Chapter 3 The War

I can remember being at a bus stop in Tring, aged seven, when learning that war had been declared: I was old enough to realise what seriously bad news this was.

My interest in explosives had been kindled by Strain, son of the Vicar of Aldbury and a year older than me. He would manage to purloin a few items from the lab at Berkhamstead School and understood what you needed to do to get a bang. We then became ambitious to make larger bangs and it was fortuitous that the army held regular exercises at Ivinghoe Beacon, just a couple of miles from Aldbury. Scanning of the ranges following an exercise produced a variety of munitions. The most common find was unexpended 303 rounds and there were regular finds of unexploded mortars of the 2", 3" and phosphorous varieties. If a mortar had not exploded the first thing to establish was whether it was of the high explosive or smoke variety. If smoke type it could be easily handled; if high explosive it needed to be touched most gingerly and the detonator carefully removed. Charlie frightened me to death one day when the detonator on the mortar he was handling would not budge and he started knocking the side of the detonator with a stone in an endeavour to free it! (In 1957 two boys, David Butler aged 11 and Eddie Bilton found a mortar which did explode. One lost a foot and one lost both feet and a hand) Bazookas were an occasional find and we had a supply of safety pins so that they could be transported, tied to the frame of the bicycle, so that they could not explode. The most

exciting find was a Bren Machine Gun with a sizeable quantity of ammunition. Needless to say the Vicarage at Aldbury became a very well equipped arsenal.

Early fireworks were made from cordite removed from 303 ammunition. The rockets were not very good; they tended to falter having left the milk bottle and then pick up again once they got into the horizontal plane. Our skills progressed until they culminated in what for us was the ultimate firework, although looking back I'm frightened to think of what might have happened if this particular pyrotechnic had exploded in the wrong place.

We took an empty signal cartridge, about 3 feet long by 3 inches diameter to use as the mortar. A smaller empty signal cartridge, about 9 inches by 2 inches, we charged with cordite and let in a small fuse. We then got a thunderflash cartridge which we filled with gelignite and inserted a fuse to its detonator. We knew there was a risk that the whole thing would blow sky high on the explosion of the propellant, so we made sure that we were crouched below the rose garden wall when the propellant ignited. The sound was right so we knew the missile was still intact. At about 7pm on November 5th, Guy Fawkes Night, 1943 one pound of gelignite detonated about 50 ft above the pond in the beauty spot known as Aldbury. The reverberation went round the valley five times. We were never arrested for that one. (I now find that we were following in the footsteps of Colonel Blacker, inventor of the Blacker bombard: at Bedford school he rigged up a mortar in the playing field and managed to "take out" the headmaster's greenhouse at a range of 300 yards with a croquet ball).

A variety of explosions followed and we found electrically detonated underwater gelignite charges to be more effective at fishing in the canal or reservoir than a length of thread with a bent pin. I think our largest detonation in one go was 40lb of gelignite.

I was duly arraigned for my activities with Bazookas and can remember feeling quite wronged by the prosecution. At the age of 12 I knew what I was doing with the shell. By carefully inserting the safety pin every time we moved one and exploding them safely we were clearing the ranges of dangerous debris. We would explode the Bazookas from trenches above Aston Clinton by removing the safety pin and throwing the Bazooka in a well lofted arc. If it didn't go off, the safety pin was re-inserted for transporting back to the trench and then it was thrown again. They always went off eventually.

I was accused at Aylesbury Magistrates Court regarding the bazookas and also concerning damage to a gun mounting (which was not to do with me). One of the lads in the dock with me was Heinrick Seighart, an Austrian so was this sabotage by the enemy! In the event we were all found guilty of everything and bound over to keep the peace. Subsequently the boys told me they had come across something interesting at Whitchurch. Going to investigate we found a Nissen hut, the door of which had been forced, containing Blacker Bombard anti-tank shells (a source of gelignite) and something we had not seen before, L-delay fuses. Naturally I strapped some bombs to the cycle and put a box of fuzes in the pannier bag. It was many years later that I learnt that all this was part of the top secret experimental weapons department at "The Firs" Whitchurch which became known as "Winston Churchill's Toyshop". From my father's bedroom window there was a good view of Stubbings Wood, Tring. During the day I had secreted a small charge set to explode at 10 pm with one of these new L-delay fuses. My father was surprised that I wanted to admire the sunset from his room, but nevertheless agreed. The explosion occurred 10 minutes late at 10.10.

