

Abstract – WILLIAM JOHN RAINBIRD

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Interviewer: Russel Smiley
Recorded in Canada
Abstracter: Susan Brookes

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015 Born 21 November 1925, Blenheim, New Zealand
035 Went to school (**Marlborough College**) during World War 2, encouraged to do science by his Chemistry teacher. No family background in engineering, but he & his brothers always worked on cars & mechanical things as kids. Started **Mechanical Engineering** at **Canterbury College** in **1944**. Canterbury was a growing school, with lots of ex-servicemen. Only Auckland & Canterbury taught engineering then.
096 Many classmates became well known – **Alan Titchener, Jack Woodward, Brian Egan, Bob Callander** – some taught at Auckland later
107 Graduated in **1947**. Planned to study **aeronautics** which was only taught at Auckland, by **Prof Leech** (an Australian). Leech set up Government funded post-graduate **scholarships** for overseas study.
133 2nd recipient of scholarship to Cranfield College of Aeronautics in 1948. 1st was **Ris Heald**. **Leech** suggested he spend the months before going to Cranfield teaching applied mechanics at **Auckland School**
146 Spent 5 months at **Ardmore** and assisted with the move there
160 He was 22, and it was 55 years ago, so take his perspective “with a grain of salt”
174 **Les Woods & Clif Stevenson** were aeronautics engineers there at the time
182 **Ardmore** memories – **Leech** was a fiery red-haired Australian with great energy. Early **1948** Army lent trucks to move equipment to WW2 hangers at Ardmore. Driven by students, some crashed & some equipment broken. Foundations of some of the labs eg **hydraulics** weren't ready in time.
213 Some aeronautics classes probably taught by **Leech**. Other students: **Harold Denly, Rob Allen, Jimmy Wilkinson**
222 List from the Alumni Association isn't accurate, contains Canterbury College graduates as well as Auckland ones
229 Designed a small **wind tunnel**. Not all staff wanted to be at **Ardmore**. **Leech** encouraged student initiative & wide study. He also let them use his service revolver for target practice & allowed him to use the university car to take **Ngaire Crosby**, Leech's secretary, to the beach.
256 Started at **Cranfield** in Sep 1948. Worked his passage to the UK on the Shaw Savill ship Waipawa going via Cape Horn with a deck cargo of stud rams for Uruguay. **Denly** worked his passage on the NZ Shipping Co ship Rangitoto.
282 From then on his association with Ardmore & the Auckland School was through friends from his graduate year

289 He wasn't involved with **Project Seal**
293 Auckland: Other students thought that the Engineering students were a
rough bunch. Ardmore mix of Eng & **Teachers Training College** worked
well. Eng students liked beer, but had to get it from Papakura.
306 His only experience of the '**tin shed** campus' (downtown campus pre
Ardmore) was in moving the **hydraulic lab** equipment to Ardmore. They
were 'ghastly labs', the **Ardmore** labs were much better.
324 **Materials** lab at Ardmore was especially good. Ardmore had staff
housing on campus.
331 Student morale was high. Good academic students eg **Les Woods, Clif**
Stevenson (went to Cranfield), & **Rob Allen** (he thinks did UK postgrad
work)
350 **Auckland staff impressions:** Didn't get to know many staff in his 6
months teaching 2nd year applied mechanics. There were a lot of ex-
patriate British, slightly disgruntled at being there, and not of great
academic standard. Possibly why **Leech** went to Snowy River. There
were staffing problems in the early Ardmore days, but good staff
developed – **Titchener, Dalton, Vogel, Segedin, Mowbray**
382 Were you a 'star scholarship student'? Not really, was always leaving
soon, taught some aeronautics, **Leech** may have taught it too, many
students continued in aeronautics
397 Impressions of **Cranfield:** Incredible place. Specialized in advanced
aeronautics in old aerodrome & hangers. Isolated, but top notch research
& academic staff, very stimulating. He was 2nd NZ scholarship student (1st
was **Ris Neald**) . Great aircraft museum. **Alex Young**, a prof, got him
involved with **Swedish Air Board**
432 Spent 2 summers at Stockholm. After Cranfield went to Swedish
Aeronautics Labs to work on **wind tunnels**
440 1951 returned to NZ to fulfil scholarship provisions by teaching at
Canterbury. Spent 4 years there. Met **Titchener** again. Taught strength
of materials, applied mechanics, and aeronautics to final year students (in
small classes of about 6).
461 Students included: **Ray Meyer**, a Defence Science scholarship, PhD at
Manchester, moved to Canada & the **National Aeronautical**
Establishment, moved to NZ in 1969, and went on to be Dean of the
School. He is close friends with the Meyer family. **Jack Woodward**,
spent time in Australia & New Guinea, then back to Auckland.
482 **Brian Woods**, Cranfield, Royal Aircraft Establishment, applied mechanics
at Canterbury. **Ian Axford**, possibly the brightest, Defence Science Corp,
PhD Cambridge, Cornell, Vice Chancellor at Victoria University of
Wellington, Director of a Max Planck Institute. **Doug Murray**, Dean of
Engineering at Calgary. **Bill Dawson & Geoff Williams** both in the US
aeronautics industry. **Mike Frengley**. **Dennis Kemp**, Cranfield, Chief
Engineer for Air NZ.

