

INTRODUCTION.

My Role, and Views as a Wireless Operator/Air Gunner.

In connection with its participation in the Second World War much has been written about Bomber Command, and its crews, particularly during the last decade,

Almost every aspect has probably been covered by Historians, active participants who were mostly pilots, and the usual portion of "Armchair Critics". Some of the latter, lost in the midst of their somewhat derogatory remarks concerning some aspects of the Bomber offensive, seemed to have conveniently forgotten that it was total war, a fight for survival. For the most part, however, the role of the Wireless Operator/Air Gunner always seemed to be ignored, or alternatively, figured well down in the supporting cast with the Pilots, and Observers (navigators) always cast in the leading roles. There was no doubt that the latter pair had the most important jobs, but at the same time a wartime bomber crew worked as a team, each man was indispensable, a successful crew had no weak links only the addition of a modicum of good luck which was a necessary ingredient against the most formidable air defences ever created.

Prior to the period of my second tour I had the good fortune to accomplish a total of thirty five bomber "Ops", all as first Wop/Ag, flying in the old Handley Page Hampden. During most of these trips in 1941 wireless assistance was called for at very frequent intervals to assist in the safe return of our aircraft. During that period there was no doubt that a first class Wireless Op. was a valuable asset to both his pilot, and observer. I would say that most members of the "Navigators Union" would take a deep breath, be honest with themselves, and agree with that assertion, but, during those days, I came across quite a few self opinionated Observers who had a distorted opinion of our aircrew category.

The old Handley Page twin engined medium bomber was ultimately phased out from operational use in Bomber Command by the end of the summer of 1942 after long and faithful service during which about one thousand five hundred Hampdens were produced, and over sixteen thousand sorties were carried out. During this long operational period a total of over four hundred Hampden aircraft were lost in action. With the departure of the "Hambone" also went the full dual role of the Wop/Ag. Prior to this the first Wireless Operator/Air Gunner in this aircraft had been a crucial, and important member of the crew performing both jobs simultaneously. Having flown operationally in both Hampdens, and Vickers Wellington bomber aircraft, the former despite being the most uncomfortable, cold and draughty kite has to be my favourite. I had a very close affinity to this aircraft during the many hundreds of hours I flew in her, and that love affair of 41, and 42 has now lapsed into fond memories. I was visibly in the centre of all the action, and saw everything that was or going to happen, always fully occupied I never experienced a dull moment. My crew position at the upper rear of the Hampden was visually stimulating. With my spring loaded perspex cupola "lid" pushed back, and whilst standing on the raised firing steps I had a marvellous unrivalled 180 degree field of vision of the surrounding sky. Standing thus with my back to the engines I was responsible to my skipper for everything that was happening or due to happen on both port, and starboard sides, and upper rear of the aircraft whether it was Flak, searchlights, enemy nightfighters, or encroaching friendly aircraft.

Inside the Hampden therefore the full dual role of the Wop/Ag was carried out with the first Wop/Ag being the top gunner with his twin Vickers gun mounting plus control of the Marconi 1154/1155 W/T set, a busy combined job which was vital towards the safe return of the aircraft, and crew i.e his vigilant two gun defence together with his wireless assistance to both pilot, and Observer.

The twin Vickers gas operated machine guns were reliably consistent, drum fed, their firing rate was around 1000 rounds per minute, and each drum contained more or less a hundred rounds of ~~303~~ 303 which included the usual allocation of tracer.

As wireless operator I also had to keep a check on the electrical, and intercom services as well as the I.F.F. (Identification Friend or Foe) apparatus. This set was switched on at take off, switched off when approaching the enemy coastline, and on the return journey was again switched on when leaving the enemy coastline to remain so until landing safely back at our base.