Subsequently to this on the 16th July 2010 the owner of the publishing business trading from "The Firs" conducted a meeting of the twelve people in all who had responded to his note in the Bucks Herald asking anyone who had knowledge of "Winston Churchill's Toyshop" to contact him. I was surprised to see John Bercow, Speaker of the House of Commons, in attendance, but having to act independently he had used "The Firs" as his Party Offices during the 2010

election. At the meeting I was most interested to make the acquaintance of Edward Daily, the elderly gentleman who had worked on the prototypes for the "L Delay" fuzes that I had purloined. He indicated that they were so reliable that they were in use until the turn of the century; they operated on the principle of stretching lead. (I have since learned that these fuzes were used by Colonel Von Stauffenberg to activate the two clam shells (also invented at Whitchurch) with which he attempted to assassinate Hitler).

The meeting was well advanced when there was a knock at the door and in came John the son of Colonel Stuart Macrae who had been second in charge of the "Toyshop". For the first time in forty years he had decided to call at the premises, purely on chance. He obviously greatly enhanced the meeting since as a boy he resided there during the war. I calculated that the odds of him selecting the only afternoon when there was a meeting concerning the "Toyshop" were around 29,000 to one. (We asked if he would submit our lottery forms) So many ingenious nasties were invented. One of the first was a mine for insertion in the river Rhine: this was so successful that it closed the river at times. There were limpet mines, initially fashioned from Woolworths bowls and locally purchased magnets: the fuzing mechanism proved problematical but the eventual solution was to use aniseed balls which would decay at the required rate when submerged. The safety valve was a condom and in their search for numerous sheaths the engineers gained reputations as sexual athletes. For other water bound devices alkaseltzer tablets were used as fuzes. Colonel Macrae's wife worked at Bletchley Park where she was in communication with saboteurs on the continent. On frequent occasions she had reports of the great success of Limpet mines but, sworn to

secrecy, never mentioned a word to the man who helped to invent them! (such is the loyalty of a lady to her word – when Macrae confided to her details of the Airbomb, she replied "I know"). Sticky bombs met great objection from the Ordnance authorities but this was eventually overcome by a note from Churchill saying "Sticky bombs - make one million - WSC". Fuzes that acted if pushed or pulled or released were designed and some very nasty booby traps. One, operated by a .303inch cartridge planted in a tube in the ground, became known as the "castrator" for the devastating effect it might have on the individual to trigger it. Another anti personnel device was the "K delay jumping bomb": dropped in clusters of 49 these could be set to delay for days and be programmed to then fire to 25 feet and explode showering the ground below with shrapnel. Set to variable times they could virtually take out of use the ground they occupied. Mobile tank bridges were invented whereby, by rocket propulsion, a tank could span a 30' void, or 12' wall, with a bridge. For naval application JW bombs were invented which, when dropped in a harbour, would oscillate until a ship was struck: also the Hedgehog projector for depth charges. It is recorded that this weapon was responsible for the sinking of 45 German submarines. It was given to the Americans for use in the Pacific and the deadly efficiency of this weapon was demonstrated when the American navy was approaching the Marianas. Japanese admiral Toyoda knew the Americans would approach either east or west of Truk and decided to place his fleet on the easterly approach. To the west he put a string of six submarines: into this area sailed the USS England, an escort destroyer armed with depth charges and a hedgehog. Between the 18th and 31st May 1944 the England fired thirteen salvos of Hedgehogs and sank all six

submarines:- the depth charge was redundant. (The infamous thief, paramour and double agent Eddie Chapman, recruited by the Abwehr, who awarded him the Iron Cross, was parachuted into England specifically to establish why Germany was losing the U-boat war with a finger pointed at the "hedgehog". Whereas the Hedgehog was a contact weapon he reported that it had a very sensitive proximity fuse and also sent a photograph of the weapon alongside a false ruler. This was done to endeavor to mask the part that Bletchley Park was playing by breaking of the naval codes)

Talking to Edward Daily at a subsequent meeting I asked about any humorous memories. He called to mind the evening when, knowing that Charlie Wilson would work late in the laboratory, they rigged up a string of cans in a cupboard attached to a bomb release mechanism which would be triggered when Charlie withdrew a particular bit from the drill stand. The following morning on entering the laboratory all the bits were in place: Edward removed the trigger bit and the cupboard exploded filling the room with smoke!

