

# A Shipyard Apprenticeship Part One

## My Father, and The Robber and Impertinence and Old Metcalfe

### My Father

In the late 1930s when I was a boy and on the few rare occasions when he was not working in the shipyard on Sunday mornings, my father used to take me for long hill walks on Divis Mountain or Cave Hill and, often sitting down to rest in the heather, looking down over Belfast City far below, we would talk, and that was the best bit.

I would try to get him to tell me about the First World War, but he was always managed to change the subject - except on one special occasion.

And when I remember my shipyard apprenticeship, my father, that one occasion, and the crucial role he had in shaping my life and my engineering career are always very much in my mind.

He was a soldier in the First World War, and, computing backwards from the date of his sadly early death, it is apparent that he had lied about his age when he went to the Army Recruiting Office to enlist in "the Skins," the Royal Inniskilling Fusiliers. Like many ex-service men, his war years were a closed book, years he preferred to forget, and the only time my father ever spoke about that period of his life was to explain to me, while discussing my future, that, by joining the Army, he had sacrificed the twin opportunities of an education and of an apprenticeship, both of which he would have enjoyed and valued. Forgive the seeming blasphemy, but I have long ago concluded that there are many more definitions than only one of the Supreme Sacrifice.

After leaving the Army, Alec Hunter spent the remainder of his life working as a shipyard labourer. For most of those years, between the two wars, work was often scarce and he often found himself travelling from shipbuilding town to shipbuilding town, a few months here, a few weeks there, Belfast, Birkenhead, Barrow-in-Furness, Glasgow. I remember sensing his anger and his pain as he spoke with bitterness and cynicism about those times. He referred to himself with self derision as a respectable tramp. Today he might have called himself an economic migrant.

When the second war broke out, my father offered his services to the Regiment once again. But his motives were more mature than in 1914. He knew of the German "Condor" involvement in the Spanish Civil War and he told me, during another of our Sunday morning walks on Cave Hill, that he believed Adolph Hitler to be an evil bastard and that the impending war would be the only truly righteous campaign in Britain's often dubious history. He was bitter and angry all over again having been rejected by the Army because shipbuilding was a "reserved occupation."

On another such morning, with Belfast spread out like a toy town far below us, I was telling him about the prize I had won at school for gaining the highest marks in an English test, and that the English Master was encouraging me to take up journalism. My father was not keen. I can see him now, eyes screwed up a little and watering slightly in the curling smoke from his Woodbine. And I can hear him telling me that a man should have a trade. "With a trade," he said, "you can go anywhere in the world and find gainful employment. Journalism, that's not a trade."

Determined to find a trade that I knew I would enjoy, I began to investigate other opportunities and to match them with my own special interests.

At school, I particularly enjoyed mathematics and especially that increment of the subject called Euclidean Geometry, so I sought an occupation in which geometry would be in daily use. Textile design appeared to be such an occupation, and I enrolled in evening classes, while still in full-time education, to study textile pattern making. Before my fifteenth birthday I could "peg" a pattern and weave it in linen on a hand loom, and I do believe I'm the only electrical engineer in the country, if not in the entire world, with an Intermediate City and Guilds Certificate in Textiles.

But, father had other ideas in mind for me and we went for another of our long walks on Cave Hill. "Electricity is the coming thing," he said, and back then, in 1946, he was quite right. Unfortunately his timing was badly wrong - it is only recently, with the advent of gas turbine and diesel alternator power pods, that electricity is finally arriving. That, however, is different story which is not for now.

With hindsight, I must say that a humble trade apprenticeship was definitely not the most advantageous point of entry into that bright new electro-technical future. But, in those far off days, student apprenticeships were unheard-of in Belfast, so I found myself one February, with eighty-seven other sixteen-year-old boys, beginning an indentured five year apprenticeship in the Belfast shipyards of to Harland and Wolff.

The shipyard training programme was excellent, and I received a thorough grounding - marine electrical installation work, marine repair work, plant maintenance, electrical manufacture of motors, generators and associated control gear, electricity generation in the firm's own power station, electrical testing - the list goes on and on.

