
A YARN ON SURVEYING
WITH MR. FRANK MILLER

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recorded at GRAVELLY BEACH

IN YOUR MID-TEENS YOU WERE STILL AT SCHOOL AND HELPING IN THE FAMILY SHOP AT CLAREMONT. I REMEMBER ONE STORY ABOUT HOW YOU DEVELOPED YOUR GOOD POWERS OF CONCENTRATION BY DOING YOUR HOMEWORK AND SERVING IN THE SHOP AT THE SAME TIME. Quite so, quite so. There were times when both parents were out and somebody had to mind the shop which worked for those relaxed hours of 7 a.m. to 10 p.m.. WHAT SCHOOL WERE YOU GOING TO AT THE TIME? I was going to Clemes College; I'd nearly got a scholarship there. Since it was an owner run school the principal decided he would offer my father half rate fees to encourage me to go there. THIS IS WHAT WE WOULD CALL A PRIVATE SCHOOL NOW? That's what would have been now called a private school. I prefer its older and I think more proper term of public school - anyone could go to it. There was only one barrier to it during the Depression it was rather a large one - money.

SO YOU CAME TO THE END OF YOUR SCHOOLING AND THE NEXT STEP WAS TO LOOK FOR A JOB. WAS IT AS SIMPLE AS THAT? Yes, it was another one of those times when the problem was money! If I wanted any myself I had to get out and earn it. The war was well and truly on and like a lot of silly young fellers all I wanted to do was get into the services. But at seventeen, or nearly seventeen, with a father who said "No way can you go to sea. I wouldn't let a dog go to sea. I've been there myself". I had to get a job until I reached eighteen. It all just happened. I applied all over the place for anything I could think of and places that weren't asking as well as those that were, and to my surprise I got a reply from the Lands Department - the Lands and Surveys Department in those days:- could I come for an interview. The result was I became the first outsider to be brought into what was then called the D.A.D Survey - (Deputy Assistant Director of Surveys) which developed eventually into the Mapping Branch and whatever it is now called. I had the princely title of chainman for Mr. Frank Miles. JUST ONE POINT HERE, THE D.A.D.Survey : WAS THAT THE GOVERNMENT ORGANISATION? That was the Army.

DID YOU NOT SAY EARLIER THAT YOU WENT STRAIGHT INTO THE LANDS & SURVEYS AND AT THE VERY SAME MOMENT WERE SECONDED INTO THE ARMY? That's right. I was a chainman to Frank Miles under Capt. Blackwood, the D.A.D. Mr. Miles was seconded from within the Lands Department to serve in the mapping so he was in a junior position to Mr. Blackwood - a pretty senior junior position.

WHAT WAS YOUR FIRST INTRODUCTION TO SURVEYING? Well, carting heaps of gear up and down the mountains, hills and pinnacles all round, oh, not terribly far from Hobart area and taking bookings while Mr. Miles read trig. shots all over the place.

At first they were trying to stabilise and toughen up the strength of some of the old maps that existed but they found they didn't join up very well and after a while it was decided they'd just have to build their own framework and start from scratch.

WERE YOU UPDATING THE MAPS WITH PLANETABLING? Yes, that's right. We tried to update things but then little problems came about, like there was a nice survey of the Tasmanian Main Line Railway from Hobart. Initially we wanted to get to Bridgewater. We had a nice long straight of course across the old causeway which could be co-ordinated nicely. We could tie that onto the trig. chain we were developing, and there were some points established near Hobart to tie the other end. The whole thing was on a plot which was traced and superimposed on a compilation that was in process - Angus Love was there, he was doing this sort of thing. I remember quite clearly that if you firmly fitted across Bridgewater causeway the railway line didn't want to obey. Alternatively, if you got a good tie down near Hobart it went up the Jordan River at Green Point. So we decided that some of the old survey work was not up to the standard we required. By the way, although I was a chainman, I was what I think the English gentry would call failed matric - I went the distance but the English defeated me.

WHAT WERE THE WORKING CONDITIONS APART FROM LUGGING LOTS OF GEAR UP MOUNTAINS AND SO ON? BECAUSE IT WAS WAR TIME WERE THERE EXTRA PRESSURES INVOLVED OR EXPECTATIONS OF WORK OUTPUT? Oh.....there weren't any hours. Generally starting time was 8 o'clock at this stage of the game; afterwards it got earlier. Finishing time was when you ran out of daylight and sometimes that was extended because the tops of trigs were visible against the darkened sky. You couldn't read the instrument so in addition to doing the booking the chainman also had to keep up a supply of matches and get the light bright enough but not too bright through the mirror. Mr. Miles did have an instrument with internal optics, a luxury that most of us when we were cadets didn't have.

WERE YOU GIVEN ANY ENCOURAGEMENT TO BUILD UPON YOUR SO-CALLED FAILED MATRIC QUALIFICATIONS? Oh I really didn't need encouraging except the effort, the push, from my parents. I didn't start work till March partly because I went full time to a coaching school called Davis College and by a Miss Georgina Davis. When the results of that came out in the negative I decided that I'd have to get what coaching I could outside working hours and then went to work. Not really having any idea what occupation I wanted to follow I didn't resist Captain Blackwood saying "You ought to be articled, you get that matric and we're laughing". DID YOU GET ANY HELP FROM THE PEOPLE AROUND YOU? No. the 'you go and do it' help, probably the best you can get I think because the big problem with English - well when my kids were growing up as well as when I was - was the fact that the examining authorities required a maturity beyond the years and experience - that's the way it seems to me.

YOU WERE CATCHING UP ON YOUR MATRIC AND WORKING LONG HOURS PLANETABLING AND DOING TRIG. WORK FOR MAPPING ON SECONDMENT TO THE ARMY. THAT TOOK UP MOST OF YOUR FIRST YEAR OF SURVEY EXPERIENCE. WHAT HAPPENED THEN - WE NOW COME TO 1942? Well before we come to that I think there's one other little thing. They soon discovered that I rode a push-bike willingly and actually with considerable panache. I was quite capable of riding it with a planetable over my shoulder or at other times with as many as three heliographs and tripods strapped to it and me, so that I rode to and climbed hills - frequently Mt. Rumney because that had all been observed - but sometimes other places where they didn't have four instruments to do a quadrilateral and they wanted to be sure of the reference point of the remaining figure. So off I went with my kit and of course binoculars to look with. They could much more easily see my signal than I did theirs and I also probably had nothing else to do but attend it, so kept it very much on the job and very often I didn't see them sign off - it was a very brief sign off - so I was there until dark and then came home. YOU MUST HAVE COVERED MANY MILES AROUND THE HOBART AREA ON THAT BIKE. Oh yes, yes. OF COURSE THIS WAS WELL BEFORE THE DAYS OF RADIO COMMUNICATION. Oh yes, two-way radios were appearing amongst officers towards the end of the war: I saw them coming about then, but that was my first contact with them.