The I.F.F. apparatus effected a coded impulse to our own radar, which identified our aircraft as friendly. A detonator button was connected with the set to prevent it falling into enemy hands. During my operational service in 41 the I.F.F. set was also used spasmodically over enemy territory when in tight situations it was switched on and off in quick fashion by many crews during their endeavours to escape from groups of searchlights when caught in their beams. Quite a few crews thought this ruse worked, and although I tried this technique myself on several occasions I could not honestly say it made much difference to the efficiency of the enemy searchlight batteries. If one's kite was well, and truly coned by a number of searchlights the best way out was nose down, and a deviating dive earthwards to escape the beams. Even though this procedure was a nerve wracking process at near 400 mph it was a sight better than being swatted like an illuminated trapped moth. During the many bright moonlight nights of 41 a good percentage of night fighter attacks were thwarted initially by vigilant upper Wop/Ags who saw them first, and kept their pilot's informed before a decisive attack could be pressed home, with resultant evasive action usually doing the trick. When I was operating during the period of June, July, and August, 41 the intense constant surveillance of the moonlight night skies for hours on end caused intense eye strain, and throughout those months when we were operating to the limit, three or four nights per week this condition persisted. In those pre-radar assisted days the navigation was all D.R. (Dead Reckoning) plus visual pinpoints. The term "Dead Reckoning" was the art of calculating the course, track, ground speed, and position of bomber aircraft in flight from knowledge of the probable wind velocity, and true air speed. My Observer, nevertheless received a great deal of assistance from me, the W/Cp, especially Loop bearings, and visual indicator homing on beacon stations. During my hectic first tour of Ops in 41, due to all sorts of different circumstances involving low cloud, other bad weather conditions, enemy defences etc, we occasionally managed to get lost, or well off track, having then to resort to wireless aids on the way back home. The Marconi 1154/1155 W/T set was a really good set. Introduced in June 41 as the standard Bomber Command W/T set, it replaced the old 1082/1083 set which had always been a very awkward and difficult to work especially in sub zero conditions. The Marconi set was certainly a great, all round improvement being far superior to its predecessor, and very much easier to operate. On its High Frequency channels QDM bearings (a course to steer in degrees to the Station transmitting) were obtained, but these were not often used, not by me anyway. However long range positional fixes were at times required in cases of emergency on Medium Range frequencies. I can recall Bircham Newton, and Heston being such M/F D/F stations I worked regularly. After contacting the appropriate ground M/F D/F station a coded message was transmitted, and at the latter's request a series of signals were then sent which were long enough for a bearing to be taken. In most cases not many seconds were needed for the ground station to find out, and give me our kite's position, which was then passed on to the navigator. I felt as if I knew the Heston ground station wireless operator personally through the human touch of his very distinctive Morse keywork mannerisms, and sense of style, I could always recognise it instantly. It was necessary when working on Medium Frequencies to wind out the trailing aerial, the winch was situated near the right hand floor of my crew position. When fully wound out the aerial was around a hundred feet in length, and was weighted at the end with several lead weights. Many a wireless Op, at the conclusion of a flight, forgot to wind in his trailing aerial before landing. The result was usually a lost aerial, and the lad concerned inevitably found himself "on the carpet" with a probable fine, or at most receiving a severe "rollicking" from the Signals Officer.

In consequence of this I was aware that quite a few irate farmers existed around certain parts of our fair English countryside lamenting on the various injuries to their grazing livestock which were caused by offending trailing aeri-als, and forgetful wireless operators. Returning to the Marconi W/T set, and its many facilities, the 1154/1155 had additional attachments of two visual indicator needles meters which were used in connection with homing on our ground beacon stations. One such visual indicator was sited alongside my rotatable D/F Loop aerial, with the other being situated on the pilot's instrument dashboard, for his use. In conjunction with my pilot I used this radio direction finding process quite frequently to home our Hampden back across the North Sea to our coastline, usually arriving bang on the beacon station, or very adjacent. As far as I can recall the procedure commenced with me tuning in to the frequency of an appropriate beacon station, whose position was known, and listen out for its call sign which was automatically transmitted continuously, followed by a long dash signal. Fully tuned in I then rotated my D/F Loop aerial, which had a 360 degree circular scale, until I heard a definite sharp minimum giving a positive line from the transmitting beacon station. Having tested for reciprocal and with the crossed needles centralised on the visual indicator the pilot would then fly on the resultant heading to ultimately arrive over the home beacon station if that was required. During the course of this homing procedure the pilot's visual indicator would instantly tell him if he strayed off line. In short that was visual D/F homing on a Loop bearing ground beacon station using the Marconi 1154/1155, and its attachments, a radio aid to navigation during the year of 1941. Apart from this homing system it was a regular, normal practice on return journeys from the Reich to obtain a series of ordinary Loop bearings from any of the four known beacon stations, using the Loop aerial only. These were passed individually to the Observer (navigator) to enable him to check his position line, and if necessary adjust his homeward course.

