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Engineering Heritage Canberra Professional Career Series



ENGINEERS
AUSTRALIA
Canberra Division

Engineers Australia

Engineering Heritage Canberra

Oral History Program

INTERVIEW LOG

Interviewee: James (Jim) Thompson Tracks: 4 = 3 hours, 16 minutes recording time

Interviewer: Dr Margaret Park

Place of Interview: 51 Macalister Crescent, Curtin, ACT

Dates of Interview: 17 February 2015

Restrictions on Use: See Interview Release Form

Interview recorded on Zoom Hn4 Digital Recorder



Track 1 = 60 minutes		
Time	Subject	Proper Names & Keywords
0.00-1.00	Provides full name, date and place of birth.	Jarrow, County Durham, UK
1.00-6.30	Father eldest of four sons; started work as messenger boy and delivering coal by wheelbarrow. Worked at Palmer's Shipyard as an apprentice Caulker. Describes work of riveting and caulking. Origin of father's middle name: Aittis and family connections in Germany.	Father: Alfred Aittis Thompson
6.30-10.10	Mother grew up in Jarrow; her parents separated when she was young so brought up by father and his two brothers – all lived together. But she was often left on her own and diagnosed with malnutrition and sent off to farm in Northumberland to recover. Parents met at school and married in 1932. Siblings – Kenneth (middle brother) born in 1938 and died in 2008; Jeffrey Hubert born in 1944.	Mother: Mabel Laverick Siblings: Kenneth and Jeffrey Hubert
10.10-14.45	Growing up in Depression years. Recalls the King visiting Jarrow and receiving an orange. Lived with father's grandparents in Jarrow. Moved across river to Wallsend – end of Roman wall.	Depression Wallsend
14.45-19.35	Describes the local accent – Geordie. Living on the banks of the Tyne on either side. Improved living conditions moving over to Wallsend. Delivered newspapers then delivered bread for pocket	Geordie accent River Tyne Coal Mining

	money and household during wartime. Rationing lasted until 1952.	Wallsend World War II Rationing
19.35-24.25	Memories of the Jarrow hunger/protest march in 1936. Elaborates on depression years and dole eligibility. Read about the March in "The Town That Was Murdered" by Ellen Wilkinson, MP for Jarrow. Comments on what the March achieved – solidarity between the marchers and a memorial. Shipyard closed for 40 years under bankruptcy agreement.	Jarrow March 1936 Depression Unemployment Ellen Wilkinson Palmer's Shipyard
24.25-31.50	School years: attended Grange School in Jarrow, then West End School in Wallsend until Grammar School, Wallsend. War years: issued with gas masks; three types of air raid shelters – descriptions. Air raids and school rules. Collecting and trading shrapnel. Describes unexploded bomb technique. Buying chips during wartime during blackout during winter and air raid. Colour toys and bombs.	Grange School, Jarrow West End School, Wallsend Grammar School, Wallsend World War II Gas Masks Air Raid Shelters: Anderson, Morrison and Communal Unexploded bomb
31.50-36.20	Taking 11+ exams and getting into Wallsend Grammar. Mother took Jim to school – very imposing and impressive school building. Describes education – biased towards a 'grammar' education. High distinctions in maths, physics and chemistry. School's woodwork workshop closed as teachers were called up for the war. Describes his teachers with a 'double generation gap' as older teachers brought back from retirement.	Wallsend Grammar School Courses: arts and sciences
36.20-38.00	French teacher, after the war, provided a more up-to-date approach. Talked about France during the war. Completed Grammar in 1948.	French Language France
38.00-43.30	Worked with Post Office/Telephones climbing telegraph poles. Sent on a 6 week course to Otley in Yorkshire and upon return moved to repairing domestic telephones. Took open civil service exams before leaving school. Father insisted he move to the clerical side of public service for job security. Returns to description of testing telegraphs wires.	Post Master General's Department (PMG) Telegraph Poles Wire tensioning Newcastle
43.30-46.25	Clerical position: certified returns work – checking returns and statistics from cinemas and theatres. Between 16 and 18 was in Birmingham then called up for military service in 1950.	Civil Service Administration Entertainments Duty Birmingham
46.25-52.00	University wasn't an option for him. Served in air force – RAF. Details of recruitment: being fitted out for first uniform, billeting, etc. Sent to West Kirby for boot camp. Billeted and known by surnames and service number. Story of remembering a friend's service number.	Military Service – RAF West Kirby, Wirral Peninsula Boot Camp
52.00-56.00	Sent to radar school in Yatesbury, Wiltshire. Came first in course and Jim became a lecturer. During height of Korean War in 1951 sent to infantry training and eventually on to Bomber Squadron at Norfolk. No active service – checked aircraft radar. Younger brother diagnosed with Perthes Disease during this period – 48 hour pass to travel home to visit.	Radar Yatesbury, Wiltshire Korean War Perthes Disease

