If You Want Peace, Prepare for War

A History of No.604 (County of Middlesex) Squadron
Royal Auxiliary Air Force

by

Ian White
Dedication

This book is dedicated to those men and women who served and supported No.604 (County of Middlesex) Squadron, RAuxAF, throughout the twenty-seven years of its existence as an Auxiliary squadron, and in particular to those who laid down their lives on the Squadron’s behalf during peace and war.
Acknowledgements

The basis of this history is taken from the two volumes of the Operational Record Book (the much quoted ORB) held in the PRO (now the National Archive) at Kew, and the memories, accounts, papers and photographs of the Squadron Association’s members and their families. In particular: Mike Allen, Margaret Budd, Norman Burton, Derek Dempster, Bingham Dore, Fred Grisley, Jill Howard Williams for permission to quote from Jeremy Howard-Williams book, Night Intruder, Keith Pearson for permission to quote from his memoirs, An Erk’s Eye View, and Valerie Wigfall for permission to quote from her father, George Evans, book, Bless ‘Em All.

Others outside the Association’s membership also lent their support, particularly: Maureen Bridge, Paul Cruco, John Harrison who turned the final product into the electronic format understandable to our printers, the Photographic Departments of the Imperial War Museum, Lambeth, and the RAF Museum, Hendon, Jeff Jefford and Tony Freeman of the RAF Historical Society, Judith Last who turned my sketches into decent maps, Paul Litherland of Antony Rowe, Bill Morris for helping us to locate the whereabouts of Heath Brow, Mary Gunn, the Librarian of the RAF College, Cranwell, and Charles Ross of the RAF Heraldry Trust who provided a good copy of the Squadron badge for use on the cover and, finally, to Chris Lewis Associates for their assistance in designing the graphics for the cover.

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And last, but by no means least, to my wife Carol, for putting up with me disappearing into my study each afternoon throughout the ten months it took to complete the story and for undertaking some of the initial proof reading. To them all I offer my sincere thanks, and, as with the best authors, any mistakes herein are entirely of my own making.

Ian White
Martlesham Heath
December 2004
Introduction

Throughout the twenty-seven years of its existence as an Auxiliary unit, No.604 (County of Middlesex) Squadron, RAuxAF, maintained itself at the forefront of RAF efficiency by winning the Esher Trophy three times, and was instrumental in the development of the night-fighter role using airborne radar. Its record of 132 enemy aircraft destroyed at night during World War Two, is second to none, as are the number of its officers and NCOs who reached senior ranks within the service, and the decorations they were awarded (four DSOs and one bar, thirty-seven DFCs, or bars, nine DFM, four BEMs, three Norwegian War Medals, numerous Mentioned in Despatches and one posthumous George Cross). Sadly, much of the documentation available to historians, in particular that of the Squadron’s operational record book, concentrates on the service lives and actions of the aircrew, with little reference to the ground staff (fitters, mechanics, clerks, storekeepers, the medical branch, drivers, ground defence personnel, cooks and so on).

It should not be forgotten that an RAF fighter squadron represented the very tip of an air defence system, that relied on the teamwork of those supporting its branches: the airfields from which it flew, the ground radar stations and their fighter controllers, the training organisation that took *ab initio* aircrews and turned them into operational pilots and radar operators, and finally, the UK aircraft industry and the civilians in large and small (sometimes very small) companies, who designed, built, produced and repaired aircraft in their thousands.

It should, nevertheless, be born in mind that without the wholehearted support of these men and women, who invariably never left the ground and received little official recognition for their efforts, the Squadron would not have achieved the results it did.

This book therefore seeks to make some attempt at redressing the balance of over emphasis on officers and aircrews, by drawing, wherever possible, on the written accounts and published documents of the non-commissioned ranks and civilians. I will leave you the reader to decide to what extent we have achieved that objective in recording the history of our Squadron.

Ian Ponsford
President 604 Squadron Association
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CHAPTER ONE