Since the end of the Second World War I have read, in connection with radio aids to navigation, that in essence Loop Bearings were not very consistent, being in some cases twenty miles or so out. During my first operational tour days I would say that "distance" quoted did not present any undue difficulties. Most landfalls were aimed at either the Lincolnshire or the East Anglian coastlines where visual pinpoints, and various aerodrome flashing beacons became available, though bad weather, foggy conditions, and low clouds were the drawback. In any case during my operational experience I found that, in the main, the end results were always pretty good, and there was no doubt that D/F Loop bearings, used in either form I have described, played more than a minor role in enabling our aircraft to return safely on many occasions during 1941. As a well trained, experienced Wop/Ag I think I can state, in all due modesty, that I lived up to that standard of expertise, which was later assessed in my flying logbook as "Above Average".

On some odd occasions I utilised German beacon station frequencies for bearings on. On outward operational journeys to certain parts of the Reich, I can recall Limburg being one such station used. We usually obtained these enemy beacon station frequencies, which were listed on eatable rice paper flimsies, from our Squadron Signals Officer before take off on operational nights. Other particulars on these rice paper flimsies concerned up to date information relating to the enemy colours of the day together with the times apertaining. These German colours of the day were used expressively in cases of emergency, for example when ones aircraft was coned by groups of searchlights, or alternatively when bracketed by concentrated heavy flak. During such adverse conditions, when it was too hot for comfort, the appropriate enemy colors of the day cartridges were fired from the Verrey pistol installed in the roof of our aircraft. At that period of the war the oracle usually favoured us, with the searchlights switching off, or the gunfire temporarily ceased, thus enabling the hard pressed crew to escape into the darkness of the night. Full marks were due to our Intelligence boys, how they managed to get the up to date information across so smartly for our operational use was quite amazing to say the least.

Prior to late 1942, in direct contrast to his Hampden counterpart, the Wop/Ag in Groups 1, 3, and 4, and in some cases my own Group No. 5, flying in Wellington's, Stirling Whitleys, Halifax's, Manchesters, the new Lancasters, was more comfortably placed. These aircraft were all cabin jobs in which the W/Op had a comfortable chair seat in his respective wireless compartment, with also a firm desk like platform enabling him to neatly compile his wireless log. The W/T set in a Hampden bomber was situated on a shelf below the platform on which the twin Vickers gun mounting was fixed. Working space was very limited there being no room for any desk like projection, my wireless log constituted of a single sheet affixed to a wooden clipboard, and my seat, only used when working the set, was a swing out swivel effort with only a small circular cushioned top upon which I sat or perched. Two small hooded lights one at each side of the fuselage provided my very sparse illumination. The wireless operator in the cabin aircraft I have previously mentioned naturally saw relatively little of all the action that happened outside the kite in enemy air space, unless they pulled back their side curtains alongside, but not everybody was curious. For the most part, therefore, these lads were wireless operators only, but stand by gunners if needed. All the foregoing aircraft mentioned possessed hydraulically or power operated gun turrets front and rear, although the four engined jobs had mid upper turrets too, and mainly, the rear plus mid upper gun turrets were occupied by straight Air Gunners. During the year of 1942 when the Bomb Aimer became a specialist job he also manned the front gun turret.

As the war progressed into 1943 Bomber Command was then composed mainly of four engined aircraft, the only survivor of the twin engined days being the "Wimpey" (Vickers Wellington) which would soldier on for many more months, and I would be involved, although it would not prove to be a lasting attachment. Navigation was now much more precise with the aid of the TR 1335 "GEE" radar set, which had then been in Operational use for some many months. The "Gee" box was a tremendous asset to the Navigator, and enabled him to obtain continual, and accurate positional checks on the way to and from German targets. The wireless Operator now using a signals code book, which I knew as the Bomber Code, obviously had an easier existence in the prevailing conditions, as W/T assistance was not therefore required as much as in pre "Gee" days. W/T silence was observed, especially on the way out, and the W/Op mainly just listened out, especially on the half hour Group broadcast frequency which had to be strictly adhered to in cases of Recall, Diversions or any other instructions. When over enemy territory the W/Op kept a watching vigil using the astrodome position on the look out for encroaching enemy fighters etc. Later during the year of 1943 other navigational, and blind bombing radar systems would follow, the first being named "H2S" which was followed by "Oboe". Additional jobs came into being for the W/Op one of them being the disposal of bundles of "Window" (code name for strips of foil dropped to confuse enemy radar) which was a heavy job at altitudes of between fifteen and twenty thousand feet.

