

CHAPTER THREE

Studies in Depression

Early in 1929 a panel of senior officers in the P.M.G.'s Department interviewed those applicants for P.M.G. Cadetships who had passed the Leaving Examination of 1928. Applicants were asked to bring any papers which might be relevant to the positions.

I took along a book of drawings, made over the last few years, of things I had constructed in my hobby work - such as fittings for my model railway. I had always been fond of drawing, and these examples included fully dimensioned plans and elevations. The panel seemed quite enthusiastic about them, and I left the interview full of hope.

The Engineering Degree course comprised four years of study, embracing 24 subject units, with a requirement for 12 months practical work experience before taking the degree. In the first year there were six subjects.

There was no indication as to when appointments of P.M.G. Cadet Engineers would be made, but I knew that if I succeeded in obtaining a cadetship my hours for attendance at university lectures would be limited. It would have been unwise to commence the full complement of first-year subjects and then to be forced to drop some, part way through the year, in the event of my obtaining a

cadetship. Therefore I enrolled for three major subjects only in 1929 - a relatively light load which left some time for other interests. Dad paid my fees and bought my books.

As there was no guarantee that I would obtain a cadetship I sought an interview with Mr Stobie, of the Adelaide Electric Supply Company, on the prospects of employment with them during my study. He was the designer of the ubiquitous Stobie steel and concrete pole, used throughout South Australia to support power lines. I remember his question "Why do you want to become an engineer?" I had plenty of reasons.

There were then about 60 engineering undergraduates at the Adelaide University. Of my colleagues in the Sixth form at Saints, Edmund Sharpe, Gordon Colebatch and A.H. Finlayson had joined the faculty in 1928, and Eric Cottrell and Murray Howell did likewise in 1930, but I was the only one leaving Saints to begin engineering in 1929.

Between 1928 and 1930 my contemporaries Bob Moodie, John Bray, Keith ~~Mac~~Donald and Colin Moodie (dux at Saints in 1929) began law courses, John Colebatch began medicine and Jerry Price and Colin Kerr Grant began science courses. All these succeeded notably in their careers.

The undergraduates in the Engineering School had their own peculiar initiation ceremony for "freshers". Part of the ceremony was a "candle race". The Engineering School was then in the western half of a two-storey brick building at the end of the main University drive - the eastern half being occupied by the Physics School. The initiation ceremony was conducted at night behind locked doors. There was a concrete staircase rising to the first floor with an intermediate landing. The freshers were divided into two teams, and instructed to strip. Half of each team was grouped at the top of the stairs and the other half at the bottom. Each fresher was presented with a standard 10 inch domestic white candle.

The first fresher in each team was required to insert the butt end of the candle horizontally in his posterior, and the protruding wick was then lit by the official starter - the first fresher in one team being at the top of the stairs and the first in the other team being at the bottom. The candles were definitely at the bottom. The freshers were then required to descend and ascend the stairs without dropping the lighted candles - a strictly "hands-off" procedure. Most of the building lights were extinguished, and the chief illumination came from the flickering tail-lights of the nude figures, casting grotesque shadows on the walls as they clumsily passed each other on the stairway.

It was a relay race. On reaching the end of the stairs, each fresher had to stand back-to-back with the next member of his team and light that fellow's candle from the flame of his own. Again, a "hands-off" procedure. Shouts from the assembled undergraduate spectators helped them to line-up the two candles. When the two consecutive freshers were of different heights this mating of candles became a most delicate operation - the shorter one standing on tip-toe and the taller one attempting to squat appropriately without dropping his candle.

In my case, the next fresher was rather shorter than I, and had a thick coating of reddish hair on his back. He yelled as I singed him with my candle!

Two things made this race very difficult, if not hazardous. First, it was difficult to step up or down to the next tread of stairs without dropping the candle - and some candles did drop and had to be re-inserted. Secondly, as the candles burned down, the hot wax was liable to drip on to the calves of your legs - a painful experience.

The race was completed with much barracking and hilarity. There was no prize for the winning team - only the glory of victory.

Other tasks were devised for the initiation ceremony each year, but the candle race was the most memorable.

At 17 years of age, I began to show an interest in the opposite sex. I had spurned girls during my school years. John Thompson and I decided we should take lessons in ballroom dancing, which was the most popular form of evening entertainment in those days. In May 1929 we began to attend the dancing classes of Miss Norah Stewart in Tynte Street, North Adelaide. Miss Stewart was recognised by Adelaide Society as the authority on ballroom dancing and deportment. She held joint classes for both sexes. Dancing "pumps" had to be worn and the boys had to wear white cotton gloves. Music was provided by a piano. It was all very formal and we were taught to behave with the utmost propriety.

I enjoyed the classes, but many of the dances taught were of little use at the average social gathering. The foxtrot, blues and waltz were certainly worth learning; the tango, the varsity drag and the black bottom, however, might have been useful to an exhibition dancer but in the normal course of events we never met anyone (away from Miss Stewart's classes) who knew how to dance them!

Anyway, John and I were able to attend dances, organised by the girls' club at St Saviours Church, and

take the floor with a partner without disgracing ourselves.