AFTER THIS HECTIC TRAVERSING TO AND FRO ON VARIOUS MEANS OF TRANSPORT IN THE HOBART AREA - YOU DID THAT FOR A YEAR - WHAT HAPPENED THEN. AT THE END OF YOUR SECONDMENT? Well as soon as I turned 18 I was due to be conscripted; enlistments for overseas service were suspended at the time I turned 18. and in any case I would have been roped in to continue the job I was doing, from inside an ill-fitting khaki uniform until the powers that be thought the pressure for emergency mapping in Tasmania had departed. So there I was. SO YOU WERE CONSCRIPTED? DID YOU HAVE ANY BASIC TRAINING? Oh no, no. I came in for a recruitment day. I was brought in to Hobart: I was given a fistful of papers and I got a lot of black looks from the fellows standing in queues as the orderlies who were looking at the papers just put me in front of queue after queue, and I looked down to see what was going on and at the bottom of one of the pages that these fellows slipped over I saw words to the effect "Pass. All equipment. send back to unit today". IN OTHER WORDS, YOU WERE DESPERATELY NEEDED TO CARRY ON WITH THE MAPPING AND NOTHING ELSE MATTERED. That's right, in fact the medical was an absolute farce - whether I came out with a disability I went in with is their blooming fault.

SO AFTER YOUR CONSCRIPTION IN APRIL '42 YOU WENT STRAIGHT BACK ON THE JOB MAPPING. Very much so. WHAT HAPPENED FROM THERE AS FAR AS SURVEY WORK WAS INVOLVED? Oh well. we grew to a group of five - six at one stage - planetablers. Les Davies Sergeant in charge of us in the field: one army utility, one privately owned ute; at times we got a marvelous old Dodge and

driver/chainman/assistant who'd been in the trig. parties. There was an army Warrant Officer stationed in Tasmania and he joined the trig. work that Mr. Miles had been pushing on with for a start. so it became more or less a military operation - drafting sergeant, corporal, one or two civilians - a pretty small unit. All up we covered four inch-to-the-mile map sheets, about 2000 square miles. It's a fair bit of territory.

YOU MENTIONED LEVELING, WAS THAT AT THAT TIME, OR A BIT LATER?
No. In typical army fashion, when it was deemed that this could be wound down we moved on within the services - I had in the interim volunteered for overseas service before this happened - when we moved on we all went to the army's field survey training depot just outside Bacchus Marsh a few miles. There, having done two and a half years altogether in the game they set about to teach me surveying army fashion including six weeks tuition in planetabling. Had quite a nice time at that! We also had an instructor who taught me leveling and I think rather nicely said "You know, you pass easy, but you're going to continue surveying after the war - I'm going to fail you so you get another weeks experience and that'll really get you somewhere". SO HE HAD YOUR BEST INTERESTS AT HEART? Yes, he was very nice. Oh it suited him too, very much. DIDN'T HE HAVE MANY PUPILS TO INSTRUCT? No, he was going to be a bit light on without me and I had as a staffman a man who was also supposedly interested in training who said "I'm not going to do any of this, I don't mind taking the staff for you, you're getting somewhere".

AFTER ALL THIS TRAINING WHAT CAME NEXT? WAS IT SOME TIME BEFORE YOU WENT ON OVERSEAS SERVICE? Typical army mess about, you know, you can't go from this state to that state without being put in hold and processed and fiddled about - that sort of thing went along merrily as a means of getting into Queensland. Then I began a period with the 2nd Field Survey Company which was working in Australia on things that the army still deemed to be very important and I went out with a party as booker to the officer. He was a good scout. WAS THIS IN QUEENSLAND? (Oh well, he was a New South Welshman). Yes, working up in behind Rockhampton and all round, including the coast at times. He was a licensed surveyor; he showed me how to use a theodolite and let me do two rounds to be measured and used as one in his observations. I was brand new, a brand new rookie and I think he did a marvelous job; so long as my two rounds were compatible with his. he was very happy to use it with half the weight of his. That gave me a chance to get a little bit of a look at a theodolite that I would never have got otherwise in the army. IT WAS PURELY HIS CO-OPERATION AND GOOD WILL THAT ENABLED YOU TO GET HANDS-ON EXPERIENCE? Oh yes.

AND WAS THAT BUILT UPON LATER? No, that went by the board, that just went into experience. The instrument by the way was a one second Tavistock, a beautiful machine. Then we went up to reinforce a Queensland unit who were getting ready to go

overseas: they were pegging off B class men and having to replace them. WAS THIS A SURVEY UNIT? Yes, the Frightened Fifth: they called it Fighting, the Queenslanders, but only on beer nights did that really apply. WHAT HAD THEIR TASK BEEN? They'd been mapping various areas. PROSPECTIVE AREAS THAT COULD HAVE BEEN COVERED BY CAMPAIGNS? Yes, where the Japs might come and do us over.

SO IT WAS VERY MUCH FLY BY NIGHT BEHIND THE SCENES SORT OF WORK? No, they had not left Australia at this stage; they were doing work which was vitally necessary if the Japanese made a landing - hopefully the powers that be were trying to pick the places that were likely, starting from Cape York. DID YOU GET UP THERE? No. I didn't get as far as Cape York. They settled down on the Atherton Tablelands training and mucking about, and doing a lot of wonderful things, but eventually we shipped off over into the Moluccas. Some of the lucky ones got into Borneo, and all got out with their skins intact. I'm glad to say.

WAS IT TOUCH AND GO AT THAT TIME? Oh, it was definitely on in Borneo. There were still Japs on the island we were on but they were very peaceful, glad to say. There were odd scares; we went out and established a perimeter around the beach. Well the camp was outside the area, but our water supply was even further up the bush. We had to go and secure that just in case at times. I thought the greatest danger really on that perimeter at night was that something would scare the mob behind us. They were the draftsmen working in shifts twenty four hours a day on map production; they were exempt from guard duty but some had itchy trigger fingers and you did not need a vivid imagination to see yourself between two fires.

IS MOROTAI PART OF THE MOLUCCAS? I suppose the one that sticks in nearly everyone's geography is the old Celebes, now Sulewesi. Well, we were about a couple of degrees north of the equator and east of Sulewesi.

WERE YOU UP IN THAT AREA FOR SOME TIME? Until August '45. I was up there until between the first and second bombs on Japan they invited me to go home. 'You have been offered a manpower discharge, will you accept'. What do you say to that - will a swim duck!

DID THAT IMPLY THAT THEY NEEDED YOUR TALENTS BACK HOME? Not really, it was rather a council of despair at the Lands Department. Surveyor General Colin Pitt had two surveyors, quite a bit of work waiting and a lot more in prospect to meet housing and land settlement for returned servicemen surveys.

