

#### **ANU HERITAGE OFFICE**

#### **ORAL HISTORY RECORDINGS**

# **INTERVIEW WITH CLAIRE WEHNER**

#### **18 FEBRUARY 2014**

### At Mr and Mrs Wehner's home, Chapman ACT

Interviewer: Dr Judith Winternitz

Also present: Ms Amy Guthrie, ANU Heritage Officer

Claire speaks about her time at Mt Stromlo from the 1940s, undertaking mathematical calculations, working on the site's first computer and as part of the Commonwealth Time Service. Claire also speaks on the domestic life of Stromlo, life on site for women and breaking down the typical gender roles.

#### **SUMMARY**

### **INTERVIEW**

(figures= interview time counter points -hours and minutes; CW = Claire Wehner)

# 0.00m-0.05 m

- Family and educational background mother from an old South Australian farming family, north of Adelaide; father from the UK, moved to Australia and became a headmaster of high schools in the public school system in South Australia ending up at Glenelg in Adelaide;
- CW is the second of four children; family moved around Adelaide as her father was posted to various schools;
- CW educated at public primary schools and then Presbyterian Girls College (now Seymour college) in Adelaide; left school at 16 in 1945; had worked temporarily as a laboratory assistant at Waite Agricultural Institute; had hoped to go to university but could not due to family circumstances;
- Applied for a job as a cadet at Philips Electrical Industries: accepted under a program in the company supposed to be supporting an increase in the numbers of female workers; worked in the laboratory – the only female there;
- Had been interested in maths and various science subjects at school (Seymour College had a strong science and maths teaching program);



# 0.05m-0.16m

- Difficult for women to get jobs or university places immediately after the war: returned soldiers got the preference;
- While at Philips, saw an advertisement for a "scientific assistant" at Mount Stromlo
   Observatory; was interested in this: had never travelled more than 50 miles from Adelaide;
- Applied to the Department of the Interior for the Stromlo job; heard nothing for a long time, then received news suddenly that she was accepted and had to leave quickly to take up the position;
- Left Adelaide in December 1947 by aeroplane; had never been on a plane before; the flight took all day on a long "milk run" to Canberra, with various stops along the way; was airsick after the first five minutes;
- Was met at Canberra Airport, taken to the Hotel Canberra for an overnight stay and next morning picked up by car at 8.30am to go to Mount Stromlo;
- On arrival, was introduced to the Director, Dr Woolley, then to the Deputy Director; was
  given a desk, a slide rule, a book of mathematical tables and was given calculations on
  astronomical observations to do;
- The Stromlo environment was pleasant and friendly; there were three other females a telephonist and two typists; CW was the only female scientific assistant; this situation continued for her first few years;
- Lived in the Hotel Canberra for three months, then in Acton Guest House; went up and down to and from Stromlo every day by car
- Stromlo had a system whereby staff would be picked up by car from Canberra and taken to
  the mountain every working day and taken back in the evening; the first car pickup would
  take the workshop staff from pick up points in Canberra up to the mountain, then take the
  Stromlo children down to their schools in Canberra, then pick up another group of staff from
  Canberra and take them to Stromlo;
- Around 1949 CW graduated from doing manual calculations using tables to using a simple hand-punch calculator;

# <u>0.16m – 0.18m</u>

- Took leave for a year to travel to England using her savings;
- Worked in a maths laboratory at Cambridge University as one of a small group of scientific assistants, assisting the students who were building ETSAC, the first big computer built in England;
- The four women scientific assistants doing this work would manually check the computer's
  calculations and outputs after it had been programmed to make sure that the computer
  program was working correctly; the four women would all sit together around a big table in
  what had been the University's medical faculty to do their manual calculations;
- While overseas, also travelled to France, rode bicycles from Paris to Marseilles and back, travelled to the Lakes District;



• Returned to Australia (6 week boat trip) and Stromlo;

# 0.18m - 22m

- When CW returned to Stromlo, Professor Woolley asked her to do some observing for the Time Service, using the transit telescope;
- This involved comparative observations on stars which had previously been observed and recorded many decades before and calculating the differences;
- Worked mainly for Arthur Hogg and Henry Abraham on the Time Service;
- Taught to drive by Mr Banham, the Stromlo Observatory workshop foreman;
- Learned on an old pre-war Chevrolet, driving on the circle road around the central Stromlo buildings with the whole workshop watching and laughing;
- Remembers driving gingerly down the mountain on the dirt road to the police station to take her driving test in 1952, and meeting on the way the man responsible for filling the many holes in the dirt road, with his horse and cart; this was his full-time job;
- As part of the driving test, had to do a hill start in the old Chevrolet, which had a broken foot brake;