Perhaps not the best administrator but without doubt a genius, the Commanding officer was Major General Sir Millis Jefferis. Early in the venture Jefferis and Macrae shared a house with their wives. They usually worked late and, returning home, would often visit a pub to further consider the latest invention. Jefferis' wife complained that they seldom saw their husbands and never got flowers. The following evening Jefferis directed Macrae to stop at a flower shop. He instructed the flower seller to despatch the whole stock of the shop to their residence. The following night there were so many flowers in the house they even had potted plants in the lavatory. They were never asked for flowers again!

At a later meeting I was present when Edward Daily was introduced to Barbara, daughter of Charles Wilson (one of the boffins) and Edward's immediate response was that "Charlie taught him all he knew". I learned that Barbara has a dolls' house made by her father and the baseplate is fashioned from wood upon which are drawn sections of a jumping bomb: this prompted me to ask if I could photograph it and she happily responded that she would get it down from the attic for me.

Barbara Wilson let me have a fascinating menu for a dinner in honour of the Principal, Col.M.R.Jefferis to be held at The Bulls Head Hotel, Aylesbury on 16th January 1942. Decorated with drawings of some of the devices made at "The Firs", the courses for the meal are described in "bombastic" manner. The menu is reproduced within this cover.

In 1941 with some very shrewd maneuvering and the help of Professor Lindeman, Col. Macrae acquired an account at Midland Bank, Aylesbury with unlimited funds on his signature alone, thus completely sidestepping the Ministry of Supply.

James Tuck, a physicist from Manchester and scientific officer to Churchill, worked at "The Firs", initially on shaped charges designed to blast through steel (the Piat projectile) and then researching methods to initiate a plutonium based atomic bomb explosion. In his book "The Secret War", RV Jones, the brilliant scientist says the Americans told him that without Tuck it was very unlikely that they would have succeeded with The Bomb. Further, an extract from Los Alamos National CV for James L Tuck reads "At that time. the research on the implosion process for the atomic bomb was encountering grave problems at Los Alamos and Tuck, becoming known for his outstanding experiment, was asked by Los Alamos, through Churchill, to join them which he did early in 1944. There he made a significant contribution to the first implosion weapon by devising an explosive lens"

Reading Macrae's diaries at The Churchill Archive in Cambridge I found this entry for the 7th May 1945:-" Peace day fun. No work done in afternoon. Jefferis wrecked drive entrance with a tank. Also busted main water main. Passmore took tank to Oving and broke church steps. Angier hit crypt back with a rocket. Oh what fun."

A quite amazing coincidence was revealed to me on the 21st June 2016: it followed attendance at the release at Hatchards of Piccadilly of Giles Milton's splendid "The Ministry of Ungentlemanly Warfare" about WW2 Guerrilla activities concerning which I had given Giles some weapons information. Having given dozens of lectures on the "Toyshop" topic I had dinner with John, son of Stuart Macrae": At that time Andrea Leadsom was flying high as a possible Prime Minister in the political arena and John mentioned that his son was acquainted with Andrea since he had courted her sister. "Not Joe I exclaimed" - to receive confirmation that Joe, my great pal whom I had not seen for 35 years was indeed the man. Despite our age difference (21 to 51) I had for a couple of years been a close up drinking companion of the grandson of "Toyshop Macrae". I am delighted to say that I have now renewed my acquaintance with Joe and met his enchanting family.

Later Charlie Wilson was appointed Chief Experimental Officer in the Instrument Section of the Rocket Propulsion Establishment at nearby Westcott (five miles distant from Long Crendon): the roars from this establishment were a part of daily life.