Formation and the Early Years, 1930 - 1934

At the close of the First World War in November 1918, Britain’s exchequer was very nearly exhausted and its people wearied and disillusioned after four years of hard fighting. The natural wave of anti-war feeling amongst those fortunate enough to have survived, coupled with severe financial restraint on the part of the Government, precipitated the need to demobilise the three armed services at the earliest opportunity. At the end of 1919, the Royal Air Force (RAF) comprised 193 squadrons, containing some 22,000 aircraft, and a manpower strength of 30,000 officers and 263,000 airmen. The Secretary of State for Air, Sir William Weir, proposed a reduction in the RAF’s front line strength to sixty-two squadrons, commensurate with its contribution to national defence and the protection of the Empire in the post-War world. Weir’s plan envisaged the majority of the squadrons being based overseas, supported by a smaller number in the UK for general defence purposes. In addition to these responsibilities, the efforts of the Secretary of State were directed towards the need to retain the RAF as a separate arm, independent of the Army and the Royal Navy, and equal in standing. Weir’s ideas for the future of the RAF were not shared by the Prime Minister, David Lloyd George, who viewed the creation of the Air Force as a wartime expedient. In Lloyd George’s Cabinet reshuffle of December 1918, he removed Weir and appointed Winston Churchill to oversee a combined War & Air Ministry that would begin the dissolution of the RAF. Fortunately for the Country and the RAF, Churchill was one of the most air-minded politicians of his day. During his tenure at the Admiralty, prior to the outbreak of war, Churchill had learned to fly with the Royal Naval Air Service and thereafter maintained a close personal interest in aviation. He sought out Weir who persuaded him to remove Sir Frederick Sykes as Chief of the Air Staff (CAS) and replace him with Hugh Trenchard, whom Weir thought better suited to leading the peacetime RAF. Trenchard was duly appointed CAS in March 1919.

In one notable respect Churchill differed from Weir with regard to the numbers of operational squadrons needed during peacetime. Aware of the need to significantly reduce the national budget, Churchill favoured deep cuts in the strength of the RAF and the Army, and an acceleration toward full demobilisation. By April 1919, RAF strength had been reduced to fifty-five squadrons. The Treaty of Versailles, with its clauses forbidding
Germany from maintaining and operating military aircraft, was signed on the 28th June 1919 and left Great Britain in the unique position of having no natural enemy on the Continent of Europe, other than her erstwhile ally France. Like Great Britain, France was also turning towards general demobilisation and the need to maintain large military forces on either side of the Channel diminished accordingly.

In the light of European demobilisation and the effective, if temporary, military neutralisation of Germany, the Government postulated a policy that foresaw no war on the European mainland for the next ten years, the infamous Ten Year Rule. Accordingly, at a Cabinet meeting on the 15th August 1919, proposed further reductions in defence spending. The Cabinet subsequently endorsed the Treasury’s proposals that the defence budget be dramatically reduced from the £502 million set aside for 1919/1920, to £100 million for the financial year 1920/1921, just over one fifth of the original sum, of which the RAF’s allocation was £75 million. The worst was yet to come. In August 1921, the Government commissioned a committee under the chairmanship of Sir Eric Geddes to seek further economies in national spending. The Geddes Committee on National Expenditure, to give it its correct title, recommended swinging cuts in defence spending in 1922/1923, with the Army and Navy’s vote being cut to £50 million and the RAF’s to £13 million and later to just £11 million.

The subsequent scramble for scarce resources and the pre-War enmities between the War Office and the Admiralty that had been the principal reason for the formation of an independent RAF in 1918, re-emerged in 1921. In May of that year the War Office postulated the theory that aircraft would best be employed as auxiliary arms of the Army and the Royal Navy, a view also shared by the Admiralty. The matter was put before the Standing Sub-Committee of the Committee of Imperial Defence (CID) in July 1921. Its chairman, the Lord President of the Council, Arthur Balfour, attempted to reconcile the opposing views of the various parties, but only succeeded in producing inconclusive opinions. However, Balfour himself clearly understood the significance of air operations to which an independent RAF was best suited: strategic bombing and air defence being the most significant elements. Balfour’s independent report agreed there were some situations where it was right that air operations be subordinated to a local military, or naval commander, but maintained it was essential the RAF retain autonomy over its own administration, training and tradition. Anything less was liable to hamper its development, which in the longer term might place Great Britain at some disadvantage compared to other air minded nations, particularly France. The issue was finally settled in the RAF’s favour in August 1923, when the Prime Minister, Stanley Baldwin,
announced, following the machinations of a special sub-committee of the 
CID,\(^1\) the need for an air service independent of the Army and the Royal 
Navy, for which a Home Defence Force of fifty-two squadrons was 
necessary to protect the Country from external aggression, meaning France.

