

## JOHN SAMUEL BOYCE MIEE

### Electrical Engineer in Germany & the Sudan

by *Betty Billingham*

*Betty Billingham, a recent visitor to our Museum at Cairns Road, tells us about her father Jack Boyce, who among many other adventurers was the senior electrical engineer in the Sudan during World War II.*

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The eldest of four boys from a seafaring family, it was always understood that Jack Boyce would go into the navy. He left the Torpoint School at 14 to earn money for the family, pulling a wooden cart up and down the hills of the village delivering bread and then attended Plymouth Naval School, where he finished 2<sup>nd</sup> out of 500 students.

Jack now went into the Royal Navy, studying to becoming an officer. He had reached Petty Officer when in 1918, and the end of the war, he was assigned to the army of occupation serving with a flotilla of Naval Motor Launches. Due to the neutrality of Holland, they were forbidden from going straight up the Rhine. Instead they had to zigzag their way through Belgium, settling in Cologne. Jack quickly made friends with Hans, a German official resulting in them regularly going to a quiet bar at the nearby hotel. When Jack was invited home, he sampled a typical German meal. Jack had only eaten British fried sausages before and on hearing these various German sausages were smoked and not cooked, turned them down, saying he could not eat raw meat. In the end, Jack ended up with two boiled eggs – at least the bread and butter were acceptable.

On one occasion at the hotel, a charity ball was being organised. Jack was enthralled at the lavish decorations and beautiful women in gorgeous evening attire. Three beautiful young ladies carrying baskets of flowers

wandered from table to table collecting for the charity. Jack was particularly attracted by one and he bought her a whole basket of flowers, presenting the roses to her in exchange for a dance. The lady was Eugenia and she was rendered speechless by such gallantry and readily submitted to a dance – the first of many, for Jack was completely smitten.



**Jack Boyce MIEE**

Over the following weeks they met often, much to the alarm of her parents and even more so her brother Franz. Franz had been an officer in the German army and the idea of his sister going out with one of the enemy was not on.

Eugenia's father was a town engineer and had supervised the building of the only bridge across the Rhine which didn't get bombed. Eugenia was one of those rare breed of "forward" women who went to work – first with her father's team, then with Dr Adenauer, the leader of the Council, soon to become Mayor of Cologne, and eventually the first Chancellor of West Germany.

Eugenia had an affair with a pilot first, which seemed glamorous at the time, but a year later when her pilot was demobbed, he lost his glamour and the love died too. A chance meeting with Jack and romance was rekindled and marriage proposed. Then when Jack had served just four and a half years, he was informed that he was to be demobbed and sent home. Jack was devastated. From babyhood the Navy had been his destiny and here he was being pushed out. What to do next?

The job market was saturated and in desperation Jack took on a job with the Colonial Office in the Sudan – the main qualification was to be at least 6 feet tall! "The natives could not respect you if they had to look down on you" he was told. Jack pawned his watch to cover his train fare to Cologne where, within his three days leave, he got the bans passed to marry Eugenia in the registry office. It would be 2 years till he could come on leave and be able to take her with him.



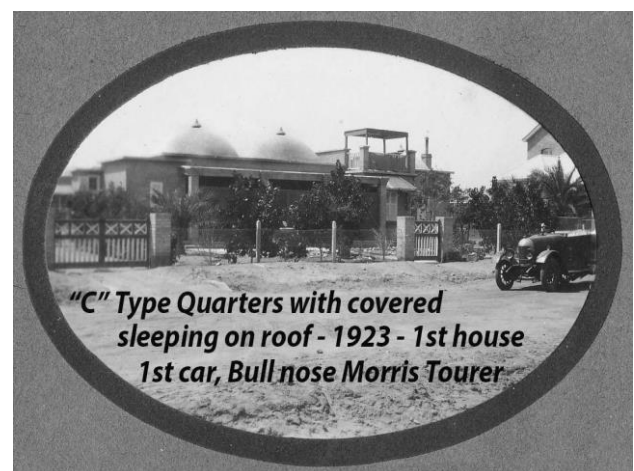
**Aerial View of Port Sudan in 1923**

Back in the Sudan in 1923, Jack discovered the electricity supply in Port Sudan was still DC and his first job was to go out with teams of men putting up poles and convert the town to AC. As summer came, temperatures rose to

120 degrees F in the shade so work started at 6am with a break for breakfast at 8am and then through until 1pm when everyone went home. In the evenings the Brits would emerge at the club house for a sundowner. There were two such clubs, one for junior staff and one for senior, and nary the two shall meet.