Another device which came into practical use during 1943 was code named "Tinsel" Controlled by the Wireless Operator this entailed jamming the German night fighter controllers. When this was carried out the W/Op listened out on the enemy frequencies where German ground controllers would be directing their fighters into the bomber stream, and upon hearing instructions being passed on, the W/Op would then tune his transmitter in to that frequency, and depress his Morse key. A microphone situated in the engine nacelle of his kite did the rest, with the result being a large volume of engine noise helping to drown the German instructions. Evidently this practice proved really effective. Later on another innovation was wind speed reporting together with the receiving of new wind changes for the Navigator's use, these being usually received by the W/Op on the half hour Group broadcasts. Our aircrew category was eventually changed to Wireless Operator (Air) with a new half wing brevet bearing the letter "S" for Signaller, replacing our old "AG" type brevet. It was farewell to the Wireless Operator/Air Gunner of yester year.

Retrospectively, recognition in other ways did not seem to be very forthcoming in those days when they appeared to be no apparent yardstick in the distribution of awards. Despite their great numerical superiority awards to N.C.O. aircrew were well below those made to Commissioned officers. I would say that the ratio was one to five throughout Bomber Command, and that is probably a conservative estimate. Whilst many D.F.C.'s were individually well and truly earned, most received their wings on completion of a tour of "Ops". in my opinion quite justly so, but in the same circumstances NCO aircrew were just as worthy, so why the great disparity? During my squadron experience it seemed to me that it was usually the pilot's who struck gold on completion of a tour as far as N.C.O. aircrew categories were concerned with very, very few going to mere Wop/Ag's, and of course this lent to the theory that some of the RAF hierarchy though it was a pilot's Air Force. Do not get the wrong end of the stick, I say that without prejudice at this late juncture. After forty odd years I obviously have no axe to grind, this is but a personal opinion of the system which prevailed at the time, as I saw it. A bomber crew was no one man band, cohesive teamwork was essential to the safe return of the aircraft, and in those operation days of 1941, 42, and 43 when the average loss rate was between three and four percent not many survived a bombing tour of either two hundred hours or thirty trips when experienced as well as new crews "got the chop". In a nutshell, there was no doubt that on the question of recognition an uneven, unfair balance existed when on completion of a tour of bomber operations some received an award while the equivalent efforts of others were ignored.

An Operational tour medal could have been struck to recognise the fulfillment of a certain number of sorties, or a full tour, the accomplishment of which was no mean feat. The RAF establishment in this respect were sadly lacking in appreciation, ideas, and ingenuity. They could have easily taken a leaf out of the book of our American allies who awarded an Air Medal to their bomber crews on successfully completing five operational sorties, with a subsequent clasp for each further duplicate of that number of trips. . . . The American bomber tour was a total of twenty five trips, which meant that a successful crew member earned an Air Medal with four clasps, and invariably received, additionally, their D.F.C. to boot. This was a fair process, and deservedly so.

Unstinting service of a full first tour of bomber Ops followed by a ten month period at a bomber Command Operational training unit in an instructional capacity preparing course after course of Sgt. Wop/Ag's for their squadron baptism of fire saw me eventually embarking on my inevitable second tour of Ops, an old hand but still a mere Sergeant with the odds on my longevity falling all the time. In this connection it would seem that the official reluctance also applied to the wartime promotion stakes where once again the poor old Wop/Ag category always seemed to be at the tail end of the queue where systematic promotion to Flight Sergeant was concerned. The system was equally hard to understand as . . . aircrew members we all shared the same tasks and dangers. At this point of my wartime career I plead guilty to a slight case of disenchantment, but I was ever resilient, it did not affect my performance one iota, or the expertise of which I was justifiably proud in my own aircrew role. I would place particular emphasis on the fact that I would not have missed my aircrew wartime experiences for the world, unforgettable is the word that fits, despite all the risks, narrow escapes, near misses, and the privations I later endured as a P.O.W. The wartime camaraderie of bomber squadron life was really something special. I find I cannot really explain its significance in words, the layman would not altogether understand, participation only provided the answers.