To achieve the fifty-two squadron standard entailed a massive expansion 
of the RAF that was patently beyond its capability to sustain in time of 
peace. Recourse to a reserve organisation was therefore necessary to meet 
the manpower requirements. The concept of reserve forces supporting a 
Regular Air Force was not new. Section Six of the Air Force (Constitution) 
Act of November 1917 contained the clause for the maintenance of an Air 
Force Reserve and an Auxiliary Air Force (AAF). Whilst the war was in 
progress there was little need for reserve forces. However, once the war was 
won and wholesale demobilisation was underway, Trenchard hoped 
sufficient ex-wartime personnel would be available to provide a pool of 
trained aircrews to meet any immediate crisis. In order to achieve the 
expansion requirements and retain costs at a reasonable level, Trenchard 
proposed the RAF adopt the Army model of a Territorial reserve of 
Auxiliary pilots and ground crews. His proposal for winged ‘Terriers’ was 
accepted by the Cabinet and written into law in March 1924 as the Auxiliary 
Air Force and Air Force Reserve Act. It was implemented during the tenure 
of one of the most pro-AAF Secretaries of State for Air, Sir Samuel Hoare; 
later Viscount Templewood and 604 Squadron’s Honorary Air Commodore.

The responsibility for Army Territorial Reserves resided with the 
Council of County Territorial Associations, and it was to this ready-made 
organisation that Trenchard looked to take charge of its reservists. The 
County Associations were subsequently expanded to become Territorial 
Army and Air Force Associations. These were charged with a variety of 
functions, chief amongst which was the recruitment and payment of officers 
and airmen, and the clothing of airmen as officers were generally expected 
to clothe themselves. The military buildings and accommodation, including 
the land thereon, were to be provided along with equipment, motor and 
horse transport and liaison with civilian employers in the county. Funding 
was the responsibility of the Air Board through the annual Air Estimates, for 
which each Association was required to ‘bid’. Because the RAF had little 
practical experience in the operation and maintenance of reserves, the Air 
Board adopted two styles in their approach to the recruitment of personnel 
and the administration of their squadrons, namely; the AAF and the RAFSR. 
The difference between the two organisations are highlighted below:-

\(^1\) The 1922/23 Salisbury Committee was tasked to inquire into the case for the retention of 
an independent air force.
Table 1 - General Comparisons of AAF and RAFSR Squadrons.²

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<th>SPECIAL RESERVE</th>
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<td>600-series</td>
<td>500-series</td>
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<td><strong>Recruitment</strong></td>
<td>Via County Association</td>
<td>Directly by the unit</td>
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<tr>
<td><strong>Qualification of officers</strong></td>
<td>Licensed pilot</td>
<td>Taught to fly by unit</td>
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<tr>
<td><strong>Qualification of airmen</strong></td>
<td>Trained by unit</td>
<td>Pre-skilled</td>
</tr>
<tr>
<td><strong>Organisation</strong></td>
<td>Three AAF flights plus Regular HQ staff</td>
<td>HQ &amp; one Regular flight plus one/two SR flights</td>
</tr>
<tr>
<td><strong>Commanding Officer</strong></td>
<td>AAF officer</td>
<td>Regular officer</td>
</tr>
<tr>
<td><strong>Location</strong></td>
<td>Near centres of population</td>
<td>Near engineering centres</td>
</tr>
<tr>
<td><strong>Training</strong></td>
<td>Frequent attendance at Town HQ &amp; local airfield + summer camp</td>
<td>Limited attendance for Service familiarisation &amp; discipline</td>
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It will be seen that AAF squadrons had more of the characteristics of an ‘amateur’ organisation, since the vast majority of the Auxiliary manpower was recruited and trained locally by the unit, whilst the RAFSR placed greater reliance on qualified tradesmen based around a core of RAF Regulars. However, these distinctions became blurred and eventually faded with the passage of time.³ Amateur organisation or not, Trenchard envisaged *esprit de corps* as the:

‘dominating force in the squadrons and each, therefore, was to have a well equipped headquarters, mess, and distinctive life of its own. Social meetings were to be encouraged and on no account was any squadron to be regarded as a reserve for filling up regular units.’⁴

The original 1924 reserve plan proposed the formation of six Auxiliary squadrons and seven of the RAFSR, a total of thirteen, all of which were to be equipped with bombers. The control and administration of the reserves

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² C.G.Jefford [1], *Royal Air Force Reserves & Auxiliary Forces* (RAF Historical Society), page 21.
³ It should be noted that the Special Reserve was absorbed into the AAF in 1936 - 37.
was assigned to the Superintendent of the Reserve, Wing Commander Frank Haskins, who was replaced in 1925 by Headquarters (HQ) Special Reserve & Auxiliary Air Force in Sloane Square, London, with Air Commodore Cyril Newall\(^5\) as its first Air Officer Commanding (AOC).