As the town was converted, the system constantly became overloaded as people discarded their old paraffin lamps. Ceiling fans were the main culprits, but in the evenings, lights were switched on and it became the norm to shout for Jack to drop everything and dash to the power station generator to get the electricity back on line.

When Jack was on his 2-yearly three month's long leave, he collected Eugenia and brought her back to Khartoum and the 2-room house he had been given. Beds were naturally on the roof for coolness. Jack's house was near the zoo and Eugenia couldn't resist writing to her parents how she could hear the lions roaring every night when she went to bed!



**Jack's First House in Khartoum, note his Bullnose Morris Tourer**

Within 4 months they were moved to a wooden house in Port Sudan near the power station, on the opposite side of the town from the rest of the community. Port Sudan was growing and Jack had the job of erecting 4 large cranes to off-load cargo from the increasing number of international ships bringing goods to the country. They quickly earned the nickname of "Jack's Babies". His ability to speak fluent German was another asset encouraging foreign

captains to make this their preferred port of call.



**Port Sudan Harbour with three of Jack's babies in sight (the cranes) as a ship leaves Harbour.**

In his spare time Jack built his own 14 foot racing dinghies, with which to compete in the regular weekend sailing races held in the shark infested harbour. These boats regularly keeled over when racing hard into the wind and one had to swim into the sail till the rescue boat arrived to fish you out before the sharks got you!

A railway was built from Wadi Haifa down to Berber, and on to Atbara and finally Khartoum, the capital. Track had to be laid on sand which got into the wheels, quickly grinding them to pieces, so at every stop a man tapped each wheel to check it was still sound enough to continue. Twelve stations had no water so an extra tanker supplied the station master and staff, replenishing the train's supplies at the oasis in the middle. The station master buried watermelons which served as their only source of drinking water. They also kept chickens but their feed made the eggs taste of perfume. It might sound exotic but I can assure you perfumed eggs take some getting used to! As the railways expanded, Jack built power stations with large generators.

In 1924 King George VI and Queen Elizabeth toured East Africa and Jack proudly drove the train clearing the way directly in front of the Royal Train, with many hazards on the way. Jack regularly inspected the power stations travelling in a saloon – a railway carriage built like a caravan with a lounge/dining area, two bedrooms, servants quarters and a kitchen. A wash basin was supplied with water from a

tank on the roof but the frogs loved it, so you had frog's eggs in the sink as you washed. (That's why I hate tapioca!)

The saloon would be attached to a train and on arrival would be shunted onto a special side line, plugged into the electricity, water tanks replenished and a bucket placed under the toilet outlet. On completion of Jack's inspection, the saloon would be attached to the next train to travel overnight to his next power-station.



**Eugenia, Jack & a friend and Betty on a picnic beside the Nile. Betty is holding her rifle!!**

It irked Eugenia that they were not allowed to enter the Senior Staff club and she urged Jack to return to studies to advance his position. He arranged with the Plymouth Technical College to have a special course produced for him to study in advance. During his 3 months long leave he would attend lectures before taking the IEE exams. It was a tall order. Every night he studied his books in his single-minded determination. He passed, and was now senior staff with further promotion possible!

It was 1932 when the pregnant Eugenia returned from a Long Leave. Jack had already returned, most ladies staying a further two months to miss the worst of the heat. As the ship arrived, a junior clerk thoughtlessly announced Jack could not meet her as he was dealing with a riot. Eugenia panicked, and in her fright, the baby turned over. It was too late to send her back to Europe so when her time came due, an operation would have to be performed. All five doctors made the journey to attend the theatre; thus I was the first caesarean birth in the Sudan.