Travelling home on the Glen Osmond tram, one day in June, was the most beautiful girl I had ever seen - with the most wonderful head of golden hair coiled in a bun at the nape of her neck. I stayed on the tram beyond my stop, to see where she alighted. It was at Glenunga Avenue. I got off at the next stop and rushed back but she had disappeared. At the next choir practice at church I described her to my friends. Cecil Lapthorne said it must be Phyllis Williams, who lived in Glenunga Avenue. He agreed to introduce me to her at the first opportunity, which was at a young people's dance in St Saviour's Church hall. She was very distant, and not at all encouraging. I resolved to take every opportunity of seeing her and getting to know her better.

Almost all of 1929 passed before there was any news about appointments of Cadet Engineers in the P.M.G's Department. I began to wish I had undertaken the full complement of first year subjects, although the cost of such an enrolment and the associated text books would have been a big strain on dad's resources. At last I received advice that I would be appointed Cadet Engineer as from January 2nd 1930, at a salary of one hundred and twenty three pounds per annum. My engineering career had begun! And so I began working for a salary at last.

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I well remember reporting for duty at the engineering department in the Adelaide G.P.O. building. On the reception desk at the entrance was a polished wooden tablet bearing a gold-lettered inscription - similar to that used in all departmental offices -

COURTESY TO ALL
PROMPT ATTENTION
EFFICIENT SERVICE

That was the ideal of the Commonwealth Public Service - an ideal that all members were expected to observe. Those were the days when the P.M.G.'s Department handled all mail. Letter postage was twopence, with two deliveries Monday to Friday and one on Saturday morning. Today I frequently wait in a queue of 8 people at a local post office while 3 or 4 employees busy themselves with paper work on the other side of the counter or exchange fragments of gossip, completely ignoring the waiting public. How times have changed!

There were seven other Cadet Engineers in the Adelaide Branch of the Department - Sid Jones, Jack White, Bill Howe, George McKinnon, Stan Chapman, Malcolm Rogers and Don Burnard - at various stages of progression through the normal four-year course of training. Don Burnard had been appointed on the same day as myself - he was five days younger than I and had attended Princes. With similar interests and a common sense of humour we became firm friends.

The Departmental training for Cadet Engineers involved experience in all phases of P.M.G. engineering work, with evening lectures in specialised subjects by senior officers and a limited number of hours off to attend lectures and practical work at the university. Cadets were required to sit for a Departmental exam for appointment as Engineer at the end of their training. Don Burnard and I chose university subjects in the B.E. (Electrical) course, although there was no guarantee that we would be given sufficient time-off to complete the course on a part-time basis. 1929 and 1930 marked the beginning of those traumatic years known as The Great Depression, and we were the last cadets to be appointed for a very long time.

When we were training at city locations, attendance at the university was a simple matter. When training in the suburbs I found my bicycle very useful for going to and from lectures. Training at country centres was confined to periods when the university was on vacation.

My first posting was to the Norwood automatic telephone exchange, learning as much as possible about the equipment and how it was maintained. It was very strange at first, working among a body of men much older than myself and calling them by their christian names - after the use of surnames only at school. I began by addressing the foreman mechanic as "Sir". They thought this a great joke. I cycled to and from work and ate my

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luncheon sandwiches, washed down by "billy tea", with the mechanics and linesmen. It was indeed a sudden change from schooldays. The automatic exchange had a strange characteristic smell, probably the product of electrical insulation and contact sparking.

This was followed by periods at the Central Exchange and the Telegraph Workshops - both in the city proper.

Now that I was earning a salary I began to revel in my independence. No longer did I have to rely on dad to pay my university fees, buy my books and provide me with pocket money. I was able to pay a nominal sum to mother for my keep.

Some time after we moved to Glenunga dad had traded his Model T Ford for one of the new Ford tourers known as "Model A", which had come on the market in 1927. Like the Model T, this had a folding canvas hood, detachable side curtains with celluloid windows, running boards and mudguards - but the body had smoother lines and was less like a converted horse-drawn buggy than the Model T had been. The hood was nearly always left up, secured to the front windscreen.

The side curtains were secured by not very reliable press-button fasteners. It was necessary to examine the weather forecasts before venturing out if rain was at all likely, because attaching the side-curtains in an

unexpected shower was both time-consuming and unpleasant. The battery was mounted externally on the running board at one side and the spare wheel was carried vertically at the back behind a fold-down luggage rack. "Boots" had not been invented.

I used to help dad with periodic greasing, oiling and cleaning the car, but he frowned upon any suggestion that I should drive it. However, I took careful note of what he did to control it. I was sure I could drive, given the chance.

During the barley season dad used to drive over to Yorke Peninsula to inspect the crops. He usually returned home with an offering of fish, crabs or wild duck - and often quite sunburnt. But sometimes his Melbourne principals, Mr Smith or Mr Mitchell, drove to Adelaide to visit the Peninsula with him - and on such occasions dad's car was left unattended in the garage for several days.