1925

Increased funding of fifteen million pounds for the RAF during March 1925 by the incoming Conservative Government, under Prime Minister Stanley Baldwin, enabled Trenchard to finance the establishment of the first RAFSR and AAF squadrons. Securing the finance was the first of Trenchard’s problems in forming an effective Air Force Reserve. His principal problem in 1924/1925 was convincing the sceptics, Churchill amongst them, that his ‘Citizen Air Force’ of civilian ‘Weekend fliers’ would have the aptitude and commitment to train as military pilots. To ensure that the squadrons stood a realistic chance of making a valid contribution to Metropolitan Defence and were not used as a dumping ground for mediocre officers, Trenchard personally vetted the short-list of adjutants and flying instructors. Only those applicants capable of independent thought and action were passed as suitable for the AAF.

Having set up the funding and leadership criteria, the final task lay in establishing a meaningful role for the reserves. RAF and Trenchard policy in 1925 regarded ‘offensive’ action as the principal element of ‘deterrence’ in the protection of Great Britain from bombing attack, otherwise known as the theory of ‘counter-bombing’ by Air Staff and politicians alike. Fighters, it was argued, had little prospect of success in preventing bombers penetrating the defence, and consequently it was thought more realistic to be able to threaten an aggressor with massive retaliation, than to provide an impenetrable defence. For this reason all units raised in the first and subsequent tranches of Special Reserve and AAF establishment were allocated in the bombing role to reinforce the Regular squadrons.

1930

The first RAFSR and AAF units were raised during 1925: No.502 Squadron, RAFSR,\(^6\) in May 1925 and No.602 (City of Glasgow) Squadron, AAF, during October, followed, in chronological order, by Nos.600, 601,

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\(^5\) Later MRAF Sir Cyril Newall, GCB, OM, CBE, AM, CAS September 1937 - October 1940.

\(^6\) Absorbed into the AAF in 1937 as No.502 (County of Ulster) Squadron.
603, 503, 605, 504 and 501 Squadrons. No.604 (County of Middlesex) Squadron was established at RAF Hendon, North London, on the 17th March 1930, St Patrick’s Day, in the corner of a hanger shared with two of the older and therefore senior Auxiliary units: No.600 (City of London) and No.601 (County of London) Squadrons. 604’s first officer was, appropriately, an Irishman, Flight Lieutenant Francis ‘Joe’ Fogarty, DFC, the Squadron’s first adjutant and flying instructor (see Appendix 1 for a listing of the Squadron’s principal officers). The initial cadre comprised one officer (Fogarty), one warrant officer and nineteen airmen, all from the Regular Air Force, around whom the Squadron would be built over the coming months.

The rivalry between 600 and 601, both of whom were commanded by Right Honourables ‘Freddy’ Guest and Philip Sassoon, was intense. Known collectively as the ‘Berkley Boys’ in deference to the black and light blue old school tie of Eton attributed to many of the squadrons’ officers, the two London Auxiliary squadron’s behaviour in the Hendon Officer’s Mess was described as ‘bloody’. This factor, however, ‘never impaired the efficiency of the squadrons, or their co-operation in the air’ and it was into the neutral ground between these warring factions that 604 was born.

On the 19th March, Lieutenant Colonel A.S.W.Dore, DSO, TD, was appointed as 604’s first commanding officer (CO) in the rank of squadron leader. Alan Sidney Whithorn Dore served in the Worcester Regiment during the early part of World War One, reaching the rank of major, before transferring to the Royal Flying Corps (RFC) in 1917. He joined No.13 Squadron, RFC, as an observer flying in B.E.2s, and later as a pilot, commanded a flight of No.43 Squadron under Major William Shoto Douglas, MC, where he enjoyed some success as one of the RAF’s pioneers in trench strafing. Colonel Dore recalls the beginning of his association with 604 and the AAF:

‘In the oak panelled hall of the Bakers Company, a survival of the old City Guilds, there came to lunch with me two men, who asked me to raise and command a Middlesex squadron of the Auxiliary Air

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7 It should be noted that two other Auxiliary squadrons, Nos.607 at Usworth and 608 at Thornaby, were formed on the same day.
8 Later Air Chief Marshal Sir Francis Fogarty, GBE, KCB, DFC, AFC.
10 Colonel Dore held the rank of honorary Wing Commander, but wore the insignia of a Squadron Leader, AAF.
Force: I hesitated. Ten years ago I had lain aside the trappings of war. Although I always chose to fly on my missions to Europe, for ten years I had never flown as a pilot. Was it fair to my family? I should have to give up much of my leisure, my holidays, my golf and tennis at weekends. A dozen voices shouted No! But a voice louder than them all, the call of the air, shouted Yes! I consented, and never regretted this decision, for the next five years were perhaps the happiest of my life.¹²

