

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

ORAL HISTORY PROGRAM

INTERVIEWEE: Eric Adam

TAPE NUMBERS:

INTERVIEWER: Paul Tinslay

IEA SYD: PT2

IEA SYD: PT3

DATE: 3.10.96

NUMBER OF TAPES: 2

RESTRICTIONS ON USE: Recording of tape shall not prevent publication of experiences in proposed book.

TIME MIN:SEC	SUBJECT	NAMES AND KEYWORDS
TAPE: PT2 START SIDE A		
00:00 - 00:24	Leader and Identification	
00:24 - 01:20	Education. 1926 Bursary. Left at third year certificate stage. Odd jobs.	North Sydney Boys High School
01:20 - 04:40	Apprentice in fitting and turning with NSW Railways. Interview in building in what is now Australian Graduate School of Engineering Innovation. Crude working conditions. Description of typical day working including evening attendance at Sydney Tech. 44 hour week. 7.30am - 5pm Mon - Fri & Sat Morning.	
04:40 - 05:12	Last term in new loco shop. Lots of hand craft which was good training. Chipping, filing, working lathes, shapers and slotters. Then got into drawing office.	Everleigh workshop
05:12 - 06:20	Applied for and nominated for scholarship in October and had to qualify for university entrance by end of January. Four months to educate from third year certificate stage to matriculation.	Eddie Memorial Scholarship
06:20 - 07:47	Attended coaching college and helped by draftsmen in office. Passed and won scholarship for 150 Pounds a year. Holiday jobs available due to apprentice experience.	Metropolitan Coaching College. Sydney University
07:47 - 11:40	Third term in third year practical experience at sea as 9th Engineer. Gained membership of marine engineers. Twin Screw steam engine ship built in Germany for Kaisers triumphant tour around the world after winning the war. Given as reparation after the war.	'Morella'. Jack Burgess Fifth Engineer
11:40 - 13:25	Observations of six months ship board experience. Found marine engineers often move into power station work when they go ashore as work is similar.	
13:25 - 16:00	Graduated in 1939 in combined electrical and mechanical degree. Found it interesting for a practical person to find out how things are designed. Went back to railway to find that no he was to get no credit for four years of University.	Tom Hardigan Funnell
16:00 - 17:50	Job with Sydney County Council as member of efficiency staff at Bunnerong. Describes getting to work. Responsible for water management, fuel efficiency and station efficiency. Age 26 when started at Bunnerong. Date of birth.	Bunnerong Power Station
17:50 - 18:30	After ten months at power station applied for job at Commonwealth Railways. Employed as draftsman.	Port Augusta
18:30 - 20:45	Problems with boiler efficiency due to water and scale and poor coal.	

TIME MIN:SEC	SUBJECT	NAMES AND KEYWORDS
20:45 - 21:30	War broke out about the same time as he started and there were need for increased train services as part of war plan.	Macarthur
21:30 - 21:45	First job involved in design of dining car.	
21:45 - 23:10	Promotion from draftsman to chief draftsman then Works Manager. Locomotive Superintendent Central Australian Railway. Given one days notice to take over.	Korn, Peterborough. Milsons Point.
23:10 - 24:26	Had learnt to shunt and drive when working in Sydney. Practical experience and his apprenticeship made it easier to be accepted.	
24:26 - 26:38	Descriptions of trains and services. Water problems.	Ghan, Indian Runner, Afghan,
26:38 - 29:25	Poor coals. Description of 'prime' and how it was controlled. Lack of skilled drivers and firemen and no train control.	Tom Playford 'Prime' Quorn to Alice Springs
29:25 - 32:20	Train control was instituted with help of the South Australian Railways. " Learn the road. "	
32:20 - 33:45	Appointed Chief Mechanical Engineer at the age of thirty of a system in chaos.	
33:45 - 41:30	Returned to Sydney and offered job with ACL. Then Commonwealth Engineering offered position to open up new factory in Brisbane to construct carriages for Queensland Railways. Air-conditioning requirements required change to steel frame from timber frame.	Newcastle Flyer Sunlander.
41:30 - 44:56	Description of how staff were obtained by putting agent on migrant ships in Perth and encouraging the right people to stay on the ship until Brisbane. Assembled team of 26 draftsmen with no railway design to design new steel frame train from first principles. Huge task.	Bob Burns
END SIDE A		

TIME MIN:SEC	SUBJECT	NAMES AND KEYWORDS
START SIDE B		
00:00 - 00:55	Leader	
00:55 - 07:15	Design of dining car for axle limits. Introduced new ideas from overseas derived from other industries. Head end power helped with weight. Trial run confirmed correct choice of power.	Head End Power Jack Duggan
07:15 - 09:40	Offered job by Board to come to Sydney and take over Enfield which was in bad condition. Union problems.	
09:40 - 16:40	Design of Southern Aurora around 1957 / 58. Introduction of stainless steel. Roomette and twinette. Design from American idea. Story of problems with design of rooms and how problems were overcome. Zig-zag corridor.	Southern Aurora Frank Harrison
16:40 - 20:45	ACI offered job as Chief Executive of Engineering at 47. New field required adaptation. Responsible for all engineering activities in the group. Became company trouble shooter.	Gun-Boat Smith
20:45 - 23:40	Discovered Value Analysis. Attended workshop - Learn by doing. Basics concepts of system. Wanted to use in management area. Applied system to ACI and found that it gave amazing results	Value Analysis Dusty Fowlkes
23:40 - 30:00	Left ACI at 54 to set up own company. A challenge to set up company and to develop the skills to sell the idea. Five steps. Size up person, get his attention, get his interest, get his understanding and he will accept it. Important to get knowledge of how to deal with people.	Value Management Australia.
30:00 - 32:18	Discussion of bottom up management. Value Management. Developed at General Electric.	Larry Miles
32:18 - 35:00	Boral approached with job offer. They bought companies and he would try to turn them around. Three and a half years with Boral.	Sir Elton Griffen
35:00 - 37:30	Three and a half years with the office of the Agent General in London looking at products and processes suitable for Australia.	
37:30 - 39:50	On return to Australia was asked to look at Dri-Clad Industries. Took over as Managing Director to get company running properly.	Fast Diagram
39:50 - 42:30	Back to Value Management. Jobs with Boral. Monier Besser in Adelaide. Set up Institute of Value Management. S.E.C.V.	Jack Davenport
42:30 - 44:15 END SIDE B	Government took up idea and it was made mandatory for projects over \$5 million dollars.	