The merry band of ex-service cadets (Joe Holmes and Geoff Griggs ex RAAF and Cyril Edwards and I) were in demand, but it was for engineering surveys - e.g. Montagu Swamp - and War service Land Settlement and Housing subdivision: plenty of good instrument practice but it wa a long time before I encountered my first Old Marked Line

DID THE ARMY BRING YOU BACK TO MELBOURNE FOR DISCHARGE? Right back to Brighton.

YOU MENTIONED SOMETHING ABOUT HOW THEY EQUIPPED YOU FOR CIVILIAN LIFE AS YOU PASSED THROUGH MELBOURNE. Oh yes, that's right. We came out of the tropics. They tried to dig out our service dress and great coats and some over zealous character had apparently poured considerable quantities of paste that should have been only enough for a label, so it pretty well penetrated right through mine. They gave me the wreckage and also a new overcoat and really only desperation put you into your army rig after you were once let out of it.

THEY ALSO GAVE YOU A GRAND SUM OF MONEY DIDN'T THEY? Well, having taken manpower discharge we sort of renounced all our repatriation rights. Later they reinstated medical fortunately for me because I needed it - for me - otherwise they gave us vouchers to the value of I think it was eleven quid and clothing coupons (specified items to be bought) - didn't get you very far and a ten pound grant for tools of trade, which had to be spent promptly, in Hobart, at the end of the war where everything had been rationed. We got some odds and ends which were useful.

SO AFTER YOUR DISCHARGE FROM THE ARMY YOU LANDED BACK IN HOBART.....AND THEN YOU WERE APPRENTICED TO COLIN PITT. NOW HE WAS SURVEYOR GENERAL AT THE TIME. Well actually I was apprenticed just before the army called me up so I'd served three years and achieved next to nothing except that in the army I was able to start a course with what was then Melbourne Tech, now the R.M.I.T., on Land Surveying.

THE ARMY LIFE WOULDN'T ALLOW MUCH TIME FOR THAT. Well an apprentice in those days had to be pretty determined - unless he had a very good friend at court. But somebody had to go and do these surveys, that was fair enough, that's what they'd got us out for.

SO YOU LANDED BACK IN HOBART AND THEY SAID: HERE'S A THEODOLITE, GO OUT AND DO SOMETHING. That's right.

WHERE DID YOU GET YOUR OWN PARTY LEADERSHIP EXPERIENCE: IN WHAT AREAS? Well we had about six weeks roaming about some subdivisions that had been done in Hobart, putting in reference pegs. After that I took my first party out, knowing slightly less than nothing I reckon looking back. They sent me up the Montagu Swamp. They also sent two chainmen, Cyril Edwards and Joe Holmes. Joe didn't go out in the field much, in fact I think he did more field time, helping chaining for me up there, than he did in charge of a party of his own. We were supposed to rotate about but the department had engaged a local contractor surveyor to supervise us, and he found out that Joe was a draftsman and it seemed that somehow or other I was told that Joe had gone to one end of the swamp and Cyril was told that Joe had gone to my end of the swamp. So we went looking for the boundaries of Montagu swamp.

WHAT TIME OF THE YEAR WAS THAT: WAS IT PRETTY WEI. KNEE OR WAIST HIGH WATER AT TIMES? No. the water was seldom much more than ankle deep. We went up. I think in November and pulled out about the following Easter. but there's no summer up there. I think humping out our gear on Monday mornings we were either simply drowned out and couldn't go. or plugged out in the rain something like seven out of ten consecutive Mondays.

AFTER YOUR STINT UP IN THE MONTAGU SWAMP WE NOW GET INTO THE WINTER OF 1946. Oh yes.

WHAT WAS THE NEXT PHASE OF YOUR EXPERIENCES? Well that was when we really started to become a surveyor in the terms of property. Up 'till then was purely instrument experience. In that winter I went down the Huon to join Mr. Jack Howell and his cadet, Geoff Griggs. I became junior cadet in what was either two cadet parties or sometimes all three and Mr. Howell in the field: he spent a fair bit of time supervising us and avoiding that plague of your life in the Lands Department - he spent a lot of his time in camp, where it was quiet, doing field notes. There just seemed that feeling in the office that you weren't surveying when you were writing field notes. Nobody ever showed them the old gag where the job's not finished until the paper work is done. They seemed to think the leprechauns would do it for us. If you were a surveyor in charge. and you sent one cadet to that line. and one out to another line, you could sit down and write field notes so long as you didn't let the fire go out and freeze to death.

WITH WHAT SORT OF INSTRUMENT DID YOU START SURVEYING WITH? Bit of a come down after the Tavistock in the army: I had a Troughton-Simms, about 1880 model with external focus, open verniers, and just to make it really good, twin screws, not a tangent screw on the vertical. You had to lock one against the other, and of course they developed sort of little patterns on the brass plate that they locked against, so that the horizontal axis often tended to wander away as you tightened up - most disconcerting. By the way, up on the swamp, while we're at it, the leveling was also done with ancient brass machinery: external focusing, you know, keep your eye out of the way when you're on a short shot and four screws, very badly worn. I spent a lot of time trying to keep these things in adjustment. Towards the end of my time there I used to hope that I would trip over something and bump the jigger on a tree because it did a better job of leveling than I could with capstan bars and so on.

SOON AFTER THAT YOU ACTUALLY BOUGHT YOUR OWN INSTRUMENT, DIDN'T YOU? Oh yes. the opportunity sort of fell my way to buy a Japanese made Fuji: at least it had enclosed verniers on the horizontal plate - the vertical was still open: it was more or less aluminum, seemed to stand up all right. It was built to an American pattern I believe for an engineering instrument and it had a reverse horizontal circle as well as the clockwise one. It was very handy in setting out work on extensive left hand curves. You didn't have to make all these wonderful subtractions which were so easy to slip up on - thus you got better results.

YOU WERE GETTING EXPERIENCE AS A PARTY LEADER AT THAT STAGE. WHEN WERE YOU REGISTERED? March 1950. DID THAT ENTAIL A TRANSFER FROM WHERE YOU WERE STATIONED, OR DID THAT COME LATER? Oh no. I went right on the same old pay and the same old job. In November of that year I took my leave, and I'd been using an old car as transport for the department on modest mileage. I thought, well a car was a dead loss - a prewar Ford - cost the earth to run, got very little back for it. As soon as I took my leave I sold the car and wrote a letter informing the department that I'd sold it and would they please provide me with such transport as they needed me to use on my return. They counteracted by then advertising the position of junior staff surveyor, cutting the surveyor's pay to about seventy per cent. It was a heck of a nice bonus compared to what I'd been getting; nearly doubled my pay anyway but they prescribed "that the surveyor will provide a utility vehicle". I'm pretty confident this was supposed to rub me out because the others - one chap was qualified and one who was nudging that way - each had utilities and generally speaking there was a two year wait on getting a new vehicle. I countered by asking that a panel van be accepted as being a utility vehicle and pointed out that this provided lock-up equipment space, and with a little coaching from my father who knew a few things about the place - such as saying it's cash - I bought a new vehicle, a van. So that prevented them eliminating me from the positions that were offered.