The formation of 604 and the selection of its officers was the responsibility of the CO and the adjutant. Colonel Dore again:

‘Joe (Forgarty) and I set to work cautiously to choose those who would form the hard core of the squadron in future years. We were a selection committee of two. We made our own rules. I chose or eliminated on the principles I had unconsciously learned in the war and applied these to the boys who came in dozens to be interviewed, lured by the adventure of flight and animated by the need to do something for their nation. Unknown to them, and often to Joe, I

¹² Alan Dore, Extract from the Memoirs of Alan Sidney Whithorn Dore, page 1
Francis ‘Joe’ Fogarty, 604’s first adjutant, from a photograph taken later in life as Air Chief Marshal Sir Francis Fogarty, GBE, KCB, DFC, AFC (604 Squadron Archive).

gave each applicant marks for his school record in scholarship and athletics; and if he could ride a horse, or drive a car, or motor cycle, or sail a boat, or ski, or play the piano, I gave him more marks. Finally, when the would-be flyer had gone I would ask Joe if it was thumbs up or down. We seldom disagreed.

In this way we interviewed about 150 candidates for aircrew and selected in the first year about fifteen. Only a very bad judge of character would have chosen his team badly. Subsequent events showed that we had the pick of the youth then available. They came from all sorts of occupations and professions, but to each and to all, I made it clear that he would have to give up the golden delights of the weekend, to attend one or more drills a week, and to spend his fortnight’s summer holiday in camp with the squadron.’

Squadron Leader Dore’s methods of selection were intended to ensure that 604 got the best material possible for its officer candidates, and this

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13 Alan Dore, op cit, page 1.
inevitably meant recruitment came from the upper echelons of 1930s society: the public schools, with Malvern being to the fore, the universities, Oxford and Cambridge, the legal profession, the Stock Exchange and the City. Prospective officers were regarded as being on probation for the first three months of their service and if they failed to meet their CO’s expectations, or through no fault of their own, seemed unlikely to make good pilots, their services were quickly dispensed with. This approach appeared to work well, since only three or four had to be ‘jettisoned’. It would appear the only candidate not to sit the Dore-Fogarty test was Mr A.E.Chatterton, who was examined elsewhere and posted to the Squadron in the rank of pilot officer, AAF, on the same day that Squadron Leader Dore became CO. A Regular officer, Flying Officer W.H.Bowden, previously based aboard the aircraft carrier HMS Eagle, joined on the 29th as the Squadron’s Stores Officer.

Unfortunately little is recorded concerning the recruitment of airmen and non-commissioned officers (NCO) other than ‘airmen came forward with almost equal zest to learn a trade from the Regular NCOs and aircraft hands who maintained our aeroplanes on the station.’ During April, an unidentified corporal wireless operator/mechanic and a flight sergeant from No.25 Squadron reported for duty.

The unit’s first training aircraft, de Havilland D.H.9A, J8472, was delivered by air from No.600 Squadron on the 2nd April, followed by Avro 504N, H3015, from 605 Squadron on the 10th, another D.H.9A, J7319, from 601 on the 23rd and a second ‘504N, K1043, from the Home Aircraft Depot, Henlow, on the 27th (see Appendix 2 for a listing of the Squadron’s aircraft). A de Havilland Moth, K1103, from No.1 Air Defence Group was allocated to the Squadron during June and delivered courtesy of 601 Squadron and a third ‘504N, J8541, was delivered in August. Squadron Leader Dore recalls his first flight under the tuition of Flight Lieutenant Fogarty:

‘After a break of ten years, I took over the controls of an Avro from Joe with some trepidation. Would my hand and eye have lost their cunning? The medical authorities had endorsed my papers “Fit to command a squadron” which was just what I might not prove to be. But stored in the uppermost recesses of my mind were those lessons I had learned in the testing times of 1914 - 1918, and after dual instruction, during which I showed some lack of judgment in the

14 Alan Dore, op cit, page 2.
glide into land, I felt fit to instruction, during which I showed some lack of judgment in the glide into land, I felt fit to fly alone.\textsuperscript{16}