Unfortunately for us, like student apprenticeships, day release for technical study, common in England, Scotland and Wales, was not available in Northern Ireland, where the apprentices had to endure the hard grind of evening classes and the failure rates and the drop out numbers were high. Of the eighty-eight hopeful sixteen-year-olds who signed up for Year One,

fewer than half sat the examinations - Electricity and Magnetism, Mathematics, and Applied Mechanics ~ at the end of the term. Only nine sat for the Ordinary National Certificate at the end of the third year. Only four succeeded in obtaining the Higher National, that coveted passport to advancement. Only two studied further.

I could, at this point, tell you about the high number of apprentice wood butchers who were signed on in 1947, in excess of three-hundred, I believe. I could also mention to you the lessons that had been learned in the war and the government-lead technical committees that were seeking to develop new, fire-resisting materials to replace timber for ships' internal bulkheads and, consequently, two hundred apprentice steel fighters were recruited. I could mention the inter trades union strife, and the famous and much-pilloried "who-twangs-the-string" strike that took place a decade later. I could ask who you think was responsible for all that misery and unrest - was it the employers who recruited and trained so many woodworkers who would not be needed, or the "Commie" trade unions seizing opportunities for mischief as desperate tradesmen tried to cling on to the dwindling remnants of their livelihoods?

But that's bordering on political argument, I don't really want to go there and doubt if you want to go there either, so it is about time I tell instead about some of the characters I encountered during my apprenticeship - the Robber, the demon Metcalfe, Hope Ferguson, and the dreaded Protestant Pope. Second thoughts, maybe not the Pope because that particular tragic episode had definite political overtones.

### **and The Robber**

So - the Robber, poor deluded man. Chargehand Electrician. Main Yard Plant Maintenance Workshop. Later promoted to Senior Foreman, Central Plant Workshop.

There I was, beginning my second year, and working under the Robber. Actually, I was working 220 feet above the ground on the Arrol gantries in the Main Yard. The Arrol gantries were erected in 1907 specially to facilitate the building of two, later three ships, the "Olympic", the "Titanic" and the "Britannic."

The gantries, long since pulled down and sold as scrap metal, were massive steel "Mecanno" lattice structures, with two outer "walls" and a double middle wall. I don't know where the name "wall" came from, because the entire structure was basically an open lattice design. Maybe the name came from the small cranes, known to the workmen as "wall creepers," which ran back and forth along the walls and were used to lift ships' ribs and later shell plates into place for riveting.

The machine gun rattle of the pneumatically-powered rivet guns and rivet hammers -it's a wonder I'm not stone deaf! The winter cold ten times more severe up there. The early morning frost on the ladders and handrails would remove human skin. Ice on the walkways was a constant winter hazard, yet the maintenance men climbed all over the gantries with the agility of monkeys and never a safety harness in sight. Today's Health and Safety Executive would have apoplectic fits at such conditions.

But I loved the work. After a few days of timidity and caution, I became as agile and fearless as the others. The views over the six square miles of the shipyard, the slipways, the dry docks, the engine shops and the fitting-out basins were unique and spectacular, as indeed were the views over Belfast and the Lough. The crimson and golden winter sunsets. The cold heavy rain. The damp clammy fogs. The swirling, swooping dark clouds of starlings each evening, until slowly the birds began to settle to roost on the tall cranes for the night. Strangely, I don't remember the starlings flying away in the mornings. There was a rumour to the effect that Harland and Wolff would pay a fortune, £10 a week for life, to the person who could think of a way to get rid of the starlings before the cranes and gantries collapsed under the weight of accumulated bird droppings . . . but I was going to tell you about the people.

The Robber was an unlikely sort of man to be a chargehand. The tradesmen seemed to treat him most casually and with disrespect that was almost contempt. Yet he was the boss, and he did rule our roost, as I was about to learn.

I don't know what particular sanctions the Robber used to control the tradesmen, but he had one particular sanction that he used to keep the apprentices in their proper subservient places - Metcalf . . .

### **and Impertinence**

Bob Metcalfe, trained in the diamond mines in South Africa, was an old man with a particularly cantankerous nature. He couldn't have been much more than sixty, but he moved stiffly and slowly, spoke with a tremulous voice and looked ancient to sixteen-year-old lads. Old Bob was a very conscientious and hard working man, a loner who preferred his own company and not at all popular with the others in the squad.

And therein lay the Robber's sanction for use against wayward apprentices. "You *behave* yourself, Sunny Jim, or you'll find yourself working with *Metcalf*"

And "working with Metcalfe" was such a terrifying prospect that the offending apprentice would invariably mend his ways. And, yes, you know what is coming. No cigar for guessing that I made the mistake of assuming that / could treat the Robber with the same casual disrespect as the tradesmen.

