistant Engineer.

Assisted in investigations for and design of Warragamba Dam. Special investigations carried out at Sydney University on foundation sandstone and on large aggregate concrete.

Signed

Date