

A Teaching Experience

BY ROGER WELSMAN, O.L.S.

I HAVE recently returned to Canada after spending a year in Kingston, Jamaica teaching surveying at the College of Arts, Science and Technology. I completely missed last winter and I hear it was a good one to miss!

The College offers 2 and 3 year courses in Land Surveying. Graduates of the three year program go on to become licensed Land Surveyors. The Land Surveyors Regulations state that theodolite surveys must have a linear closure of 1 in 2000 with the maximum total error not to exceed 10 feet! Compass surveys are allowed in rural areas with a precision of 1 in 500. There is also a section on bearings which sets out the following methods.

Initial bearings may be obtained by means of:

- (a) east and west observations of sun or star
- (b) observations on Polaris
- (c) the Island triangulation
- (d) gyro-compass
- (e) magnetic needle
- (f) an adjoining survey the initial bearing of which was obtained by any of the methods specified in paragraphs (a), (b), (c), (d) or (e).

I don't need to tell you how surveyors put bearings on plans with a choice like that!

Areas are to be given in acres, roods and perches!

There is a complete stagnation of the surveying industry which seems too weak to stand up to the lawyers who cherish the status quo. I couldn't help comparing this to our situation here in Ontario where the surveying profession is taking such an active part in the reform of the land registration system.

The education of surveyors was in bad shape. Most of the instructors had very little practical experience. Some of them were recent graduates of the survey program who were hired immediately. They were not sure of which methods worked so they taught all methods and hoped for the best. On the first day of classes I told my students that I would only teach one way of solving a problem and that would be the easiest, fastest and best way. The whole class cheered!

We used azimuths instead of bear-

ings in closures and balanced by the Compass (Bowditch) method. Areas were computed by the cross coordinate method. All the time I stressed the fact that this was the way a computer does survey calculations.

We took every calculation for closures to its completion and that was to plot the parcel by the coordinate method.

Each project involved field work first and this was where the program had been sadly lacking. One of the requirements I have of my students at Georgian College is that they be able to set an instrument over a point, level it up and read and double an angle within 7 minutes. I pulled the same trick on my Jamaican students and they sweated blood to beat the stop watch! They all did it and I never had another problem with a student who could not run an instrument.

The sad thing about the third world is the lack of money. I went to Jamaica at 1/5th of my Canadian salary and found that I was making 5000 Jamaican dollars more than my boss! This means that every teacher must work at other jobs to make ends meet. My boss for example is head of the survey department, he is doing private surveys on most weekends, his wife grows vegetables on their farm and sells them to several hotels, and he has started a lunch bar near the college selling box lunches to the students and bus drivers.

This schedule means that the moment he finishes a lecture he is gone and the students have no way of getting questions answered. I was being supported from home so I didn't have to moonlight and I could be at school all day. I got a lot of teaching done outside the class.

Textbooks are very expensive, so much so that most students don't have one. A hard cover field book which costs about \$3.95 in Canada costs these students between \$30 and \$50. That makes the textbook we're presently using at Georgian College about \$400! To leave more than just a memory I got busy and wrote lecture notes on Curves, Astronomy and Plane Surveying.

It was a great year and Jamaicans are the greatest people I've ever met. It was interesting that for the first part of the year my pictures were mostly of

scenery but towards the end of the year my pictures were all of people I'd met and wanted to remember. I was invited to four parties at the end of the year. The first was a third year class who were finished with school and probably wouldn't be seeing each other again. They had only one thought in mind, to get as drunk as possible as soon as possible. They accomplished this with a drink called "Steel Bottom" which is half beer and half white rum. The next class was about 50% female and the girls had it all organized with dancing in the driveway and chips and peanuts being passed around! The third class held their party in the local rum bar where I tried my hand at the one-armed bandits in the back room.

The fourth party was held in my honour by the faculty of the Building Department of the College. I was presented with a very fragile ceramic statue and many nice things were said about me. Jamaicans love to make speeches and one of the finest speeches was made by one teacher who admitted during the speech that he didn't really know me! Everyone from the head of the department to the cleaning lady was present.

We suffered quite a culture shock when we first arrived. I took my wife and son (18) and daughter (16) with me. The first thing that hit us when we got off the plane was the oppressive heat and humidity. The next thing that was a little upsetting was that the driver from the college was not there to meet us. I finally hired a mini-bus to get us into town and found out from the driver the next day that he hadn't bothered to go out to the airport at 4 o'clock because he'd been out the day before and the plane was an hour late! The trip into town past burned out cars on the side of the road, flocks of goats, the odd cow crossing the road and roadside markets had me wondering what I had gotten myself and my family into. We had been told how dangerous it was in Kingston and that we couldn't possibly walk on the streets. My wife and I couldn't believe that and walked over to Half-Way Tree, the centre of the city.

One thing I had to do was run a survey camp for first year students at Negril Beach at the west end of the island. This is a very popular resort area frequented by nudists! My wife is still chuckling about the one who liked to jog down the beach and every time he came to a group of people he would stop and do several pushups before continuing on his way! I found out while at Negril that I was eligible for hardship pay since I
THE ONTARIO LAND SURVEYOR, FALL 1985



Roger Welsman presenting a 200 ft. steel tape to Jeff Davis, technician Survey Stores, College of Arts, Science and Technology, Kingston. Looking on are David Garrett, left, and Ruel Campbell, both lecturers at CAST.



Roger Welsman and Construction Technician 3 class at The College of Arts, Science and Technology, Kingston, Jamaica, March 1985.

was away from Kingston. I tried to explain that to a vacationing couple from Montreal, but they couldn't understand what the hardship was that I was being compensated for! Neither could I!

I met some very interesting people. One fellow was the rum buyer for Seagrams. Another ran the New Yarmouth sugar factory in the parish of Clarendon. He gave us a guided tour of the plant. It produces 30,000 tons of sugar a year and 8,000 gallons of rum a day. The rum is shipped to Wray & Nephew in tanker trucks as 95% pure alcohol.

Through my kids I met the gate man at the Sutton Place hotel. He wanted to take us out to his brother's farm in St. Elizabeth. I spent most of the day in Miss Gloria's pub and met almost every farmer in the district. One fellow turned out to be the same age as I, although he had lost all his teeth and looked about 65. He bragged he had 12 children, 4

since he got married. He grew the best yams in the district so I took him over to his farm and bought 10 lbs. from him at 50¢ per lb. When I got back to the farm the good people had a few fruits and vegetables for me to take home. What do you do with 75 ripe tomatoes?

Our other most interesting expedition was into the Blue Mountains. These mountains are spectacular, rising up to 7,400 feet a few miles from the sea. Blue Mountain coffee is grown at altitudes above 3,600 feet. It is supposed to be the best in the world. Japanese coffee drinkers think so, they buy most of the crop. We were conducted through the mountains by an American woman we had met who worked in the area with a Rotary Club funded project to provide self help to the villagers. I got my old Toyota Corolla up roads that were hand made, every stone placed side by side to pave two tracks for car wheels and one track in the middle for

mules and donkeys. The centre track was the best used of the three. In some places there was nothing to see out the side windows except the valley floor, 2,000 feet below. We had a picnic lunch at a place called Albion Mount. We met one of the local farmers. He grows cabbages and transports them by mule down to the valley town where his wife takes them aboard the local bus to the market at Morant Bay. We later went to Morant Bay and met her at her stall.

School ended on June 17 and I was back in Barrie on June 21. I then went through a period of culture shock in reverse.

Canadians drive so slowly and traffic is so quiet! We didn't worry about pollution control devices down south. And I never noticed so many overweight people as I do now. Nobody in Jamaica is overweight!

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