This was my opportunity! I found the key and carefully drove the car to a large open space known as the Beaumont Common, not far from home, and practised gear changing, backing and parking manoeuvres to my heart's content. After several such practices I had full confidence, and when dad returned I announced I could drive the car. I gave him a demonstration, and he was

convinced. I obtained a driving licence, which was not difficult in those days.

From then on dad allowed me to borrow the car for outings, when he was not requiring it himself, and it made a wonderful difference to my mobility.

The young people attending St Saviour's Church resolved to form a local dance club. A committee was appointed in May 1930, which included Berenice Bailey, Phyllis Williams (both former students of P.G.C.), Cuth Bammann and myself as honorary secretary. We called it the "Salvador Dance Club" and held dances in the local Milton Hall every 2 or 3 weeks in aid of church funds. Attendances ranged from 50 to 100 and music provided by a piano, saxophone and banjo was followed by a supper of sandwiches, biscuits, soft drinks and coffee.

I had fallen madly in love with the beautiful Phyllis Williams, but although I saw her regularly at committee meetings I was very reticent about making any advances. Many fellows sought her company at dances, and I felt very inadequate. The intensity of my feelings may be judged from a sonnet which I secretly wrote about this angel of a girl -

Phyllis, what fairer form could meet the eye
Than she, the darling by the Gods beloved -
Her eyes, the beauty of the boundless sky,
Her lips, who could not by their spell be moved
And held entranced by their glorious bow!
When first I saw her all the world stood still -
I felt my heart leap high, but dare not show

My passion openly - lest she should kill
 My hopes, my yearnings. Oh, how can I find
 Her favour - I, least favoured of them all
 That seek her favour? Yet may I, in mind,
 Dream of the fortune that may someday fall
 My lot - till stark reality unkind
 Wakes me from dreaming, shrouds me in its pall

I showed this only to John Thompson who was my
 confidante, as I was his, in matters of the heart. He
 was sympathetic, and urged me not to give up hope.

Talking pictures were still a novelty in 1930. The
 first talkie, The Jazz Singer, starring Al Jolson, had
 been shown in Adelaide in 1929, but that relied on sound
 from a synchronised disc record accompanying only part of
 the film. Films were now provided with "married sound",
 photographically recorded along one edge of the film
 stock. In June one of the first all-colour talkies, The
 Gold Diggers of Broadway, was showing at the Majestic
 Theatre in the city. I plucked up courage and asked
 Phyllis to see it with me. She agreed, and I was in a
 kind of seventh heaven!

Everybody called her Phyll. She was the youngest of
 five attractive daughters and her parents were very
 strict. I met them when I called for her on that first
 outing. Mrs Williams' opening remark was "What a tall
 thin boy!" - a sort of mental slap in the face. Mr
 Williams was a man of few words who wore a homburg hat
 and seldom smiled. He was most emphatic about his
 daughter coming home on time.

That August I bought my first Dinner Suit, and in December I took Phyll (and Don Barnard took his girlfriend Doone Mengerson) to the first Cabaret of the newly formed Adelaide University Footlights Club in the University Refectory. We also went to the Revue produced by the University Footlights Club at the Theatre Royal.

This was the first of a series of annual Revues of surprisingly professional standard. They were always presented in the presence of the State Premier and his wife, the Lord Mayor and his wife and sometimes the State Governor. Beginning with one performance in December 1930, the performances increased progressively to six in December 1935. They owed this success to an enormous amount of hard work and enthusiasm by a large body of students. There was a core of men and women who were the driving force year after year - in particular Keith Macdonald, Dean Hay, Bill Hann, Jim Muecke, Gavin Walkley, John Duncan, Dick Brooks and David Hogarth (all from Saints) Rex Dawe (from Princes) and women students Pat Richardson, Iris Hart, Shirley Cuming, Roxy Sims, Maisie Todd and Margaret Corpe.

Rex (Whacker) Dawe and John Duncan formed a marvellous comedy duo. Keith Macdonald was the "straight man" and compere. Jim Muecke was a very competent magician. Dean Hay and Bill Hann were responsible for most of the music, and Bill wrote many catchy songs for these Revues. We looked forward to the Footlights shows

every year - they were a happy climax to a year of study. I would have loved to take part in them myself, but my duties as a Cadet in the Department would not have allowed me the necessary time for rehearsals.

Having passed my 1929 university subjects, I took three more in 1930, including Physics II under Professor Kerr Grant. His son Colin, my form-mate from 1928, was my partner in the practical work which we enjoyed together.

Prof. Kerr Grant was the best-loved personality on the University staff. He was tall and thin and slightly stooped, with a shock of unruly hair, shaggy eyebrows and a bristling moustache. His twinkling eyes behind spectacles gave immediate indication of his good humour and kindly interest in others. I don't think anyone who passed through the Engineering and Science courses in his 40 years at the University could have left without some favourite stories about this typically absent-minded professor.

In one year he was alleged to have paid his income tax twice.

He drove a Franklin car - a make as famous and unique as its owner. Having mislaid it once, he rang the police on reaching home and said he thought it must have been stolen. "What is the number of your car?" they

asked. "Oh, just a minute," replied the Prof, "I can't remember. I'll go into my garage and have a look."