The posting of officers, NCOs and airmen and the recruitment of civilian volunteers began in earnest during May. Flying Officer D.H.Black, AAF, arrived at Hendon on the 1\textsuperscript{st} from 603 Squadron and Flying Officer Richard ‘Dicky’ Legge from the RAF College, Cranwell, on the 19\textsuperscript{th}. With sufficient training aircraft available, three prospective pilots, Christopher ‘Kit’ Gabriel, a future Squadron CO, Richard ‘Dick’ Smallman-Tew and Mr I.G.Statham, began their \textit{ab initio} flying training during the month and between them and their instructors amassed seventy-two hours by the 31\textsuperscript{st}. During June, two of these gentlemen, Kit Gabriel and Dick Smallman-Tew, and a newcomer, Mr L.E.A.Healy, were commissioned as Pilot Officers, AAF. Another newcomer, destined to serve with some distinction during World War Two, Mr John Cherry,\textsuperscript{17} began his \textit{ab initio} flying with 604 during July. The dubious distinction of being the first pilot to damage an RAF aircraft fell to Mr Statham, who collapsed the undercarriage of ‘504N, H3015, on landing at Hendon on the 19\textsuperscript{th} July. The damage was sufficiently serious for the machine to be returned to Avro for repairs and its engine to No.4 Supply Depot. Mr Statham’s incident, it would appear, was not judged

\textsuperscript{16} Alan Dore, \textit{op cit}, page 2.
\textsuperscript{17} Later Group Captain John Cherry, RAuxAF.
sufficiently serious to delay his appointment as a Pilot Officer, AAF, eleven days later.

604 Squadron undertook its first weekend camp at Hendon on the 9th August, which preceded a period of intense flying to bring the trainee pilots to the required standards of airmanship. The weather in August 1930 must also have been good, as 223 flying hours were recorded, the highest monthly total to date. Avro 504N, J8541, was delivered to the Squadron on the 30th, presumably as a replacement for H3015, whilst the ground crews were strengthened by the arrival of a ‘quality’ leading aircraftsman (LAC), fitter, from the School of Technical Training, Manston, and the officers’ numbers increased when Mr Cherry was commissioned as a Pilot Officer, AAF, on the 19th.

September was a significant month for 604. The first deliveries of the Squadron’s operational equipment, the Westland Wapiti IIA, were made to Hendon: K1325 and K1326 on the 11th, K1327 on the 15th and K1328 on the 18th, all being delivered directly from the manufacturer’s factory at Yeovil, Somerset. Although regarded as a ‘general purpose aircraft’ in RAF service, the Wapiti’s operational role in the AAF was that of a bomber. Of all-metal construction and powered by a geared 550-hp Bristol Jupiter VIII radial engine, the Wapiti Mk.IIA (Wapiti IIA) was a two-seat, fabric covered biplane that could attain a maximum speed of 135 mph (217 km/hr) at 5,000 feet (1,525 metres), had a service ceiling of 20,600 feet (6,280 metres) and a range of 360 miles (580 km). Armament comprised a single fixed, forward firing 0.303 inch (7.69mm) Mk.II Vickers machine-gun and a 0.303 inch Mk.III Lewis machine-gun on a Scarff mounting for the observer/air-gunner. Various combinations of bombs up to a maximum of 580-lbs (265 kg) could be carried on universal carriers under the wings and fuselage.

The second event of the month saw the award of the Squadron’s first flying badges to Pilot Officers Chatterton, Gabriel, Statham, Healy and Smallman-Tew. Mr C.D.Griffiths joined as a prospective pilot and commenced _ab initio_ flying training on the 1st. Finally, Flying Officer Lewis was posted-in from the RAF Depot, Uxbridge, to replace one of 604’s founder members, Flying Officer Bowden (Stores Officer), who was placed on the retired list in July. Lewis’ tenure was short, being in turn replaced by Mr L.F.Caunter as Civilian Stores Officer on the 13th October. By the month’s end, the Squadron’s recruitment record stood at nine officers and forty-eight airmen in addition to the permanent (Regular RAF) staff.
Two trainee pilots who later played significant roles in 604’s wartime development, Mr Michael Anderson\textsuperscript{18} and Mr Roderick ‘Rory’ Chisholm,\textsuperscript{19} joined the Squadron during October and immediately began their ab initio flying training. Mr Anderson was commissioned alongside Mr Griffiths as a Pilot Officer, AAF, on the 1\textsuperscript{st} November, with their appointments being back-dated to the 29\textsuperscript{th} September. Mr Chisholm, however, had to wait until March 1931 before his commission was gazetted.