YOU WERE NOT A JUNIOR SURVEYOR AT THAT TIME? No, I was classed as - I think the word was assistant surveyor. It meant nothing. It just happened when you ran out of your articed time; most of which expired while I was in the army.

YOU WERE AN ASSISTANT SURVEYOR WHEN YOU WERE REGISTERED AND THEN GOT THIS JUNIOR SURVEYOR POSITION? Well, yes, Cyril qualified the same time as me and that November was the first occasion that he and I got any recompense for our passing.

YOU THEN CONTINUED ON IN HOBART? Oh yes, when I got back to headquarters and not up the mulga somewhere.

WERE YOU SENT ALL OVER THE SOUTHERN AREA OF THE STATE? All over Tasmania.

SO ALL SURVEYS WERE CONDUCTED FROM HOBART? THERE WERE NO BASES ANYWHERE ELSE AT THAT STAGE? No, everyone was based in Hobart, the more favoured you were the shorter the range you went. Cyril and I contended with the north of Tasmania pretty well on our own.

DID THE WORK ITSELF VARY? WAS THERE ONE PREDOMINANT STYLE OF SURVEY OR CUTTING UP OF LAND? Up 'till this stage both Cyril and Joe had done a great deal on cutting up Soldier Settlement blocks, at Lawrenny and such like places. WHERE IS THAT? Lawrenny - out of Ouse in the Midlands. There were a fantastic number of blocks out there for soldier settlement, it was a huge property. There'd been some other I think but can't place them. I'd been basically under Mr. Howell's direction all this time and he ranged all over Tasmania; I'd done a couple of so-called summers on the West Coast on mining work, and various property work on all sorts across the nor-west and north, not as much in the north-east. I got that area all to myself later on!

YOU MENTIONED SOLDIER SETTLEMENT; WHAT ABOUT KING AND FLINDERS ISLANDS? DID YOU GET THERE AT ALL? Well Geoff Griggs got one very long stretch over on King. Flinders was done in rather shorter bursts. I never got any of that until later it was open country at least - and you know, that's some compensation, at least you don't have to hack your way through everything. King wasn't like that; a lot of King hadn't been cut at all, it was cut by survey line. Geoff had a torrid time on that I think. WAS IT MAINLY TI-TREE, BEFORE THE DAYS OF ALL THOSE BOX-THORN HEDGES? Well, they were really in the older settled areas. The new stuff was all ti-tree. I remember seeing Geoff who was not far short of a workaholic in his cadet days on one occasion standing, gazing at his theodolite in a sort of trance and I was a bit concerned actually. I was going along on an intersecting line and came across him and I said 'Geoff, are you alright?' He said, 'I was just contemplating the plump bob. It's going that way', and pointed vertically down. After a long stretch on King Island it was a delightful sight. Another very interesting job about this period was the Mt. Field National Park boundary compass survey. We kept getting advised to pick out a big tree about half a mile away and just choof off to it. If you have ever tried doing that in rain forest you know its not always successful, is it? Well, when you are already confined to the line that you're on, mainly you can see nothing but three big trees overlapping each other and then scrub at about half a chain.

DID THE LINES HAVE TO BE CLEARED? Well you had to clear or mark them, you've got to have access on them near enough line to mark it. So there was nothing for it but just up to a tree and put a little bark blaze on it and walk round the other side and put your compass up and say, cut that way fellers, and go and help them along a bit. THAT WOULD HAVE TAKEN QUITE A BIT OF TIME WOULDN'T IT? It felt like eternity. WERE YOU AT LEAST GIVEN A REASONABLE TIME OF THE YEAR TO DO IT, WEATHERWISE? Yes and no. At least we started in good weather, but what happened was that we lost a lot of useful summer that we could have used much better. They wouldn't define, because they were waiting on Parliament, boundaries on the south and the west of the park which had to be run.

WAS THIS IN CONFLICT WITH LOGGING CONCESSIONS? This wasn't in conflict with logging, this was a gold capped gift to logging. There was a huge area of the Florentine Valley - quite a bit of it had already been logged that was in the national park and that was handed over to the loggers and in exchange they gave a funny looking arrangement on the south side of Tyenna Peak - and some pretty ridiculous boundaries, especially a section which said that for so many chains it should be ten chains south of the Adamsfield track which meant traversing the track and then go down south and try and reproduce it, with a compass!

THIS WAS INCLUDING THE TRACK IN THE PARK? Yes, that included a bit but surely to God they could have said go down ten chains and go west; anyway, they didn't. and Cyril copped that, and he had a hell of a bad time in that. So we were snooping around Hobart and doing odd jobs and so forth waiting for the answers and all along they knew, or should have done, that a great deal of the

northern boundary was to stand and was un-surveyed. Now we could have been doing that in the mid-summer. instead of that I arrived there with one chainman about middle April. I got started. got snowed out. and then I objected very heartily to the what I considered dangerous situation trying to work that country with only one chainman. As a result Cyril with two chainmen - one a new one - came up and we sort of double-handed it along there which was much safer.

BY THE WAY. WAS JACK BARRETT WITH YOU THEN? Yes. Jack was fairly new to the department then. but Jack was a very useful bloke even when brand new. Anyway. just as well we were there. It wasn't without its, little bundles of drama. I mean we left both compasses up the line one night. There was fog the next morning and we said. 'Right. O.K.. we know the direction. we'll string out. put a surveyor in front to get drowned and one at the back to see that the mob stays in line.' (We changed ends when the front bloke was thoroughly drowned). The upshot was when we came out on the line it seemed to be inclined in the wrong direction: like we expected it to go downhill to the left and it went uphill. A bit of thought on the subject and we realised we had come out over the northern boundary which we had surveyed a few days before and what we were looking for was the western boundary on the other side of Mt. Lord. We got there eventually and came home in the dark. matches and the grace of God. mainly.

WERE YOU CAMPING? We camped out near Lake Emmett. five men in a eight by ten tent. Water run under it. more times than not. and a big bed of ti-tree. HOW OFTEN WOULD PROVISIONS COME UP FROM TOWN? Never. carry everything yourself. We came out at weekends. We went like scalded cats on that job: with an adequate gang, one compass picking out the line - two chainmen ahead cutting the line. then my chainman and lastly me with clino and spare compass. My man and I shared blazing the remaining trees and putting up a sizeable stone pile every twenty chains. or more frequently if rock was absent at twenty chain intervals.