56.00-60.00	Demobbed in 1953 – returned to Newcastle. Story of meeting June after being thrown out of YMCA.	June Heather Bailey YMCA
	End of Track 1	
	Track 2 = 59 minutes	
0.00-4.45	Married in May 1952 whilst in RAF at Yatesbury. Received permission to 'live out' in nearest town, Swindon. Tells story of only possession – an ironing board – and receiving his demobbed civilian suit complete with a trilby hat. Returned home to Newcastle area and searched for accommodation.	Civilian Life Newcastle
4.45-7.15	Parent's flat too small – decided to purchase own home and sought a mortgage via local council's 'small dwelling acquisition act'. Description of house and garage.	Wallsend
7.15-11.05	Returned to civil service clerical work but soon applied for work in an electronics factory in South Shields. Story of interview, foreman's position in charge of test shop - testing tape recorders/echo sounders, etc. Promoted to design lab.	Electronics Factory South Shields
11.05-14.10	Attended night school, started at Year 2, completed well and achieved an electronics engineering qualification, as well as a mechanical engineering endorsement via the Institution of Engineers.	Night School Engineering Qualifications Electronics Engineering Mechanical Engineering Institution of Engineers
14.15- 17.20	Explains workings of the test design shop. Jim called in to conduct repairs as required. Provided tape recorders to the BBC. Placed recorders in teak boxes for the tropics.	Design Test Shop Ferrograph Company British Broadcasting Company (BBC)
17.20-21.15	Offered position of Design Engineer. Worked on echo sounders, ceramic switches, transformers, coils, etc. Introduction of use of transistors for echo sounders. Took an 'endorsement' in transistors; asked to give a lecture on tape recorders.	Design Engineer Echo Sounders Transistors
21.15-26.10	Returned to wartime teaching experience; taught on radar equipment, e.g. AYF – an airborne altimeter, an American altimeter using an FM vibrator. Also taught navigational bombing: Gee and Rebecca/Eureka.	Teaching – RAF AYF Navigational Bombing: Gee Rebecca/Eureka
26.10-29.20	Finished night school and moved south for work at EMI from 1962-64. Position as Design Engineer – testing missile fuses. Explains cooling of fuse.	EMI Electronics, Feltham, Middlesex Missile testing
29.20-33.20	Applied for senior engineer position in Australia working on the Blue Steel missile launch project conducted by the British at Woomera, South Australia in 1964. Recorded missile launch data on 35mm film. Much improved pay plus allowances.	Blue Steel Missile Launch Woomera, South Australia EMI
33.20-37.20	Describes passage to Australia via AWRE chartered aircraft, with stops in Aden, Cocos Island and Perth before arriving in Adelaide. Family, (wife and two children) lived in rental accommodation in Adelaide, a detached bungalow. Furniture was shipped out.	Atomic Weapons Research Establishment Adelaide, South Australia