Because of his good nature, Prof. Kerr Grant was the butt of many practical jokes. He had devised an arrangement in the Physics Lecture Theatre for demonstrating that all bodies of similar shape but unequal weight fall at the same rate. At ceiling level, about 25 feet from the floor, he had two five inch diameter balls - one solid and one hollow - secured behind a trap door. They could be released by the pull of a cord which opened the trap door, allowing them to fall into a circular tray of sand on the floor below.

Before his lecture began, some students crept into the empty lecture theatre and moved the tray two feet from its position. When the Prof. pulled the cord the balls landed on the wooden floor with a terrific crash. The Prof. blinked at his class and said "I will repeat that demonstration tomorrow."

Next morning the students found that the tray had been moved back to its proper position, with a chalk mark drawn on the floor beneath it. They completely erased this mark, drew a similar one two feet away and replaced the tray in its correct position.

On entering the theatre the Professor saw that the chalk mark on the floor was not covered by the tray, so

he carefully pushed the tray over it and began his lecture. When the cord was pulled the balls once again hit the wooden floor with a resounding crash! There would have been recriminations from a less good-natured professor.

Once a girl student arrived late for a lecture. The Prof. stopped speaking until she had climbed up to her seat. Then "The Transit of Venus!" he remarked. The girl was early next time.

Prof. Kerr Grant had made a practice of reciting the whole of Kipling's poem "If", at the conclusion of his last lecture for the year. It became a tradition keenly looked forward to by all his students who made it increasingly memorable as the years went by - with the introduction of streamers, confetti, fireworks and even smoke-producing chemicals.

"If you can fill the unforgiving minute
With sixty seconds worth of distance run
Yours is the earth, and everything that's in it
And what is more, you'll be a man my son."

Prof. Kerr Grant was knighted in 1947 and retired in 1948. Among many others he taught Sir Marcus Oliphant, Sir Howard Florey and Sir Hugh Cairns. He passed away in 1967 at the age of 89. The name of Sir Kerr Grant had become synonymous with the University of Adelaide. He was a great Professor.

University student life revolved around the Union Building, overlooking the River Torrens. The central part was the Refectory, a large and beautiful hall with a beamed ceiling painted in a Spanish design. A wall of glass doors opened onto cloisters and lawn on the river side. The Refectory was used for dances, but was normally filled with tables and chairs for student meals. At the front end was the Union Secretary's Office and a men's reading room. A cafeteria at the other end adjoined the Lady Symon Building of the Women's Union. As the Men's Union building had yet to be constructed the lawn was then embraced by cloisters on two sides only. Meals in the Refectory provided the main contact between students of different faculties, important in making friends and developing the art of conversation and debate in those days before the introduction of television which tends to destroy conversation.

In December 1930 I began training in the transmission section of the Department under F.P. (Frank) O'Grady, the Transmission Engineer for the State. I had my first introduction to radio broadcasting at the transmitter of SCL Adelaide, shortly after that station (in common with all the relatively high-powered "A class" stations financed by listeners licence fees) had been acquired by the Department at the expiration of their operating licences. Programmes were being provided by the entrepreneurial Central Broadcasters Ltd under a 3 year contract, but the Department had the responsibility

of operating and maintaining the technical equipment at both transmitter and studios. The transmitter at Brooklyn Park was in a very "haywire" condition and the Department had the job of largely rewiring it to make it "shipshape". The Australian Broadcasting Commission was not founded, to provide programmes for the National Service, until July 1932, when the number of listeners licences in Australia had risen to 370,000 at two pounds ten shillings each.

In January 1931 I began my first paid annual leave. Evelyn Connell, one of mother's ten cousins in the Hardy family, lived at Cootamundra in New South Wales. Her husband Tom had a farm property there and they invited me to spend some of the summer vacation with them. The prospect of interstate travel thrilled me. Leaving Adelaide by train, I spent three days in Melbourne where the Mitchell family looked after me, five days at Cootamundra and three in Sydney.

From the Albury station at the Victorian/New South Wales border, where you had to change trains because of the different rail gauge, Tom drove me to his property. I rode a horse there for the first time - not very successfully! The saddle girth was secured with string which gave way when the horse broke into a canter, heading for a waterhole. The saddle slipped sideways and I reached the waterhole clinging to the underside of the horse's neck. A most undignified exhibition. In those

days Albury was a city of tree-lined streets and many bicycles. Tom and Evelyn had two children of about my age, Jim and Betty. They were most hospitable, but I wanted to see Sydney!

I reached Sydney early in the morning of January 15th 1931 and my first thought was "I must see the Harbour Bridge". It was still under construction. The arch was complete but the road decking, hanging at the centre, had yet to be extended to meet the approaches at either end. Leaving Central Station, I set off along Pitt Street - and there it was! The wonderful arch framed across the northern end of the street and spanning the distant Harbour!

It had been raining, and puddles of water lay between the tram rails. A few isolated cars were parked on either side of the one-way street, with plenty of vacant kerb space at that time on a Thursday morning in 1931 when parking meters were undreamed of. As I approached a street fruit-stall I saw a youth grab an orange and pocket it when the proprietor's head was turned. "That's Sydney in the Depression," I thought. I made good use of my time, visiting Bondi Beach and the Tooronga Park Zoo with its cage-less enclosures separating animals from the people by deep chasms and differences in levels.