The Squadron’s first AOC’s Inspection took place on the 7\textsuperscript{th} November. Since 604 was formed, changes had been made to the reserve organisation. HQ Special Reserve & Auxiliary Air Force, was replaced in 1927 by No.1 (Air Defence) Group under the command of Air Commodore John Hearson, and it was this organisation that undertook 604’s inspection. Air Commodore Hearson and the Air Board’s Establishment Committee were of the opinion that the distinction between the RAFCR and the Auxiliary units was becoming blurred in relation to the enlistment of pilots. The Auxiliaries were supposed to recruit only licensed pilots, it being the prerogative of the RAFCR to train pilots from scratch, however, many Auxiliary units, 604 included, were actively training ab initio pilots in-house. A second factor, cost, was also coming into play in 1930. Auxiliary units were cheaper to operate because they had fewer Regular personnel than the RAFCR squadrons and, thirdly, recruiting for the Auxiliaries proved more popular than the ‘Specials’, due to the men being able to enlist in a trade they wished to pursue. The future trend was therefore set towards the amalgamation of the RAFCR into the AAF. No doubt to bolster ab initio training, a second Gypsy Moth, K1831, was added to the Squadron’s establishment on the 12\textsuperscript{th} November.

By the time the Squadron closed down for Christmas leave on the 22\textsuperscript{nd} December, it was firmly established as an Auxiliary unit and able to boast an Auxiliary establishment of eleven officers, twelve if Mr H.C.Hebard who joined in January, is included, and fifty-one airmen.

1931

1931 was a formative year for 604. The year opened with Flight Lieutenant Fogarty executing the Squadron’s first serious accident. On the 16\textsuperscript{th} February Pilot Officer M.V de Stag of 605 Squadron force-landed Wapiti J9096 at Hampstead Heath. The following day, Flight Lieutenant Fogarty

\textsuperscript{18} Later Wing Commander M.F.Anderson, DFC, and CO of 604 Squadron, March 1940 - August 1941.

\textsuperscript{19} Later Air Commodore R.A.Chisholm, CBE, DSO, DFC*.
took-off to return the machine to Hendon, but unfortunately stalled and crashed the aircraft on to the roof of a house in Hampstead. The machine was wrecked, but Fogarty happily escaped uninjured. Squadron Leader Dore’s account is somewhat more amusing:

‘Someone (de Stag) had force landed on an open space nearby (in Hampstead), and Joe volunteered to fly the Wapiti out lightly loaded. Just failing to clear the houses with his usual skill as a crazy flying pilot, Joe put the Wapiti down on a doctor’s roof, and climbed into the nearest bedroom. Malicious tongues said that a pretty daughter was surprised out of her sleep by the crash and still more so by the intrusion of the debonair Joe through the window. It made a good story, but is, I think, untrue,’ more’s the pity.²⁰

In March, Messrs Chisholm and Hebard were granted AAF commissions as Pilot Officers and the Squadron’s Regular cadre was strengthened the following month by the arrival of Pilot Officer G.S.Welby.

May was a busy month for 604. Whilst preparing for the AOC’s inspection scheduled for that month, the Squadron was also engaged in practising for their first public appearance at Hendon. The Squadron was duly inspected by the Air Officer Commander-in-Chief (AOC-in-C), Air Defence of Great Britain (ADGB), Air Marshal Sir Edward Ellington,²¹ on the 24th, at which, apparently, all went well.

On the 13th June a demonstration of formation flying was given to the chairman and members of the County of Middlesex Territorial Army & Air Force Association. This preceded the Squadron’s first appearance at the annual RAF Air Pageant at Hendon on the 27th, when nine Wapitis were put into the air alongside those of 600 and 601, much to the pleasure of their CO:

‘Great was my reward and pride when we flew in the Royal Air Force Display with the other two Auxiliary squadrons, little more than fourteen months after Joe and I started in that corner of the hanger in which we now housed more than a round dozen of serviceable aircraft. We were now a team, able to look older squadrons in the eye, and we knew that, except for mischance, we could keep the same team together for another three or four years. In

²⁰ Alan Dore, op cit, page 4.
²¹ Later MRAF Sir Edward Ellington, GCB, CMG, CBE, and CAS from 1933 to 1937.

this we had one great advantage over the Regulars, for on the average they only stayed in one unit for six to nine months.”

At the beginning of July, 604 was affiliated to No.32 (Fighter) Squadron to provide the Auxiliaries with the opportunity to learn operational techniques and tactics from a Regular ADGB unit. 32 Squadron had a long and distinguished history on the Western Front in World War One, prior to being reformed at RAF Kenley in 1923 and had recently converted from the Armstrong Whitworth Siskin IIIA to the Bristol Bulldog IIA, single-seat fighter.