	Rented out English home until no longer viable.	
37.20-39.20	Lived in Woomera during the working week; three messes based on British system: junior, intermediate and senior. Engineers assigned to senior mess. Only British on test site – recalls documents marked “top secret UK eyes only”.	Woomera accommodation British test site
39.20-44.40	Tests took place every week or two and were completed by end of 1964. Booked to return to UK but invited to apply for job at Orroral Valley Space Tracking Station. Family travelled home for holiday before Jim took up new position at Orroral at the beginning of 1965. Purchased land and built Curtin home – mentally became Australians during first two years at Orroral and decided to stay in Australia	Orroral Valley Space Tracking Station Canberra, ACT
44.40-46.20	More on Woomera rocket launch programs.	Missile Launch programs Aboriginal people
46.20-49.20	Construction at Orroral Valley. Commissioned in October 1965; Jim arrived in February 1965. Installation team from the United States. Staffing arrangements copied identically from that of the Rosman station in North Carolina. Description of responsibility of engineers at Orroral: Antennas, RF systems, digital and analog. Jim was the analog engineer. Looked after the Ampex FR600 tape recorders.	Orroral Valley Space Tracking Station Rosman Satellite Tracking Station, North Carolina, USA Analog Engineer
49.20-53.05	NASA negotiated with the Australian government via the Department of Supply (later Department of Science) to operate and maintain station with American equipment. Department chose to sub-contract staffing. Station employed 200 people, mainly technicians, four engineers and clerical staff and cooks for its canteen. It was used for earth orbiting unmanned satellite tracking. Explains advantages of the XY Antenna configuration.	National Aeronautics and Space Administration (NASA) Goddard Space Flight Centre Department of Supply Department of Science XY Antenna
53.05-57.10	AWA took over contract in 1967 and altered staffing arrangements. Jim now in charge of Antennas and RF systems. New contracts awarded every three years. Only government staff included a director/deputy director	Amalgamated Wireless Australasia (AWA)
57.10-end	Funding for station on a monthly basis via government department and arrangement with NASA. As all equipment was American, supplies and spare parts had to be requisitioned from the US.	Orroral Valley Space Tracking Station
	End of Track 2	
	Track 3 = 61 minutes	
0.00-4.40	Positioned cars between the creeks to ferry staff across to and from work. Used the cherry picker once, but union concerns put an end to this method. Outward Bound travellers showed up and stayed in the canteen overnight.	Orroral Valley Space Tracking Station Outward Bound
4.40-6.50	Contracts changed in 1967 and some staff lost their jobs. Many of staff was British, some Australian – this increased over the years. Jim responsible for some recruiting at Orroral and for all at Tidbinbilla. Mostly Australians at Tidbinbilla, some New	Orroral Valley Space Tracking Station Tidbinbilla Deep Space Tracking Station

	Zealanders. Recruited in Auckland and Christchurch. As a senior engineer assisted chief engineer with recruitment.	Dave Kemp
6.50-9.30	All three ACT tracking stations open. Describes location of stations in relation to each other and staffing situations. Not much staffing interaction as contractors differed. Explains contract situations at all three stations.	Orroral Valley Space Tracking Station Tidbinbilla Space Tracking Station Honeysuckle Creek Space Tracking Station EMI Hunting AWA Fairey Australasia
9.30-12.40	1960's/1970's intense space flight era – Jim talks about maintenance issues and need to work on antennas and equipment during downtime – often not sufficient time involved. Designed programs to avoid collision of cherry picker and antenna.	Space Flight programs Antenna maintenance
12.40-14.20	Location of international deep space tracking stations working together – Spain, US and Australia – all 64 metre antennas approximately 120 degrees apart on earth's surface for complete tracking coverage. Further description of responsibilities for all three ACT stations re: various NASA programs.	Goldstone Deep Space Tracking Station, Mojave Desert, California Madrid Deep Space Tracking Station, Madrid, Spain Tidbinbilla Deep Space Tracking Station, ACT
14.20-18.00	Stayed on at Orroral Valley until 1975 – talks of rapid change over the decade including expansion of digital, computers; equipment changes and other station equipment and timing issues.	Orroral Valley Space Tracking Station Digital equipment Computers Timing Zulu Time
18.00-22.00	Understanding American words – differences with equipment and supplies. Story about packing with walnut shells. Misunderstanding words between Americans and Australians. Americans installed equipment and some American visitors including a senator and astronauts.	American Language Astronauts John Young Joe Kerwin
22.00-23.30	Supervisory roles over course of time at Orroral Valley.	Orroral Valley Space Tracking Station
23.30-27.45	How Jim moved over to Tidbinbilla as Chief Engineer in 1975. Describes staffing, some initial problems/difficulties. Overrating of technical staff, paying them as engineers.	Tidbinbilla Deep Space Tracking Station Fairey Australasia Association of Professional Engineers
27.45-29.15	Promoted to General Manager of all three stations in 1980. Discusses why staff at Orroral Valley were concerned of his knowledge of their work at the station. Later involved in closure of station in 1985 which included retrenchments and unions.	General Manager Unions Retrenchments
29.15-32.00	Returning to work at Tidbinbilla – mainly administration. Union activity and staffing issues. Attended union court hearings.	Tidbinbilla Deep Space Tracking Station