I returned to Adelaide on January 20th and resumed duty at SCL transmitter next day.

1931 was a very eventful year for me. I had a heavy academic load - five university subjects filling the maximum number of "hours off" allowed by the Department - because I wanted to make good the time wasted in 1929.

On an evening in April I was driving dad's car, with Phyllis Williams, Berenice Bailey, Cuth Bammann, Betty Cleland and Don Burnard, to the opening dance of the Adelaide University Dance Club (AUDC). It was raining, the car side-curtains were up and the visibility was poor. As we drove across the intersection of Greenhill Road and Dequetteville Terrace to enter Beaumont Road through the Parklands which surround the city, suddenly -

C R A S H ! !

Another car hit us on the rear left door. Fortunately no-one was hurt but both cars were badly crumpled, though still driveable. Strangely the other car was driven by Colin Runge, heading for the same dance by another route. We drove the car to a city parking station opposite the University, enjoyed the dance and went home by taxi.

Dad used to sleep in an enclosure on the front verandah in the milder weather. He heard the front gate click as I crept inside, and his voice demanded -

"Where's the car?"

I told my story, with abject apologies. He agreed that the other car was in the wrong and he was glad that no-one was hurt. The car was insured, and fully repaired within a week. I was allowed to use it again three days after it returned, but this accident made me doubly careful.

In the early part of 1931 I completed 4 months training at 5CL transmitter. Some of the work of improving the equipment had to be done at night after the transmitter had closed down. In one week I worked from 11pm to 7am each night. This made attendance at lectures very difficult and I could not have carried on without the use of dad's car. I slept at home for a few hours from 9am, then went to morning or afternoon and evening lectures and drove back to the transmitter by 11pm.

The station also closed down from 5pm till the evening session began. There were no safety switches on the doors of the steel-mesh cages enclosing the transmitter equipment. In the high tension rectifier cage there were air-dielectric smoothing condensers which were covered by silk shields to keep insects away. Despite this, sometimes a moth would crawl under these covers and get across the condenser plates - resulting in a discharge of electricity through the moth with a loud bang, burning a hole in the silk cover. One afternoon I was showing some visitors round the station. I heard the announcement "5CL Adelaide, now closing down" at the end

of the afternoon session, and I opened the door of the rectifier cage to show them the effect of the moth discharges. I pointed to the holes in the silk, when -

C R A C K ! !

A spark jumped from the condensor to my outstretched finger, and another from my hindquarters to the opened metal door behind me. The visitors drew back in alarm and the senior mechanic on duty, greatly concerned, led me to a chair. There was a pungent smell in the air - rather like roast pork! The visitors left hurriedly. I had a burn on my finger and a neat 1/8" diameter hole burned through the seat of my trousers and my hip-pocket. I found a corresponding burn on my rump. Fortunately the rectifier had been switched off, and what I received was merely the discharge of the condenser - but the voltage was 11,000v and I knew how those moths must have felt.

We learn from experience. That taught me a lesson that lasted throughout my career.

In May I began training at SCL Studios, then located in what had been a Congregational Church in Hindmarsh Square in the city, quite close to the University on North Terrace. I was attending evening classes in Fitting and Turning at the School of Mines, adjacent to the University, for which it was necessary to wear old clothing and a boiler suit. I was given permission to change into this gear at the Studios, which was very convenient. At the Studios I made contact with radio

artists that I had heard "over the air" but never seen in the flesh - also the two most popular announcers, Bert Wooley and Jack Norris. I was allowed to set-up and operate equipment for radio outside broadcasts from the Town Hall and the Conservatorium, which was a great thrill because this was "show business".

Since 1929 the Labor Party had governed Australia under Prime Minister John Scullin in the face of increasing adversity. The prices of wheat and wool had plummeted, Government Loans to raise money had failed, and unemployment had risen dramatically. In the P.M.G's Department permanent staff retiring were not replaced and by June 1931 all technical training had ceased. Junior mechanics were transferred to positions of postmen and Cadet Engineers were placed on clerical work. Don Burnard and I considered ourselves lucky to have been appointed as Cadets in 1930 - there were no more Cadet appointments until 1937. Although we were transferred to clerical positions with a 20% reduction in salary we at least had jobs at a time when many men were having to subsist on ration coupons with no prospect of a job. Unemployment rose to 30% of the workforce. Dad's salary was reduced also.

When I was transferred to clerical work in June, my sympathetic boss Frank O'Grady very generously arranged for this to take the form of fault-recording at the Trunk Test Desk in Central Exchange in the heart of the city.

This meant that at times when the work was slack I could study the relevant circuits and maintenance manuals and learn much about the carrier trunk-line equipment - which was marvellous. I was helped considerably by Alf Johns, who was in charge of the Test Desk, and his staff - Fred Cellier, Tom Henry, Ron Nicol and Gilbert Godden.