In several places I have referred to "gelignite" in the belief that this was the explosive we were handling. Edward Daily has corrected me about this: apparently it was known as Nobel 808, having the consistency and smell of marzipan. My second arraignment was at Winslow Magistrates Court when, with several others, I was again charged regarding my activities at the "Toyshop". I was the only one currently bound over and thought I was for the high jump. My father hired a barrister to defend me and I was quite amazed to learn how the process of law carried on. I was bound over to keep the peace and I had breached this condition, but my barrister proved that the Magistrates shouldn't know about this. Plainly daft! The outcome was that we were all bound over to keep the peace again. The second court appearance did make me more cautious and by this time I was beginning to see the terrible havoc that could have been wrought by our actions. I have now put together a Powerpoint presentation regarding the "Toyshop" and my researches have brought to light Dr. Roy Foster. He also raided the premises, through an unlocked window, and a sten machine gun and piat shells were taken: he also was charged at Winslow but on a separate date from me. The link between him, me, Strain and Culverhouse was Berkhamsted school. Another new found connection was Mike Ellis, a technician whose job was to pour explosive into weapons: they made him do this in a building well removed from the main premises! There would be twice weekly deliveries of explosive so that not too much stock was present at any one time, in case! "Winston Churchill's Toyshop" by Stuart Macrae is a splendid read that will take you there. Several V1 bombs exploded during term time, but fortunately these were in the woods outside town. Landmines floated down by parachute and caused huge craters but again luckily there were no severe injuries from them locally. In the hot summer of 1940 you could see dog fights in progress in the skies high above Tring. There were many aerodromes in the area from which raids on the continent were carried out. A Wellington bomber flew over the house belching smoke. The pilot struggled to miss the houses on Icknield Way and the plane plunged into a field, just 200 yards beyond the houses; all seven aircrew were killed. Many B27's crashed in the woods and aircrews' clothing would be flung into the branches. It all brought home the suffering that was being undergone for our protection.

At home we installed an Anderson shelter. This domed corrugated iron structure was partly let into the ground and then covered over with earth and whatever. Blackout wardens would patrol and give you a roasting if a chink of light was spotted ("put that light out!!!"). Tring did not suffer too many attacks but we spent some nights in the shelter. One nearby house was bombed and brickwork fell into the baby's crib but fortunately the child was with the parents.

I was a member of the YMCA where we played table tennis. I also helped my parents serve tea and snacks to the Armed Forces. Many American airmen attended, Heros to me, who put their lives on the line for my benefit (I had seen what happened to some of the returning badly shot-up planes). (Later, aged 16 I became Junior and Senior Champion of the Apsley and District Table Tennis League. I thought I was good and entered the National Championships – that brought me down with a bump!) My parents volunteered to billet two children from the East End of London: what a disaster that was. The life style was impossibly different and they were gone within the week. Rationing was severe and you never saw a banana or an orange. Every boy has a sweet tooth and the sugar ration was miniscule. I used to love going to the Co-operative store with its old fashioned dispensers. To pay, your money and the bill were put into a pot and carried by wire to the accountant at high level who would in turn insert the change and return the pot.

My father kept a map of Europe and North Africa on the wall and regularly updated the extent of the Nazi aggression. In 1941 things indeed look grim but I had a wonderful surprise on my birthday. I was given Mick, a young black and white Welsh sheep dog. He became my pal. Taking him for a walk where there were sheep, with no training whatsoever, he would pen them in a corner and look to me for orders as to what to do next.

My wife Margaret's mother, when seventeen years old, worked close to St. Paul's Cathedral. After a heavy air-raid the buses and Tube were not running but she managed to obtain a lift in a lorry most of the way back to her North London home to find Morley Avenue had been closed by the police but the house was intact. On another occasion, when working close to Alexandra Palace, two miles distant from her home, there was a daytime bombing raid. Knowing that her street had been hit she ran all the way back to Morley Road to find windows blown out and the front door blasted onto the lawn, face up with the clockwork doorbell showing. However, a brother's wedding cake had survived alright under a bed. Sister Sheila was married to Allen who was serving in the navy at Sierra Leone. He returned home on leave to the damaged home, well after midnight, and made sure to preserve protocol by ringing the bell on the flattened door. There was no answer! He duly made his way through the open portico and upstairs to awaken his slumbering wife After Victory in Europe Day the family went by train to Bournemouth for our first holiday since the outbreak of war. One evening I was having fun and games on the beach with a rather nice and very friendly young lady. In boisterous mood we burst into the hushed Drawing Room to the sound of Alvar Lidell reading the headlines of the six o'clock news: something about a bomb at Hiroshima. Needless to say we were instantly silenced. In the war the newsreaders were always identified personally (a new departure) so that you would know if an enemy substitute was making the broadcast. I got the impression that my new liaison was somewhat frowned upon - she was Jewish, whatever that was.