**The lovely big House at Atbara, later bombed, you can just see the Boyce family on the Veranda**

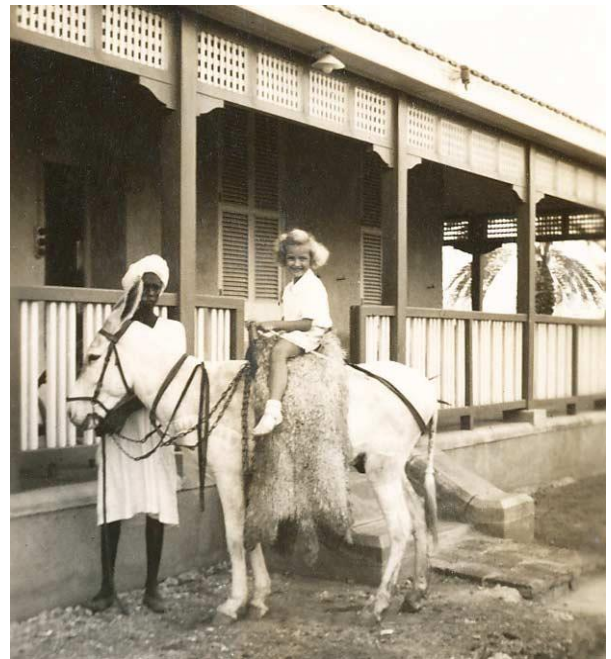
I had an interesting early childhood. You can see in one of the photos that the men both have rifles and so do I. I was given my first gun at age 7 and used to go duck and grouse shooting for the pot with the men. I also used a .303 to shoot crocodile when the villagers asked us to get rid of a man-eater. When I washed off the picnic dishes, the men stood with rifles poised over my shoulder in case a crocodile attacked me!

In September 1939 we were on leave in the UK when war broke out and Jack was ordered to be on the convoy taking officials back to Africa. He was not allowed to sign up, his job in the Sudan being too important. The railways had to bring the soldiers and equipment up to the Northern Front. The power stations were vital so he was transferred to Atbara, the hub in central Sudan at that time, and promoted to Superintendent Electrical Engineer for the whole of the Sudan and thereby got his MIEE.

Meanwhile back in England, I learnt to battle my way up slippery icy hills, wear a liberty bodice and itchy woollen stockings, and attend the local school where everything was so unfamiliar that I was instantly deemed the idiot. At the beginning of 1940 saw us catch the train from London, the ferry and on through Paris just before it fell, and finally Marseilles. We waited some days till eventually we joined a ship load of wives and children to Alexandria. The second shipload of women was bombed.

When the Italians entered the war, planes started coming from Eritrea to drop bombs on us. One night, Jack returned from the middle of a dinner party to fetch me from the care of my nanny to sleep in the car near him. Premonition? That night 90 bombs were dropped. They were trying to destroy the railway workshops and the nearby power-station. Fortunately, all the bombs dropped on the desert strip between the two.

Ladies were invited to take the two hour drive in an old Austin to Zaidab, a cotton plantation where they would be reasonably safe. The journey was across bare desert and one regularly got stuck with everyone getting out to push, once sacking and any vegetation that was about had been put under the wheels. Spare water was carried as the engine had to be topped up every half hour. To cross the river Jack had to drive the car onto two planks placed up to the side of the dhow with two more put across the boat. It was terrifying!



**Betty on her Donkey, just leaving the Atbara House**

I loved Zeidab and rode my donkey all over the plantation, safe under the protection of Sheik Abu Gassim, with whose sons I rode my Arab steed. Yes, I had a choice - I often played with his wives and daughters in the harem. The Parent's National Education Union had set up

a curriculum for parents and schools to follow to enable children to receive at least some form of education.

Quickly goods became in short supply. Without elastic, our underpants were converted to buttons made from a particularly hard palm nut. Thorns replaced gramophone needles, staples and pins. Mum and I, together with the other ladies knitted blankets, scarves and gloves for the soldiers all from home grown cotton which I helped pick, clean, and comb. The desert can get mighty cold at night. But every month each man was issued with a whole bottle of whisky while women got half a bottle of gin and were urged to drink it up to help them withstand the conditions!