The fault-recording at the Trunk Test Desk sometimes showed some interesting results. Short circuits, on open-wire aerial lines, were often produced by magpies. These birds collected odd lengths of wire left by farmers constructing post-and-wire fences, and used them to build nests at transposition poles where the lines crossed over between double sets of insulators. The test equipment at the Trunk Desk could locate such short circuits by measuring the reflection time of a test signal. One Saturday morning such a magpie nest was cleared by a linesman at 9.50am. At 11.40am it was back again at the same spot. Magpies are nothing if not persistent as I knew from my childhood. They kept linesmen busy.

It was conceded that 2nd and 3rd year Cadet Engineers transferred to clerical duties could take time-off to attend university lectures provided the time was made up in appropriate hours. This was a great relief, but it made life rather hectic. Although some lectures and practical work were at night many could only be taken in daytime, and we had departmental lectures in

Telephony, Telegraphy and Radio in the evening as well. I continued to use the SCL Studios for changing my clothes for evening Fitting and Turning. The transfers from Cadet Engineer to Clerk were officially gazetted in August and the positions of Cadet Engineer officially abolished in October. Our future looked anything but promising.

Despite those stringent measures my social life and that of my friends continued very much as before, but limited to weekends. Our pleasures were simple and inexpensive and we were not downhearted.

Dad had purchased an acoustic gramophone which provided us with many hours of musical enjoyment. This was somewhat more sophisticated than the one my Uncle Charlie had after World War I, but it still used 78 rpm records reproduced by a steel or fibre needle, and required frequent winding of the spring motor. The records had a playing time of only about 4 minutes on each side - which was sufficient for a popular song, but orchestral or operatic recordings were likely to require several discs and the turning-over and changing of these introduced irritating breaks in the continuity of the music. Further, if the spring motor was not rewound at suitable intervals the loss of speed and accompanying "dying" of the music was painful to the ear.

Both dad^{and} I bought records when we could afford them - usually at four shillings each. By modern standards the reproduction was poor and scratchy, but it is remarkable how one could learn to reject the unwanted background noise and concentrate on the music issuing from that wooden horn.

At the AUDC evenings at the Refectory the girls wore long evening dresses and the boys wore dinner suits. They were always "programme" dances. The programme of 10 or 12 dances, comprising foxtrots, blues and waltzes, was printed on cards with spaces for names. The boys began the evening by approaching the girls they wished to dance with, and all filled their cards with the names of the partners who agreed to dance with them. If you spotted an unknown girl you would like to dance with you had to move quickly - first to obtain an introduction to her and then to gain her acceptance, if she had any dances left free on her programme. The prettiest girls were always fully booked before dancing began. The greatest insult you could give a girl was to fail to present yourself for a dance you had booked with her. This sometimes happened when a boy found another more attractive partner, but that was the act of a cad and not easily forgiven.

Music was provided by a small orchestra, but in those days there was no electronic amplification used and the music was no louder than necessary for dancing - which meant that you could enjoy conversation with your

partner as you danced, as well as between dances when conversation was lively within groups. It was an excellent way for young people to meet one another.

Our parties at those dances became pretty standard. In addition to Phyll Williams and our great friends Bruce and Lorna Woolcock there were usually Cuth Bammann and Berenice Bailey, Miggs (W.G.) Chapman and Jill (Kath) Lucy, Jack Lucy and May Voke, Don Burnard and Doone (Lorna) Mengerson, and Rolfe Boehm and Rita Porter - couples destined to become man and wife in later years. We had a wonderful time and made many new friends.

In three years it was usual for young girls in "society" to make their "debut", and be presented to some notable person at a "coming-out ball". The annual University Ball at the Refectory was one such occasion, and in July 1931 the debutantes were presented to the State Governor, Sir Alexander Hore-Ruthven. The 49 debutantes included Roma Mitchell, who eventually became State Governor herself, and many of our circle of friends. The girls took great pride in their ball dresses, and their partners had to wear academic gowns over their evening dress. I was very proud to partner the beautiful Phyllis Williams and borrowed an academic gown from Colin Moodie who was a resident student at St Mark's College which formed part of the University. It was a marvellous evening with a sumptuous supper. The girls all looked ravishing and the carefully rehearsed

procedure, with curtseys and bows, provided an impressive spectacle.

By this time I was taking Phyll out pretty regularly - to theatres, cinemas, dances, bridge parties and picnics with our circle of friends. We enjoyed each other's company but I suffered the pangs of intense jealousy when she went out with other boys, as she sometimes did because she was very much in demand. The bridge parties were really an excuse for young people to get together, and conversation and supper were the most important ingredient of a happy evening. Visits to the theatre and cinemas cost little in those days with seats in the theatre gallery or cinema back stalls. It was wonderful to be able to indulge my love of music and the theatre at my own expense, and to share it with friends.

Ever since I first saw Phyll back in 1929 I had longed to see her with that lovely golden hair unbound and flowing free. In August 1931, driving home from the church social club one evening I had my reward. She let me take the pins out and see that magnificent cascade of golden waves surging down her back. That was the first of many such experiences and I took some marvellous photos when we went for weekend picnic drives to our favourite spots at Brownhill Creek and Waterfall Gully. Phyll with her hair down was a sight to marvel at.