MENTIONING COMPASS SURVEYS REMINDED ME OF YOU DOING A NUMBER OF MINERAL SURVEYS. WHEN WAS THAT? Most of them were done in my post apprenticeship period.

I KNOW YOU'VE DONE A FAIR BIT IN THE BEACONSFIELD AREA: WERE THOSE MINING JOBS DONE THEN? There were some mining jobs there. yes. not so many. the big push on mining was down the West Coast. There was thirty or forty mineral leases in one great fell swoop with four parties in Zeehan at one stage. Today I think they just draw mineral surveys on plans if there is no conflict. but I suppose in those days there were a lot taken up adjoining each other.

IS THAT WHY THEY NEEDED THE SURVEY? I don't understand why. EZ could take out land by the thousands of acres: we did one down there. there were three parties on one block. Joe Holmes and Mr. Howell and myself. which extended from high up in the slopes of Mt. Reid at one end. almost right into Rosebery. There were about three thousand acres in that. and they took that out in one block. thank heaven. the time to cut that up into the maximum lot

of eighty acres would have been murder. On the other hand, all those that were for some branch of Broken Hill at Zeehan, all had to be cut up into eighty acre blocks. All to one company. And when they got it, they consolidated the lot. Crazy method. I used to reckon, but that was the law. Somebody might have known there was a good reason, I didn't. We just slogged through the scrub.

AFTER MT. FIELD, WHAT OTHER SURVEYS COME TO MIND OVER THE YEARS? Oh after that you really start to get into property then. About June 1951, that would be only a couple of months after we finished Mt. Field, I was given half a dozen surveys to do up north here. Mostly auction surveys round Beaconsfield and Lefroy. Couple of other little things. And I set off up here with a couple of Polish blokes as chainmen. We'd hardly started before I got a few more blocks sent up in the mail. Scrounged camps for a while; that's right, old huts and whatever we could get into at first, then we got a caravan later. And then they said would I go and see Mr. Ralph Campbell-Smith who had some surveys issued to him which he was no longer to do. Private blokes were flat out on private work. It was an anachronistic system really - issued them out to private blokes and said 'You know, you must do this within three months'.

I SUPPOSE AT THAT TIME THERE WAS AN ACTIVE BUILDING INDUSTRY. Very active. They were doing a lot of subdivision work for the Housing Department which was called something else then. They were doing a lot of that and of course that was vastly better work than the old four guinea pops in the bush. That was the fee, four pounds four shillings for a building block. I think you had to get into a matter of acres before you got away from that. I don't know how many from memory. Anyway, Ralph gave me a pile of jobs that a kangaroo dog couldn't jump over, and I went back to Hobart twenty two months later! It was given to me to understand that I was to come back when I'd finished and to keep sending down diagrams.

FANCY - YOU WERE PERMANENTLY IN THE FIELD BUT VERY MUCH BASED IN HOBART. Yes, all over the north-east in that period.

WHEN WAS THE MOVE MADE TO BASE YOU IN THE NORTH? I made the move myself. John Cohen's two ex-apprentices, Paul Phelps and Ted Pedley, worked for a while for John as surveyors and then it seemed to not go on that way and Paul got a job with the Lands Department as a surveyor based in Launceston. Well that was very nice while it lasted - until the Department did something that he found intolerable and he went out in private practice without a doubt on a shoestring I'd say. I take my hat off to his courage! That meant the north became vacant territory and for a while everybody looked the other way but there were files in the surveyors' room in Hobart - I think it was nominated as north east actually, included the Launceston area - were overflowing, and that's an understatement. I went to Mr. Miles and said, 'Look, I think it would be a good idea if you based me in Launceston.' There was a precedent now, he had Paul based in Launceston. 'What makes you think that?' I said, 'Well, just go and have a look at the size of the file, somebody's got to go there soon, for a long, long time, and it's going to be me.'

'What makes you think that?' I said. 'You tell me somebody else that you'd send.' That stopped that conversation! Eventually, anyway he came around and said 'Take some instructions and have a look round, see where you want to live, and come back and tell me what you think.' There was no guarantee I would stay up in the north-east. I understood that and I said there was just one thing that I'd like and he more or less tacitly agreed that he wouldn't send me out of it and put somebody in my back yard; in fact he honoured that. So I came up here, had a look around, found a place I liked; I moved up here to Gravelly Beach to the house next door to where we are now. I looked all round Launceston and nothing seemed to come out right. It's funny how I came here. I was putting in a wet Sunday between jobs - I was living in the pub at Beaconsfield at the time - I'd been told about the place at Gravelly Beach, the agent said 'I know just the place that would suit you, but it's too far out.' I said, 'Where?' and he said 'Gravelly Beach.' I said 'I don't intend to set up that sort of a situation, far too far out'. Anyway, having nothing better to do when it was raining, I came and looked at the house, in the rain, and liked it so much I brought the family up the next weekend - went down to Hobart, grabbed the family, brought them up, showed them a few other options, then showed them this one - and oh lovely. So we moved and I presented a very modest account for my traveling and furniture shifting. The Department told me I was ineligible! Anyway, it was the best money's worth I've ever had.

WELL, YOU REALLY MADE THE DISTRICT YOUR OWN, DIDN'T YOU? Oh yes.

AT WHAT STAGE DID THEY ESTABLISH BASES AT DEVONPORT OR ALONG THE NORTH WEST - THAT WAS PROBABLY MANY YEARS LATER? Yes, I came up in 1958. (left the Department in 1966, went to the Public Works, now Main Roads) and I had John Sheehan come in nominally with me and he basically was based at Scottsdale most of the time he was with me, although he was under my control, because there was such a pile of work there and he seemed to be so contented to stay put there and work around. He had a few excursions away for other departmental requirements. I think John was the first based at Sulphur Creek, nominally Burnie, in the early sixties. I don't think anything was ever official with the Lands Department for years with these things, it just sort of happened. They yielded to the pressure of logic rather than making decisions.

HOW DID YOU COME TO LEAVE THE LANDS DEPARTMENT, FRANK?

Well, it's a bit of a long story in a way. When I moved up here with a big backlog of survey instructions in the area, they piled in a lot faster. I did get quite a lot of staff help both John Sheehan and various cadets were assigned to me and we moved through very well. We kept up with the thickest of the input, we held that at bay, and when that eased off we were pushing the whole lot down very nicely really, although some of the cadets then moved away. One big problem with it all was that some of the stuff I brought up originally in 1958 was very ancient - then years old or so - and the information to work on was drawn by draftsmen on tracing paper. Naturally, they sometimes didn't understand the import of some of the things that were in the old plans and didn't record them. In any case it was all getting a

bit out of date. The department had a photostating machine for years - it wasn't under great pressure I don't think then for work, and there was the other thing that private surveyors were getting out especially in the northern area here into country areas and sort of places where I'd worked and they had done surveys. I land on a job and find brand new marks and I sometimes felt at a bit of a loss to know how to interpret these. There was a third thing and that was that some of the applicants had either died, gone away, or lost interest or whatever and I couldn't locate them. So several times I asked Mr. Miles to please withdraw or allow me to send back these very ancient instructions to be reprocessed. Is the applicant still alive? What is his present address, and do they still really want the thing? If so, get me out all the information afresh, up to date.