# 0.22m - 0.28m

- 1952 was also the year of the first major Stromlo fire;
- Despite the order for a general evacuation of all women and children, for which a bus was
  provided, CW and another girl, plus the Director's wife and Mrs Hogg all stayed on the
  mountain as the fire came through: CW and the other girl hid when the bus came;
- The workshop caught alight; crews of staff, including Professor Woolley, and other helpers tried to put it out but there was no water, as the power had gone so the water pump did not work;
- The fire itself was so intense that it generated intense smoke and then a kind of rain storm immediately after it went over the mountain and this helped to put out the fire in the end;
- The fire was so intense that it caused an explosion in the workshop; there was a joke afterwards that you could tell who had been in the war, because on hearing the explosion, they fell flat on their faces; the others did not;
- Volunteers circling the base of the mountain managed to prevent the fire from spreading further beyond Stromlo;
- It was a frightening but exciting experience;

# 0.28m - 0.36m

- After doing observations for about 6 months, CW was still living in Canberra and using the
  Observatory car to drive up and down the mountain every day (CW had become the official
  driver on the daily pick-up route by this stage);
- Became sick of the daily driving and asked Professor Woolley if she could live in the Bachelors' Quarters instead of coming up and down every day; Professor Woolley agreed;
- Did not have to share a toilet but did share a bathroom with the other, male residents;



- As CW was now living on the mountain, she was required to do more night observations;
- Although the only female living in the Bachelors' Quarters, CW soon showed she would not be helping with housekeeping tasks any more than the other residents, even if they had perhaps hoped she might do so on weekends when the housekeeper was not present;
- The Stromlo community composed many people from different backgrounds many of the scientific staff and others had come to Australia as post-war displaced people to boost Australian economic and population development;
- Dr Woolley would find out about their background and qualifications and would extract them from post-arrival manual work requirements under the immigration program and bring them to work at the Stromlo Observatory;
- After moving to live on the mountain, CW had only a bicycle for transport;
- Once a week the Observatory would offer a car to take people down to shop in Canberra; groceries were sourced from J.B Young in Kingston the grocer would drive up to take orders on Stromlo and then deliver them the next day; milk came up on the first bus in the morning in a big can; bread came with the mailman; a greengrocer would come up with his truck once a week;
- CW remembers one particularly religious PhD student living on the mountain who would ride his bicycle in to St John's at Manuka for choir practice on Wednesday evenings and for church services on Sundays, and back up to Stromlo on the dirt road at night;

## 0.36m - 41m

- CW remembers Hermann's (her future husband's) arrival at Stromlo on the October longweekend, 1952; Kurt Gottlieb introduced Hermann to the residents of the Bachelors' Quarters; CW was at the time going out with another Stromlo resident;
- Life on Stromlo: residents kept chooks and large vegetable gardens; previously people like Professor Allan, whose family, with many children, lived on the mountain had grown all their own food and kept goats, which were milked;
- The Mount Stromlo Observatory community was essentially a village; there were quite a few children living there;
- Eventually Hermann and CW got together and were married in January 1955;
- They married at St John's Manuka, travelling down from Stromlo in cars along with the whole mountain village community to attend the ceremony, and then back up the mountain for the reception at Dr Gascoigne's house, again attended by the whole Stromlo community;
- CW remembers a big box of frangipanis had been especially ordered and sent from Sydney and were strewn all over the house;
- Once married, CW had to resign from the Department of the Interior, which then ran the Stromlo Observatory, under the rule that then prevented married women from being permanent employees at government agencies; was immediately re-employed as a temporary employee at the same salary, although lost her superannuation entitlements;
- CW and Hermann were fortunate in being allowed to move into their own house on Stromlo straight away after they married;



#### 0.41m -0.58m

- CW continued to work for the Time Service on Stromlo including at night, since she was a resident on the mountain;
- The Time Service involved about 4-5 people, and CW was on call for night-time emergencies, which typically occurred at 10 minutes to 2 in the morning, just before the important 2am time signal;
- In the International Geophysical Year (1957-8), Stromlo acquired another telescope to be used for Time Service work: both Hermann and CW were involved in setting it up and CW used it for several years;
- One of the perils of living and working on Stromlo was the snakes: there were always many around;
- CW remembers one night when Hermann came up to the Time Service telescope where was working to bring her dinner, and announced he had just killed a snake on the way in;
- Also around this time the Observatory acquired its first computer; it was pretty elementary, about the size of a piano, and was programmed by and produced outputs on punched paper tape; an electrical keyboard created the punched paper tape inputs;
- This computer did the calculations that CW had previously done manually; decoding the punched paper tape was done by looking at the pattern of noughts and ones;
- Eventually three people were able to operate the computer CW and two other male scientific assistants;
- The computer was made by IBM and CW remembers many emergency late night/early morning calls to the IBM technician to handle problems;
- To meet deadlines for papers and material for Stromlo scientists for the International Geophysical Year, CW had to run the Stromlo computer non-stop for 48 hours; she then had to go to Sydney to the big IBM computer there (a machine the size of a warehouse) and had to use the computer at night after its normal work was over; had to work every night for a week just to get through the required work;
- The ANU's Department of Physics also acquired a computer, which was larger than the Observatory computer, so she would sometimes go down to the campus to use it, driving down in the old Chevrolet even when pregnant;
- CW continued work until she had her first child, Martin, on December 7, 1963; stayed at
  work until her waters broke and she had to be taken to hospital: there was no provision for
  maternity leave for her;
- This was more or less the end of her work for the Stromlo Observatory: although the Director, Bart Bok, asked her to do some work writing a computer program at home, it proved too hard to manage work and the baby and the same time;