Phyll and my sister Marjorie had both left P.G.C. to undertake courses in art. Phyll treated art as a hobby, but Marjorie aimed at a career as a professional artist and hoped to do book illustration.

Phyll went to the School of Fine Arts under F. Millward Grey in Tynte Street, North Adelaide, with her friends Lorna Woolcock and May Voke. Phyll excelled in poster work and Lorna in china painting. They held solo and joint exhibitions at various times in a room in the city.

Marjorie went to the South Australian School of Arts and Crafts in the city. She had great talent for drawing and painting and took part in their amateur dramatic productions. We had now reached the stage when we could enjoy each other's company - our tastes were alike and we had the same sense of humour. We both enjoyed Gilbert and Sullivan and together followed the script when listening to broadcast recordings of the operas. I was proud to escort my sister to a dance or a concert, and we often shared outings with our friends Mollie Roberts and John Thompson.

We played tennis on our hard-court, which I rolled and kept weed-free, and I played golf with John and other friends on the North Adelaide public course or the local Beaumont Common - which was cheaper. My sporting ability was poor, but I had fun.

John, being a British citizen, had applied to join the R.A.F. training college at Cranwell, England. He was accepted and set sail for his homeland in November. We gave him a farewell dinner at the Southern Cross Hotel, followed by a night at the Regent Theatre. I was not to see John again for many years.

Towards the end of 1931 a ray of hope appeared at the end of the Depression tunnel, when the Commonwealth Government announced the creation of a number of "Free Places" at universities. Don Burnard and I both applied for these, and were interviewed on November 4th, together with six other Adelaide applicants, by a Selection Board. It was a rather terrifying interview, all the worse because it took place in the middle of our final exams for the year. Five weeks later I was delighted to learn that I would be granted a free university place from the beginning of 1932. This meant that the Commonwealth would pay my fees and allow me more time-off for lectures than had been the case as a Cadet - subject to satisfactory performance - with the opportunity to finish an Engineering Degree course earlier. Dad had to provide financial surety to cover the course, under a Deed of Covenant, and I was required to continue in the Service for five years after its completion.

My 1931 University exam results were only fair. I passed in three subjects but had to repeat a map for

Surveying and lectures for Physics III. Fortunately these were the only repeats I had to do in the whole of my university career. They were the result of too much work pressure and too much self-indulgence. I resolved to work harder than ever in 1932. Colin Kerr Grant completed his B.Sc. and Bob Moodie his LLB in 1931.

In the Federal Elections that December the harassed Labor Government was defeated by the newly formed United Australia Party led by Joe Lyons, who continued as Prime Minister until he died in office in April 1939.

I spent Christmas in hospital, undergoing a minor nasal operation - the best place I could be in during the worst heat wave since 1872, with Adelaide temperatures over 100°F for 8 consecutive days and even rising to 114.6°F, the hottest for 71 years. I came home to a cool change.

In January 1932 I took my annual leave and went on "The Gulf Trip", a six day cruise from Port Adelaide up Spencer Gulf and back in the Motor Vessel "Moonta" - a small but beautifully fitted cruise ship driven by a 1400H.P. diesel. Our first port of call was Port Lincoln, near the tip of Eyre Peninsula - a township surrounded by low-lying treed hills, overlooking a beautiful harbour, rather like a miniature Sydney Harbour, sheltered by an island embraced by the heads. There were three jetties, necessary for the extensive fishing activities. I saw

Colin Kerr Grant, holidaying there with his mother and brother.

We sailed up the Gulf to Port Pirie where the Broken Hill Australian Smelting Co. processed lead-bearing ore brought 180 miles by rail from Broken Hill just across the New South Wales border. I inspected the blast furnaces, the gantry cranes on the wharf, and the pumping station and was startled to hear the ship's siren signalling her departure. I ran down to the wharf to find the ship swinging round with all gangways withdrawn. The stern was close to the wharf and I managed to scramble on board over the ship's railing. Making my way up the companionway to join the passengers waving farewell to friends on shore, I heard one woman say "Did you see that man nearly miss the boat?" I resolved not to cut things so finely in the future.

We called at Port Augusta at the top of the Gulf - a rather quiet uninteresting town with the wide, perfectly straight, main street so typical of many Australian country towns. I looked in at the P.M.G. Repeater Station, first hop in the 1600 mile trunk line route from Adelaide to Perth. I had often spoken to the staff from the Adelaide Trunk Test Desk.

Then down the Gulf to Port Hughes on the "knee" of the leg shaped Yorke Peninsula, where we took a 30 mile bus trip to Moonta, Wallaroo and Kadina. A most peculiar

vehicle - the body of an old horse-drawn tram jacked up on the tray of a Chevrolet truck. Kadina was the best looking, cleanest, country town I had seen and the copper mines at Moonta were staffed by typical Cornish-born miners with goatee beards.

There were evening dances on the ship and deck races with wooden horses. The weather was perfect and a school of dolphins swam beside, turning graceful somersaults in unison. We returned home to another heat wave - 4 days over 100oF rising to 110oF, then 3 cool days followed by 3 more over 100oF. We had rain at last on the 4th of February.