I got no response for a while and then, I think in 1964 - I can't remember which end of the year - up came Mr. Miles: "Meet me in at the Launceston Office at x time". "Yes Sir". "Bring all your instructions". I brought all the instructions, and he whipped the lot off, right up to the very latest jobs, only left me, I think from memory, a couple that I had actually started on. jobs that had got held up at times for various reasons, very often still lacking information on modern jobs. Occasionally we had a job or two started and put in obedience and one you were working on. That's about all I got left with. From then on it was a hand to mouth thing asking, begging, for instructions. On one occasion approaching a Christmas I was absolutely out and Dick Hopkins and I did a deal whereby he'd been given an instruction which was in the area which was tacitly my area. We did have it marked out on a map, both of us; well and truly into my area and very awkward access from the west because he had to come much further east and then back-track up another road to get to it. So it seemed quite logical that I should do it, and in fact I did. Well, the Old Man hit the roof, it took two strong men with weights and pulleys to pull him off the roof! Anyway, we lived through that. Another thing that was really hard to take was: I did get a return, plenty of manpower, there were four parties of us. This was when I'd been working on my own for some time; suddenly three parties were to come in. We were to go to Rushy Lagoon, do surveys for British Tobacco. It was the middle of winter. They told me I should not go. I said well, my impressions of leadership were that the leader went out in front and led. There was a bit of a blue over that but I went anyway. (It was a small blue). The big problem was: there was an old house out there we could camp in, but this was coming late in the period for camping - I doubt if anybody had camped for some years at that stage, two or three perhaps - and camp equipment was very scarce. I mean major items like pressure lamps which we had at that stage, they existed, but all the small odds and ends had seemed to evaporate, you just couldn't lay your hands on them. Stuart Lewis came up to the north here, told me all about what I was supposed to make these fellows do and not do myself. I said well, the big problem's going to be camp equipment. Will the ones coming be bringing their own equipment? No. I said, well I haven't any equipment for that many. He said you've got a merchant order book, use it. Equip them. Which I did. And one

little thing went wrong. I bought a dozen teaspoons for twelve men, and this offended the powers that be: you can use a pencil or the butt of your spoon, your desert spoon. Ah, this business rumbled on, letters up, letters back, letters up, letters back until I had a file that was many millimeters and making a big hole in an inch thick. Finally in disgust I said to the effect that, O.K., I'd made an error of judgment, would they please tell me the cost to the Department and I would have the cheque in the return mail, and that would finish it. They did finish it. I never got the information! That was the end of the story.

The last straw of staying in the Lands Department came over a trip to Cape Barren. Three parties, and we had to cover a bit of ground over there and we managed to hire a chap with a tractor and trailer. He also cleared the scrub for us and all his expenses were paid on voucher. Unfortunately, I put one of the dates down wrong on his voucher, and that turned out to be a Sunday. The work was done on a Saturday, all the other information went through to Hobart clearly demonstrated that. It was a pure slip of the brain or the tongue, what ever you like to call it. However, I again got into hot water over this. The interesting part was though, after stating the case, the page turned over and on the next page there was a lovely little comment, I think quite gratuitously given, that I had been guilty of consistent passive resistance and I had acknowledged my inability to train cadets and a few other nice little comments like that. These I denied quite flatly, first mentally and then what do I do about this? So I sent a copy of the letter with my statements on the matter, taking it apart piece by piece, directly to the Public Service Commissioner, on the impression that I had the right of appeal to a higher authority, the same as I'd had in the army. It turned out that I did not have that, that I'd breached the regulations. However the Public Service Commissioner got the information and became aware of the problem, and that put a whole new complexion on the business. I had to apologise to Mr. Miles for my breach of regulations, but the correspondence was then opened with the commissioner. He took it up with Mr. Miles and eventually I got a letter from the commissioner saying that he'd discussed it all with Mr. Miles and been assured that Mr. Miles had discussed it with me, and the whole situation was amicably resolved. Well I never had any discussion, (not even another blast) on the subject with Mr. Miles, so I wrote back through Mr. Miles to the commissioner saying that it was all news to me, I'd heard nothing. That didn't help matters either. Well something had to happen and fortunately, I don't know how, Wally Jones had become aware of the state of affairs. He at that stage was the Chief Surveyor of the, as then called Public Works Department. I had in the course of these upsets made the commissioner fully aware of the fact that I would like to move out of the Lands Department, that I would like to remain a surveyor, I didn't mind dropping salary and status. I didn't really want to have to leave Tasmania. I preferred to stay here.

That was one of the factors that took some effect apparently because the Public Works advertised for a Licensed Surveyor for the North East and North West districts. I applied for it and very pleased to say I got it. This might have meant a lot of time away from home because the situation unofficially was a surveyor of fairly extensive experience was to tackle the too-hard file, which had built up quite considerably in firstly the north east at least. I got into that.

WAS REX DOWNES DISTRICT SURVEYOR WITH THE P.W.D. AT THAT TIME? Rex was based in Launceston, there was also a surveyor based in the north west. The Public Works did not have District Surveyors at all at this time. So it was just a matter of me accepting a junior position to a chap who was younger than me, which didn't hurt my ego in the least. I was quite happy, I'd got out of a situation which was steadily becoming more and more untenable. There were a lot of other things but I don't want to go into those. I have no idea why they all happened.

YOU HAVE NO IDEA OF WHAT MR. MILES' MOTIVES MIGHT HAVE BEEN? No. Nothing logical, nothing I'm consciously aware of could have caused anything of this nature. I really think he had periods of quite illogical and whimsical actions and reactions. That's the only thing I can see for it. Oh he was a jolly good surveyor in many ways. I'm not denying that in any way. Perhaps it was just chalk and cheese or something between him and me and neither of us could do much about it. I don't know. Anyway, back to the changeover. I started off as I say with the too-hard file, the jobs that had definitely been put aside because they had quite substantial quasi-legal problems or very difficult locations of ancient monuments or both.

THESE WERE ALL ACQUISITIONS? These were all property work, yes. About six months on from coming into the P.W.D. Rex Downes up and handed in his resignation. That meant that in the office there was Gus Donnelly, pretty newly qualified and myself. I came in precisely bang on the end of the 1965 - 1966 financial year. I started in the beginning of July 1966.