**Eugenia and Betty sitting on Furniture made by Jack**

From our citrus trees, we made marmalade by the bucket full to put on sandwiches to feed the train-loads of soldiers from South Africa, Rhodesia, Kenya, Tanganyika and other Commonwealth countries going up to fight Field Marshal Rommel in Tripoli and along the front. When it looked as if Cairo would fall, Jack shipped Mum and me to Kenya where I was put into a PNEU boarding school. The trip took us 29 days and included 4 car journeys, 4 ships and 3 trains. It took 14 days for the steamer just to get through the Sud – the Papyrus swamp so large it can be seen from space.

Meanwhile Jack had been told by an army captain to keep the trains running at all costs until the Germans actually got to the border. Then he had to blow up the workshops, generating stations and everything else they might possibly find of use. “And what do I do then?” asked Jack. The captain looked surprised and then said “We will all be gone by then and you will have to get away as best you can and mingle with the population.” As the town was surrounded by desert and the population was black with Jack very white that did not sound hopeful. Fortunately Sheik Abu Gasseim promised to “disappear” and protect him if he could just get to Zeidab. It was good to have friends. Fortunately Monty beat the Desert Fox and his troops back and out of Northern Africa, but it was a close call!

I returned to the Atbara Catholic Convent School run by Italian nuns with a German priest – there were only two of us English girls amongst the 350 Greek, Egyptian, French, Cypriot and Sudanese pupils. Lessons were in English. But things remained tense and every evening would find Jack glued to our ancient wooden radio. I well remember the night of Churchill's famous speech - “We will fight them from our beaches....”

A fête was held to celebrate the end of the war. Instead of a coconut shy, Jack collected and arranged for the huge burnt-out 500 watt bulbs used in the power stations to be strung up from the roof of a kiosk so we could try and hit them with wooden balls. Blowing in the breeze this was surprisingly difficult but they did burst with a satisfying bang!

After the war Jack set up the first Technical School to teach the boys from the desert how to maintain rolling-stock, generators and cope with the general advancing technology. However villages had till then been run by “the elders” who, with their advanced years and experience, were deemed the most knowledgeable to keep the community safely functioning. Now these same youngsters returned to discover they knew more than their elders and their respect for them dwindled. Law and order broke down and riots against education broke out.

Forty-five was considered the age at which the heat and general conditions became more than a Western man could endure. However, 1945 was not a good year in which to return to England; the war was over, but not rationing. With a German born wife who still had the inevitable accent, Jack had to do all the shopping while Eugenia dared not put foot outside the door. We had no warm clothing and ended up in two rooms on the top floor of one of three terraced houses left out of a long row up by the Hoe in Plymouth.

Finally Jack landed a job with the Control Commission in Germany with the rank of Colonel, first dismantling the harbour and equipment in the port of Wilhelmshaven to be handed as reparations to the Russians and later at Salzgitter outside Braunschweig dismantling the steel works. That is how we got the old technology while Germany quickly rebuilt from new! I was meanwhile sent to the Army boarding school in Wilhelmshaven. 1949 saw me join the Wirtschaftsoberschule (Business College) in Braunschweig principally to repair relations between our countries.

In 1950 Jack retired for the second time. He was to retire 5 times, each time bored with "too many women at home". He once confided how difficult it was one day to have everyone kow-tow to you, doing your bidding without question, and the next you were a nobody lacking respect even from your children. But this time Jack was homesick. He bought the squire's house and land in Burraton just outside Saltash and started running a market garden. He soon got fed up with pushing a muddy wheelbarrow and took a job with Siemens as Consulting Engineer, travelling First Class around Europe, being feasted at the best hotels, and later Eugenia joined Jack in a nice flat in Nuremberg.

Seven years later in Trinidad I was married to a geologist with a young son and I was pregnant once again. My husband was engaged in marine drilling at that time spending days out at sea, and so Jack left his job to come to my aid. It was a huge sacrifice but contributed to the safe birth of my beautiful daughter, now herself a scientist. While on the

island Jack as an MIEE was invited to an IEE special meeting and discovered to his amazement that he was the highest qualified on the island! They made a great fuss over him which helped him get over all he had sacrificed.

He returned to Siemens but some years later joined us, now moved to South Africa. Before long he landed a job translating the technical books from German into English for Siemens. Not only was his German excellent but he understood the machinery and so was able to use the correct English terminology. He was still working for Siemens at the age of 81 when he suddenly caught 'flu and died.