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013 **Alan Titchener** had a great impact on the Auckland School from 1951-1986. **Ray Meyer** put together a memorial paper on his contributions

036 **Richard Flay** graduated from Canterbury, did a PhD there with Clif Stevenson. Was in Canada in the late 70s & 80s working in wind engineering & wind tunnels for the aeronautics & automotive industries. He recruited Flay for 5-6 years. Flay returned to Auckland where he has done really well with twisted flow wind tunnel for sail design, and became Associate Dean for Research

076 Spent sabbatical at Auckland Feb-July 1977. Was teaching at Carleton University in Ottawa, Ray Meyer organized the sabbatical to teach fluid mechanics and convective heat transfer

104 Nice interlude. After this left academia and moved to consulting

120 He had no concerns with the Auckland School, doing well, growing, **Chemical & Materials** programme set up, both research & graduate work good

142 **Titchener, Graham Davies, Colin Malden** all did graduate work at Ardmore

150 In 1951 had criticisms of **Canterbury Engineering's** performance – remnants of 'nuts & bolts' staff from the UK had a stultifying effect, didn't enjoy his time there in spite of the good Dean, little research work done there, mechanical engineering in particular was suffering

183 NZ academic standards in Engineering were fairly high. Some exam papers still set overseas

196 **Canterbury Engineering** moved to new premises, appointed new staff, and blossomed in the 60s & 70s

204 Was the **Auckland School** programme successful, did it develop NZ expertise? The 2 scholarships to Cranfield were good, no other NZ options at the time. Developed good people in the field, but some left NZ. **Mike Frengley** helicopter design, **Geoff Williams** with Lockheed, **Harold Denly** Rolls Royce

222 **Defence Science Corps** broader based, encouraged postgrad study up to PhD in a range of scientific disciplines. Many students left NZ, but some returned. **Colin Franklin, Michael MacLean & Ian Axford** went to Communication Research Centre

246 **Leech** wanted to encourage students into graduate studies & research – not necessarily for NZ. His scheme was a good one that helped NZ students

260 **Titchener** graduated in mining engineering, went to Canterbury to do mechanical eng, already had a B.Sc. Tramped the South Island back country together. Titchener missed the chance to do graduate work, but Rainbird persuaded him to apply for foreign student summer program at MIT. This made Titchener's career as he returned to MIT in 1955 to do his PhD.

298 When the **history** of the **Auckland School** was written in 1969, discussed the collection of information with **Ray Meyer**.

315 This information, held in Meyer's office, may be useful to those writing the updated history

324 Was there a letter/disagreement with **Leech**? Can't remember, got on well. Leech wanted him back at Auckland, but Leech had gone to

Australia by then. Leech fell out with the University Council about the move, and had lots of arguments with them

343 **Ardmore** move: It was chaotic, but good for the School. **Leech** was probably fed up all the other options for the school eg Tamaki, Western Springs

356 **Ray Meyer** went on to be involved with the development of the Tamaki campus

363 There was talk of moving the **University of Auckland** in the 1940s, but great resistance. **Ardmore** was "the end of the earth", but a great place. Training College being there was an asset

375 Students lived in **hostels** at Ardmore, and there were 'wild goings on' (no detail)

386 **Alumni Assoc** tried to draw up lists of students, one he got had Canterbury students on it. Probably because they were Univ of NZ then, eg Callander, Woodward, Egan

400 He missed **Canterbury's centenary** 10-12 years ago

420 Thank you. He hopes it is useful