Not long after this there was a family wedding followed by a reception at the Hotel on the Bridge at Windsor. This was where I learned of the joys and downsides of alcohol. Uncle Harry (the one touting fags) plied me with copious amounts of sweet sherry. I was getting on well with one of the bridesmaids who agreed to sit on my lap. She seemed not to object to some adventurous hands. Gradually the euphoria turned to a disquiet of stomach and I retreated to the bridge. Gazing down at the river I started to pay the price. Somehow I found my way to the basement and collapsed into one of the hire rowing boats where I lay retching for hours. Eventually a search party found me and we boarded the bus to Berkhamsted. It was a miserable winter's evening and the windows of the bus were so misted over that the streaks of condensation were running in rivulets: the air reeked of cigarette smoke. This bus did not even take us home; we had to dis-embark at Berkhamsted and await the bus to Tring. Of course I now realise how important it is to suffer with a reaction to alcohol. It is necessary to curb excess.

Shortly after the cessation of hostilities my father's company received instructions from the Ministry of Supply to dispose of surplus military equipment assembled at Wing airfield. This ranged from vehicles, cranes, engineering equipment and office furniture to piles of batteries as big as a house. Sales would realise as much as £75,000, a huge amount for those days. Buyers could have their cheque payments pre-authorised but many were cash merchants of dubious appearance. I helped take the cash and was frequently handed a £500 cheesecloth bound wedge of £1 Bank of England notes. My father made me count every one of the sticky things.

I have had a number of bookings for my "Toyshop" talk and at each one it seems that someone appears who has a connection most likely in a relation who had worked there. In this way I have met the son of a talented welder – Barnes Wallis would bring down the early drawings for his prototype bouncing bombs for him to weld up.

I have also established to my great surprise that the Nazis had an administrative centre in Bicester Road, Aylesbury occupied pre-war by Ita Gustaf. Sumptuously appointed with double glazing, high quality drapes, extravagant panelling and chandeliers, snooker table, television set and highest quality German furniture, it was abandoned on the outbreak of hostilities.

London Blitz Talking to Mike Moore, a fellow member of Aylesbury Literary Club it came to light that his father had been in charge of the anti-aircraft guns in London during the Blitz. There was an occasion when father attended a dinner when Churchill was present. Aperitifs were followed by white wine and red wine: subsequently father declined a brandy to be met with the repost from Churchill that he could not stand a damned teetotaller! At another time father was asleep in an hotel in Park Lane whilst a raid was in progress. He was awoken with the news that Churchill was in the foyer and wanted to fire one of the guns in Hyde Park: he duly escorted him over but it is not known whether this was permitted.

Night Fighter The father of a colleague of mine, Flt Lt William Coxell, completed a whole tour in a Lancaster bomber as the rear gunner and I have been fascinated to read his diary. On returning from a raid the procedure was to vacate the turret and enter the body of the plane for a safer landing On this particular night they were surprised to see flares being fired following their descent. A Folke Wolfe 190 fighter had followed them in: the pilot had had enough of the war. The Military Police said they would come and collect him straight away. "Oh no" said the CO: "he is our guest for the night; pick him up in the morning".

Station "Y" In the spring of 2016 I was privileged to meet Betty Turner who had been a morse code operator at this station in a pre-fab at the front of Winslow Hall. Her job was to take down German messages in groups of five letters – at the time she did not know what happened to her product but a despatch rider took her work away every evening. (it is clear to her now that she was feeding Bletchley Park). She joined the WAAFs aged seventeen when her airman boyfriend was killed and a tear came to her eye as she told me of the others she had lost. She carried out a number of water colours which caught the mood of the moment and I include two in the pictures section.

Hughenden Manor Attending here to learn about the wartime map making for air force bombing I learned that Wycombe Abbey Girls School was requisitioned for the American 8th Bomber Group. The girls left one day and the airmen moved in the next. The duty officer was surprised at the frequent clamour of bells during the night. In the morning he found the explanation: each bed had over it a sign reading "If you need a mistress – ring the bell!" I also learned that on

his deathbed Benjamin Disraeli declined a visit from Queen Victoria – "She will only want me to carry a message for Albert!"