#### 0.58m - 1hr.25m

- However, as it happened, CW did undertake more work at Stromlo 12 years later, when she
  took a part-time job for the ANU library doing a complete stocktake of all library holdings,
  including those located at Stromlo; CW was still living on the mountain at the time;
- The Stromlo holdings included everything about the Observatory and about astronomy and still had all the materials transferred from the old Melbourne Observatory;
- Continued working for the cataloguing area of the ANU library as it started to move to early
  forms of digital cataloguing and holdings recording technology from the end of the 1970's;
  would check for and identify mistakes in coding for electronic cataloguing by offsite
  contractors; also worked in the Serials Department;
- Undertook a Library Technicians' course at Technical College while working full-time, then enrolled in a computing course at Bathurst;
- Eventually formally became a computing assistant for digitising the catalogue, then went
  into programming for the whole catalogue; the ANU library was the first to have a
  computerised catalogue before the National Library;
- By the late 1980's the whole library had been computerised and library jobs changed; with the replacement of many manually-based functions, people lost their jobs and stress ensued;
- Librarians at this rime were always buying new programs, new data bases and new systems without too much thought; these were always incompatible with each other or the previous base system; in 1993, for example, there was another major catalogue system upgrade, which required transference of the old data to the new system: it was exhausting;

#### 1hr.25m – 1hr.28m

- Summing up her work on Stromlo: it was a place where you were encouraged to do anything you thought you could do; under Bart Bok, people were encouraged to come up with ideas;
- Working at the library for the cataloguing area was entirely different although many of the staff had at least one or two degrees, they had to do mind-numbing very detailed work under intense supervision and scrutiny for even the tiniest matter, such as a misplaced comma; this was such a contrast with the broad thinking approach at Stromlo;
- CW would have done a maths degree and would have continued at Stromlo if she had not had to retire when she had children;
- Vividly remembers her first experience of using a computer and learning programming: even at Cambridge, when she first encountered a computer, she could see what was coming; it was exciting to have been part of this;

#### 1hr.28m – 1hr. 35m

• CW considers the move of responsibility for the Stromlo Observatory from the Department of the Interior to being part of the ANU to have been a good thing; it was the best thing that could have happened; the Observatory had to get out of the government Department environment to become a real scientific institution;



- Under the University's umbrella and under Bart Bok, Stromlo did become something very special as a place to work; like being a part of a living organism;
- Under Professor Woolley, life moved more slowly; CW would go horse riding with him; remembers going with Professor Woolley to take his cow over to a bull at Woden;
- Mrs (later Lady) Woolley would have bridge evenings, Professor Woolley would have tennis parties for students and younger staff members; it was all very English;
- Professor Woolley's horses were kept in a paddock where the Duffield Building now is; he
  always had 3 or 4 horses; he loved his cows but didn't drink milk; the Stromlo janitor would
  milk the cow every day; Professor Woolley also liked chooks; at one stage there was a
  croquet lawn; there were tennis matches at lunchtime;
- CW remembers the Director's Residence, which her family lived in for three weeks when her son, Martin, was young, while their own house was being painted; the Boks were going away and invited Hermann and CW to stay in the house;
- CW recounts how Priscilla Bok said to her: "you'll find where everything is: if you open a cupboard and there's a skeleton inside, just shut the door";
- The Boks were always kind, very thoughtful people: they were always there for the Stromlo community;

## 1hr.35m - 1hr.42m

- Stromlo was a village very much a village;
- Under Woolley, a system had already been instituted for a lady's night once every month; on that night, the astronomers were not allowed to go to their night observing work but had to stay at home with the children;
- This social evening would be held in every house on the mountain in turn: every woman, including the caretaker's wife would meet and talk; CW attended regularly even when living in the Bachelors' Quarters;
- When CW got engaged, the women of Stromlo all got together to create a recipe book for her: she still has it;
- There were about 20 women involved and the relationships were good, even if there was occasional friction;
- When CW's children were around 5 and 7, in the early 1970's, there were about 22 children living on Stromlo, from various nationalities;
- Martin, CW and Hermann's son, literally decided to buy his current house because you could see Stromlo from the kitchen window; he goes running up the mountain every day;
- The children were upset when the family moved down to Canberra;
- Snakes were a problem: when the children were 6 and 3 a long black snake appeared stretched out on the front porch of their house; Hermann was away but CW rang the workshop and asked for help to remove it;
- At Stromlo there was always back-up help at hand if necessary;
- CW's very first impressions of Stromlo were the trees: the pine forest;
- She saw snow for the first time on Stromlo, on Xmas Day, in the 1950's.