	Recruitment hiring and firing – significant part of Jim’s work. 13 unions involved.	Staffing Court Hearings Unions Association of Architects, Engineers, Surveyors and Draughtsmen of Australia (AAESDA) Association of Draughting Supervisory and Technical Employees (ADSTE) Federated Clerks Union of Australia (FCU)
32.00-35.00	Union strikes happened – recalls a canteen strike at Tidbinbilla. Discusses attitudes of different directors at the stations. Attended regular court hearings.	Tidbinbilla Deep Space Tracking Station Union strikes
35.00-39.30	Regularly at court hearings leading up to Orroral closure in 1985. Metal Trades Industry Association appeared on behalf of company in court, Jim often in witness box. Discusses working in industrial relations area as part of his management role. Tried to be fair and in accordance with award entitlements. Travelled Australia-wide to these Industrial Courts during this time.	Orroral Valley Space Tracking Station 1985 Closure Metal Trades Industry Association Court Hearings
39.30-41.40	General Manager for all three stations – Jim’s support staff included a secretary and pay staff at Fyshwick. Jim mostly based at Tidbinbilla but worked between all three stations and the town office. Offering staff at Orroral work at Tidbinbilla, more on closure and staffing	General Manager Pay Office Fyshwick, Canberra Orroral Valley Space Tracking Station 1985 Closure
41.40-46.55	As General Manager responsible for staff; government department director was ‘his customer’; Jim’s ‘boss’ was the company in Sydney. Stopped recruiting at Tidbinbilla when Orroral slated for closure, many staff moved across. Equipment at Orroral was either ‘excessed’ or taken back to US. Remaining building offered but in the end handed over to Outward Bound for use as a travel station. Without proper supervision and maintenance it was damaged via vandalism and eventually demolished. Now a concrete slab with plaque.	Orroral Valley Space Tracking Station 1985 Closure
46.55-50.20	Honeysuckle Creek closed after Orroral Valley - issues around staffing. Jim’s views on why closures. One station made more economic sense for NASA and US government at that time. Transferred antenna from Orroral to University of Tasmania, Hobart and one from Honeysuckle Creek to Tidbinbilla.	Honeysuckle Creek Space Tracking Station Closure NASA University of Hobart Orroral Valley Antenna Honeysuckle Creek Antenna
50.20-52.35	Honeysuckle Creek closure – buildings abandoned, dish moved. Staff from there very proud of their efforts during the moon missions. Social clubs at each station, not much interchange – story of one that wasn’t the best for the stations.	Honeysuckle Creek Space Tracking Station Moon Missions Social Clubs
52.35-55.30	AWA asked Jim to travel to Western Australia to recruit electronic	AWA

	technicians for a security job with ASIO requiring top secret clearance. Travelled internationally to train staff and set up teams.	Western Australia ASIO
55.30-end	In 1989 AWA lost contract, British Aerospace took over. More advantageous for Jim to stay with AWA approaching retirement age. AWA sold Jim onto Serco, a UK government contracting firm. Wrote contracts, but also continued training WA teams. Lived in Sydney during week, returned home to Canberra on weekends. Retired in January 1993.	AWA British Aerospace Serco Sydney
	End of Track 3	
	Track 4 = 16 minutes	
0.00-4.35	After retirement Jim approached by Serco to take on more contract work. Undertook a few projects but decided not to return to full-time work. Aged 60 at retirement.	Serco
4.35-10.05	Interests include photography – encouraged at Grammar School, including taking pictures and developing. Love of photography continues today. Made a camera out of spectacle lenses; also made a pinhole camera. Moved into digital photography, computers and colour printing. Describes process of colour slides. Didn't join any photography clubs – 'not a joiner'.	Photography Cameras Colour slides Digital Photography Photoshop
10.05-12.45	Other interests include woodworking – makes tables, chests, boxes, cupboards, etc and workshop includes numerous tools and equipment. Member of two walking groups. Keeps fit by walking and going to the gym three times per week	Woodworking Walking Groups Bird Photographs Yerrabi Pond, Gungahlin
12.45-13.50	Jim's family – has two children – daughter lives in Bonython, a librarian working in the Finance Department; son lives in Melbourne and owns a bar. Three grandchildren – 30, 27 & 6 – all granddaughters. Jim is the main carer for his invalided wife.	Family
13.50-end	Engineering memberships and opinion of joining unions. Different way of thinking to his father – a strong proponent of unions. Father lived to 97; mother lived to 93.	Engineering associations Unions
	End of Track 4	
	End of Interview	