That summer we took delivery of our first ice-chest. Domestic refrigerators were unknown. Ice blocks about 10 inches square and 18 inches long were delivered regularly and placed in a metal compartment under the top lid. Foodstuffs were kept in an insulated compartment behind a lower door. The main problem was making sure that the bottom drip tray, fed through a rubber tube by the melting ice, was emptied before it overflowed. One overflowing accident was enough! Dad bored a hole in the floor and connected it to an overflow pipe at the top of the drip-tray. The ice chest was a blessing in that heat wave and the hot summers to come.

With a repeat of Physics III lectures I was again doing five subjects in 1932, but with the "Free Place"

the conditions were less stringent and I had 11 hours a week off for day lectures.

Although still classified as a clerk, I was moved to the Transmission Section under the watchful eye of Frank O'Grady. He was a brilliantly progressive engineer who played a key role in introducing carrier telephone systems on trunk-line routes, and I owe him a great debt of gratitude for his understanding and sympathetic guidance. The work he gave me included frequency response measurements, equipment wiring, circuit drawing and assembly of experimental circuits. This was divided between the transmission laboratory in the G.P.O. building, and the studios and transmitter of 5CL. They were then preparing for the opening of 5CK, the first South Australian regional transmitter at Crystal Brook.

The University held a Saturday Carnival, open to the public, in May 1932. I had the job of organising the contribution from the Engineering Faculty which took the form of a mock museum in the drawing office. There were 25 exhibits prepared by students - each one a ribald thrust at some topical subject. This was my first public attempt at a "show business" activity and it was a great success. I was told that Professor Kerr Grant was highly amused.

At the end of a working day many young people congregated at the "Beehive Corner" - the north-east

corner of Rundle and King William Streets, and a convenient spot for the necessary exchange between many tram routes. The pavement was wide and sheltered by the shop verandahs of Haigh's Chocolates, Bookseller F.W. Preece and the Ritz Coffee Bar. At about 5.30 p.m. you could be sure of seeing some of your friends there and indulging in small talk. May Voke and Phyll had to change trams there on their way home from North Adelaide art classes - which was a good reason for Jack Lucy and myself to gravitate there after work, and we always seemed to make contact. "Beehive Corner" was a good name.

With Jack Lucy I joined a weekly gymnasium class held by Claude Bennett in Twin Street in the city. We had both done "gym" under Claude at Saints, but now we did it because we wanted to, not because we had to. The gymnasium was well equipped and other old Saints boys in the class were Bruce Woolcock, Jim Muecke and Andrew Guinand.

Mother gave me a marvellous bridge party on my 21st birthday at home. I took the plunge, and put on a conjuring display which was well received and resulted in invitations to perform "magic" at three other parties during the year. This meant developing new tricks, for which I made the equipment and wrote the patter, with some injection of humour. While the purpose of the patter was to divert the attention of the audience during

sleight of hand operations, it gave me a thrill to find I could make an audience laugh. Certainly my audiences were captive and composed mainly of sympathetic friends, but nothing does more to establish rapport between a performer and his audience than a well received gag. Nothing irritates me more, nowadays, than the "canned" laughter injected into television comedies - turned on and off too frequently by an audio operator at the behest of a director who thinks "this is the spot for a laugh". Laughter should be spontaneous and deserved, not turned on and off like a tap releasing unrelated guffaws.

I received a touching letter of birthday wishes and encouragement from my old Headmaster, hoping to see me in Old Boys Week in July. He left Saints in the following May to become Headmaster of Felsted School in Essex, near Chelmsford. Felsted had been founded in 1564. K.J.F. Bickersteth had been Head of Saints for 14 years. He was given a warm farewell by the Old Collegians Association.

Lectures and work left little time for hobbies in these years, but when dad purchased our first amplified radio receiver, a 5 valve AWA Radiola mantel model shaped rather like a pregnant tombstone, I connected an additional lead to it from our outside aerial and an input lead from an electro-magnetic pick-up which I installed in our gramophone together with a synchronous 78rpm motor-driven turntable. This enabled us to enjoy considerably improved reproduction from our gramophone

records, with a release from the tyranny of the hand-wound spring-driven motor.

However, I retained a crystal set in my bedroom for late night listening. I had built a new set with variable condenser tuning which was necessary to separate SDN from the new commercial station SAD opened in August 1930. I made myself a set of bookshelves which served as a rear support for a drawing board that could be mounted above the table used for study in my bedroom, so that I could make my engineering drawings at home.

The Salvador Dance Club, formed in 1930, finally folded in 1932. As a parting gift, the Club donated a handsome pair of brass candlesticks to St Saviour's Church for the altar. These were dedicated in July, despite objections from some older parishioners who thought we were making St Saviours too "high church".

With all five subjects cleared in 1932, I enrolled for five more in 1933. Sid Jones and Jack White completed their training as Cadets and we were happy to see Free Places granted to Don Burnard, Malcolm Rogers and Bill Howe. This seemed to indicate that the Government was relaxing the economy measures triggered by the Great Depression - but we were still clerks! Recovery from the Depression was going to be a slow process.