There was another apprentice, Frank. We were quite good friends, had been to the same school, were both Patrol Leaders in the same Scout Troop, helped each other with evening class work and homework, even chased after the same girls, and were both enthusiastic model makers in our sparse spare time.

My feeble claims to fame in that direction included a number of flying balsa wood aeroplanes with rubber band powered propellers, some working weaving looms and some crude cat's whisker radio sets, later to be improved by the introduction of thermionic valve technology.

Frank's model making enterprises were much more ambitious; a steam engine that drove a flywheel, a single shot pistol (I'm damned if I know where he acquired the armoury-sized drill. I suspect he had succeeded in finding a length of pre-drilled 2.2 rifle barrel) but his undoubted masterpiece was a battery-powered, electrically-driven, scaled model of a Flower class corvette.

One lunchtime, Frank was sounding me out about the possibility of collaboration to add a radio-controlled steering engine to his Flower class corvette as he was bored by its constant straight line course. Mind you, the model yachts at Queen Mary's Park could do no better. But we are still in the 1940s. We did know about Transistors, but that technology was still twenty-five years away. Nevertheless, Frank and I were eager to achieve a first, and I had the beginnings of an idea. I was suggesting the possible use of a "flip/flop" circuit and scheming how to harness the outputs to move a tiller. Neither of us detected the looming presence of the Robber on his rubber-soled shoes.

"Have ye no work to do? What are you two young buggers talking about anyway?" Robber demanded. He always had a charming turn of phrase.

"Er, well it's modern stuff, Mr Robb," I replied, my insolent inference obvious. The Robber glared at me, his features reddening and darkening in a frown as he pondered my insult. "You cheeky young sod! Right, for that you can bring your toolbox off the gantry tonight. In the morning you start working with Metcalfe."

### **Old Metcalfe**

The Robber knew how to twist the knife - the remainder of the day and all night to dwell upon the impending misery. Among all the other unpleasant considerations, I worried about how I should address the old paragon of unpopularity. "Mr Metcalfe?" No - wasn't done. Only the managers were Misters. "Bob?" That didn't seem appropriate. "Mate?" No, definitely not.

Next morning, a simple event took place and it enhanced my working life for ever.

At school, excellent teachers had given me invaluable gifts, a love of mathematics, an abiding love of English, an insatiable curiosity and an enquiring mind. Next morning, in the shipyard, I was about to begin to receive the most invaluable gift of all...

"I'm to work with you, Ahem - Bob," I told the much-dreaded dragon.

"All right," said Bob in his tremulous tones. "Pick up the tools and come on."

So I picked up his canvas tool bag and walked beside him to the workshop door. I was on his left and just slightly in front. By a happy coincidence the door hinges were on the left. And, being of a naturally polite disposition, I reached out, opened the door and stood back to allow the old man to precede me through the door.

"Thank you," he said, with a flicker of a smile. We walked towards the Plating Shed, which was Bob Metcalfe's domain. He asked if I would be going to the big match (Linfield v Glentoran) on Saturday and seemed to lose interest in further conversation when I told him with a slight smile that I had no interest in football.

The heavy steel personnel door to the Plating Shed was hinged on the right and opened outwards. To my surprise, old Bob accelerated a little, opened the door and insisted that J should go through first. And the pattern of our association was set. I treated old Bob with the courtesy due to him, but which was natural to my behaviour, while he judged me to be a well-mannered, respectful boy whom he could teach.

The invaluable gift? Well, that was simply old Bob's wonderful teaching and extensive knowledge.

Prior to my time as his apprentice, I would say that I was interested in electricity, but Bob Metcalfe increased and intensified that interest to something close to a passion. He taught me more in three days than I was to learn in three years at night school. He gave me the gift of my profession in the form of a solid foundation for a wide and varied career of which I have enjoyed every moment. How many men can make that claim? And what gift could possibly be more precious? Just because I opened a door.

So I smile when I think of the Robber. The poor man couldn't have known the truly enormous favour that he did for me. I did want to tell him, but instead, on the next two occasions on which I encountered him, the Robber still made his displeasure plain. But those accounts are for another occasion - if the Hon Editor honours me with a future invitation to contribute to his most excellent Magazine.