Well Gus was terrific, he knew the whole history of the District; I'd have been absolutely lost without his knowledge of the people, the places, the physical side of the District. In fact I wondered at times who ought to be running it, but somebody had to run the shop and it seemed to devolve on me. I wondered whether that was right at times but subsequently found out when Gus had three months of the District all to himself some considerable time after he was quite pleased to see me back. That did my ego good! After working away there for a while there were various things that wanted a bit of straightening out - I managed to straighten some of them out - I came to the conclusion I was in about twice as much work as I'd ever done as a District Surveyor at peak with the Lands Department. So I wrote through Wally (Jones) up to the head of the Departmental tree and just sort of stated the case, and to my delight I was created a District Surveyor. They created a new position. It was a different world altogether. Of course I had a mighty lot to learn about the

engineering side of things but I think I learnt it fairly quickly and thoroughly enjoyed it. I think I gave pretty good service in the long run.

YOU OBVIOUSLY ENJOYED THE OPPORTUNITY TO SELF-MANAGE YOUR WORK COMPARED WITH THE PREVIOUS POSITION. Oh yes, and there was another thing of course, there was the access to the head. I mean a District Surveyor seems to be very much in the position of the Roman centurion: I am a man under authority and having men under my authority. Now in the Lands Department you just couldn't talk up to the authority; you couldn't ask a question. If you dared to think something was urgent and picked up the phone and asked for a clarification of something, well you only did that once or twice and then you learnt better! You never got any answers but you got an awful blast back.

IT SEEMS TO ME A CASE OF TRYING TO MINIMISE BUDGETS. I don't know what it was. It didn't minimise the budget, it blew it out to billy-oh, because so often things had to be done on the best you could obtain and a deal of that had to be by guesswork because you couldn't get the real information you needed. So on the law of averages fifty per cent had to go wrong and had to be redone. It was a hopeless situation. The other silly bit was that wonderful edict - Milesy had a lot of good sayings, quite a few good ones. One or two of them were hopeless such as: "Survey Your Instructions". This meant even if you knew dash well that you were doing the wrong thing: survey them, then submit a report. SO IN A LOT OF CASES IT WAS A COMPLETE WASTE OF TIME? Yes. You got an instruction to do a selection of a piece of land. Now that land had to be, by law, suitable for agricultural or pastoral development. If it was totally unsuitable in toto or only a small part of it was capable of development you were supposed to survey the whole blinking lot, submit a report and then go back and resurvey off the bit that was fit for selection. I once took my head in my hands over this and jacked up over surveying what is now the Strzelecki National Park. A WISE MOVE AS IT TURNED OUT IN THE LONG RUN. We went up quite a way into it and gave every shadow of doubt to the selector but left out an awful lot of the region that was selected there, fortunately, for everybody I think.

WHAT SORT OF EQUIPMENT DID YOU USE WHEN YOU FIRST STARTED OFF FRESH OUT OF THE ARMY? Well, for myself and for a couple of the other fellows, we had Iroughton and Simms theodolites. All brass, marvelous things - open verniers - some of them actually had tangent screws on the vertical circle, others had opposed twin screws. They did wonderful things as you tried to tighten them up to read a vertical angle. The telescope and the horizontal axis lifted off and separately stowed when you were carrying them. The levelling was done with a four-screw-base level, telescope from memory about fourteen inches long on distant objectives, and as you came into the closest range - it wasn't at all very close - the thing extended to about sixteen inches. On the Montagu Swamp there were times when the necessity of getting over logs that you couldn't cut your way through and

things like that - it was very difficult sometimes to actually get the staff far enough from the instrument to focus on it. They were a real pest and were worn out completely.

I am trying to remember when the first breakthrough came. apart from the one I bought for myself - the Yankee type made in Japan - was the T1, the original T1s. They would be into the fifties. DIDN'T YOU MENTION A SET OF THEODOLITES THAT HAD BEEN CUSTOM BUILT? They were all hand made. the whole bang lot of them. Those Troughton and Simms. they obviously weren't production line made - screw holes were all in different places, screws were of different threads. It seems each instrument was built by an individual craftsman who was not constrained by a detailed design. In trying to take a good horizontal assembly from a "jigger" with a suspect vertical axis and fit it in my "issue" theodolite which had badly worn twin-screw clamping, I had every mug, plate and utensil holding separate components and absolutely none were interchangeable.

Another bit of fun there was the crosshairs which were definitely spider web. If you had the misfortune when you were cleaning gummed up lenses and whatnot to accidentally demolish the crosshairs well you had to find another spider, and of course the things eventually aged and fell to bits anyway. You had to learn how to find the right sort of spider, get the diaphragm out and shellac the little markers and carefully move them over the spider web and get yourself a bit of webbing and hope the heck you could get the things close enough at right angles to be able to operate. I mean you had to deal of course with the vertical truly vertical, you had to set that up and juggle it up till you got that vertical. Then the catch was you hoped the horizontal hair was close enough to the horizontal to be able to read vertical angles reasonably accurately because unless you were absolutely hard up against the hair you would get a bit of a deviation. I CAN REMEMBER PAUL PHELPS TALKING RECENTLY ABOUT THIS. WHAT PARTICULAR TYPE OF SPIDER DID YOU HAVE TO GET? Oh, don't ask me now! You had to find one that spun a very fine web and you proceeded to cut a forked stick and I think we used to shellac the end of that and pass it through the spider web and cut off a piece of web and again you pass the diaphragm through inside that with the shellac on the diaphragm and cut it again.

WHY DID YOU BUY THE FUJI LEVEL IN 1947? This was so I didn't have to cope with one of these rotten old things any longer. that's purely and simply what it was for. The Lands Department were paying a pound a month and when I was on loan to the Public Works in 1949 they paid three and fourpence a week. It was well worth it.

WHAT INTERESTING PEOPLE AND CHARACTERS, SURVEYORS INCLUDED, DID YOU COME ACROSS IN YOUR WORK? Well some I came across and some of course I came across their evidence. Bush telegraph had it that Herbert Coombes had a knack of running three sides to his blocks and I ran into a case I thought substantiated that pretty well. Herbert Coombes was good in many ways. He built good stone piles. he saw to it that his lines were well marked. If you got onto one of his you didn't have any doubts, there was no two little pebbles by a peg for a stone pile. he made a good one.

There were others too who made good piles. I remember one job in the Huon quite early in my apprenticeship. We found these lines, we found three corners all by reference and a run up to the fourth corner not a sign of anything. My chainman, I think, alerted me to the fact that he had found a reference further ahead. We went up and had a look: no sign of a stone pile, no mention of the reference in the old man's field notes but there was a beautiful reference when it was cut out. You could more or less see the signature of some of these old blokes in their marks - sure it was his. It was patently obvious he'd run a chain too far up that side; I rather imagine he didn't occupy that corner at all, that's why there was no mention of the reference. But we found marks leading within the last chain and the only thing we could do was (fortunately I didn't have to sign this, it was another surveyor who countersigned my plan, and he was agreeable) that we simply extended a chain and slewed the back boundary by the necessary amount, up towards two degrees to complete that survey.

On the good side of old surveyors and marks, I can't remember who, but I discovered in notes some of them had in places where there was nothing but button-grassy country or similar tussocky country and nothing of any quality really for longevity, no trees - digging trenches is so-so, it doesn't last for ever and no way of getting stone - some of these had put a bottle in along each line say ten links out or thereabouts. I thought this was an excellent thing because even if the land was developed before I came along onto their work and it had been ploughed, you would still find broken glass and it put you very close to the mark. So when I was in a similar situation myself I adopted similar tactics. Put in bottles and recorded them in the field notes. I don't know whether I'm going to be the last of the old hands to have done this peculiar trick. PROBABLY SO. I CAN REMEMBER ON THE NORTH WEST COAST, PARTICULARLY IN SANDY COUNTRY, I THINK IT WAS HARRISON WHO WOULD DO THAT. Yes, it's certainly not a legal mark according to all the rules and regulations we've got, but I think common law says if the intent is made clear it's valid. NOW WE CAN USE IT AS LONG AS WE DESCRIBE IT CORRECTLY, WHICH IS A STEP FORWARD.

Another recollection is my first meeting of the Institution of Surveyors, Tasmanian Institution at that stage. I was about half through that period before I got my licence. I think it would be about 1948. The one really clear recollection is Ted Lilley got up, I think it was out of the blue, and said "You know chaps, we've got to do something about this Old System". Well you all know now that something is at last being done, we are trying to bring everything under the Real Property system. It took a while didn't it to take effect. WAS HE MAINLY CONCERNED ABOUT THE LACK OF EVIDENCE THAT WAS SUBMITTED FOR THE OLD SYSTEM SURVEYS? There was no necessity to lodge field notes, there was no inspection of what was done. I think he was concerned about the whole setup. One of the big problems was of course if you were on a bit of old system land you could mark it off wherever you dang well liked. It could be abutting Real Property. You could mark off an encroachment to that Real Property and nobody knew. It was a

terrible system. There must have been ways and means of bringing it under inspection, for a start by the Titles' Office to see if it abutted Real Property and to see if it encroached on it. I think there could have been other things done too, but water under the bridge, it's gone now.

Another thing that has been mentioned is personalities. I really met one and that was dear old Clifford McKrae Archer. By the time I met him I'd come to the conclusion that the common sort of criticisms flung about about his work were not valid in what we would call his normal working lifetime. As I came across his work and I worked on a lot of his old surveys, up till he was about age seventy his work was extremely good and reliable but somewhere about that mark old age set in and he couldn't cope with it. Unfortunately he wouldn't stop either. There was a tale told that he'd been seen standing on the streetside waiting for a pedestrian to come along and look in his old vernier jigger. He'd say "Have a look in there and tell me what that's reading". I do not believe that! but undoubtedly he kept on longer than he should have done. In fact I was asked to go along and see him officially one time and see if he would hand over to me as a Departmental Officer a job out Blackwood Creek way which had been in the mill for quite a while. He was a nice old feller. I got on very well with him, but no, I never got that survey. He assured me that he was definitely quite alright, he'd been a bit ill for a while but he'd be going back and would finish it. He knew all about it. He said, "It's really a re-survey. I did that block seventy years ago when I was a cadet!"

HE WAS ALSO GOOD AT USING LOCAL TRANSPORT. WASN'T HE? Oh yes. This is from the bush telegraph, I didn't see any of this of course, this was earlier than my days. I'm told. I think quite truthfully, that he had contact with various chaps, farmers and farm workers in various Districts, who would work as his chainmen. This was a fairly normal practice I believe. He'd get in touch with them, tell them when he was coming, to meet him at the bus or train or whatever served the area nearest, and bring his gear. They'd turn up with a horse and cart, collect him and away they'd go to work. He probably used the system more than a lot of others but variations of it were used as well. I had a chap work temporarily with me down the Huon who was rather sad that the war had intervened and changed everything because he'd been Edgar Blackwood's local man prior to the war. Once Blackie went from private practice into the mapping branch he stayed in it. I don't think this is libellous or whatever you call it. He said to me, Blackie had magnetic feet. You couldn't put a pot, frypan or a billy down on the floor in the camp without Blackie stepping in it.

WHAT ASPECTS OF THE WORK DID YOU FIND MOST SATISFYING? That's a tough one in a way really. I suppose there is an element of the detective work in property surveying and I did enjoy that. I didn't enjoy trying to beat these really ancient worn out jiggers but chaining provided some interesting things at times. One that

sticks in my mind: I think prior to the Second World War as far as I can gather nobody worried about a sag correction for the catenary of the chain. I think that came up during or just before the war. The nice little formula was good-oh in clean dry weather. I'd had suspicions I suppose at times and when we were working in wettish going we'd shaken and shivered the chain and hoped we'd got enough water off and wondered how we'd got on. But I came up against this really hard. I had to bring an area that had been chopped up, one hundred and fifty acres I think, it had been chopped up into seven or eight blocks and some of it had been under old system and some it had been bought out for a railway line that ran through it. All together it was a muddle and it was to be sold through the Closer Settlement Board and some of the old system had been private conveyance just to make it really tough. I presumed that they wanted the whole thing surveyed, these parts as well as the whole, to be assured that there was nothing left floating about once they took it over as a single lot again on the original grant boundaries. So we had lots of little closes here and there - most of it was a preserve of blackberries and other nice little things that take over land that's been allowed to degenerate. The southern end of it south of the railway line was still being worked and at the time we were there was ploughed fallow. Nice and open, and of all places this should have been a block that gave us a really good close round the railway and back on a sort of rough triangular form. No way would it close, within itself or by eliminating the railway line and going into a larger lot. So the something wrong was going across a nice open field.

Well. I thought to myself, hang on, that was pretty damp when we did that. The ground was very damp, the chain was hard to handle, very muddy. The only way out of that situation was to hold the job aside and wait for some fine dry weather and re-chain that line. Well, the difference was fantastic. I never recorded it but in looking back on it the catenary of the chain going across there must have had about five or more than five times the normal reduction to be applied to it. I know that as a result of that afterwards if I had to work with a wet chain I always noted the fact and was quite prepared to double the sag correction if that improved the close of the block. I think that was perfectly fair, because the Regulations under the Land Surveyors Act, 1909, gave a formula for (only) the estimation of sag. Of course that was only just the water that entered into it, when you got mud as well! Mind you it's more open to logic I think than when things go wrong with an EDM.

Final Draft 29 May 1990
Final Draft Typed 24 September 1990
Revision 29 January 1991

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5th October 1990