That same month the Squadron was mobilised for its first period of compulsory annual training, the Summer Camp to be held at RAF Tangmere, Sussex, where it would participate in the 1931 Air Exercises. 604 was allocated the role of attacking bombers with the ‘Blueland’ forces. On the 19th, the Squadron’s Regular and Auxiliary officers and airmen, including their recently acquired medical officer, Flying Officer A.T.G.Thomas, proceeded by road and air to Tangmere, taking with them nine Wapitis, three ‘504Ns and one of the two Moths. A spell of raiding practice was scheduled for the following day, for which the Squadron arose

22 Alan Dore, op cit, page 3.
early and took-off at 0515 hours. On their return, and in company with the Wapitis of No.602 (City of Glasgow) Squadron, 604 participated in Raid No.1 against ‘enemy’ forces. Unfortunately for the Auxiliaries, the weather intervened when they were only four miles (6.4 kms) from their objective and the ‘attack’ had to be abandoned. Similar conditions were ignored the following day when seven aircraft encountered 10/10th cloud at 6,000 feet (1,830 metres) which did not prevent them diving through and ‘striking’ their target, but did screen them from patrolling fighters. Similar ‘raids’ were accomplished on a daily basis, with and without the support of 602 Squadron, until the exercises ended with Raid No.3 during the evening of the 22nd, concluding with a combined 602/604 breakfast at Hawkinge. Throughout the exercise period, 604 Squadron participated in four ‘raids’ and flew a total of 104 hours and 5 minutes. During the second phase of the camp, 27th to 29th July, the Squadron turned its attention towards practise for the forthcoming Esher Trophy competition. The whole event culminated on the 30th with competitive bombing tests over the Porton Bombing Range, near Salisbury, with ‘bombing-up’ taking place at RAF Andover, and air-to-air gunnery tests at RAF Eastchurch, Hants. The Squadron returned to Hendon by air and road on the 1st August.

One incident perhaps marred the Squadron’s performance during the summer camp. On the 30th July, Pilot Officer Chisholm, with Air Commodore W.F.MacNeece Foster, CBE, DSO, DFC, as his passenger, stalled on landing at Tangmere. The pilot emerged from the wreckage unhurt, but the unfortunate air commodore sustained minor injuries and was subsequently treated for concussion.

The remainder of the year followed what was to become the standard Auxiliary pattern: weekend training camps at Hendon, the closing-down of the unit when the permanent staff went on leave, something that happened two or three time each year and a necessary requirement, since many of the Regulars worked most weekends, AOC’s inspections, postings-in and out and promotions. With regard to the latter, Flying Officer Darbyshire from No.1 Flying Training School (FTS), Digby, joined the Squadron as a relief for Flight Lieutenant Legge who was posted to No.603 (City of Edinburgh) Squadron on the 9th September. Mr R.A.Budd joined the Squadron and was commissioned as a Pilot Officer, AAF, on the 22nd September, whilst Mr Doulton successfully completed his flying tests and was awarded his ‘A’ License and appointed Pilot Officer, AAF. Pilot Officer Chatterton gained promotion to Flying Officer on the 31st October, back dated to 20th September. December was a significant month for promotions: Pilot Officers Gabriel (2nd), Healy (6th), Smallman-Tew (21st) and Statham (28th) were raised to Flying Officer and on the 8th Mr R.L.Nimmo joined the unit.
and was appointed Pilot Officer, AAF. The final AOC’s inspection of the year took place on the 4th December and resulted in ‘B’ Flight being awarded the Squadron Efficiency Cup.

1932

On the 9th February, the College of Heralds approved the Squadron Badge of a single Saxon Seax taken from the armorial bearings of the County of Middlesex and the motto, ‘Si vis pacem, para bellum,’ translated as ‘If you want peace, prepare for war’. No.29 (Fighter) Squadron, based at North Weald, Essex, and in the process of converting from the Siskin IIIA to the Bulldog IIA, provided 604 with its Auxiliary affiliation for 1932. No.29 was later to serve alongside 604 as one of the original six radar equipped, night-fighter squadrons in Fighter Command (see Chapter Four). Affiliation training commenced on the 30th April and continued to the 8th May, during which time the Squadron was based at Bicester for bombing practise. Later that month, as part of its ‘At Home’ celebrations, the Squadron hosted the members of the Middlesex Territorial Association to a flying day at Hendon on the 29th.

June 1932 proved to be an important month for 604. On the 3rd, the Right Honorable Sir Samuel Hoare, Bt, GCSI, GBE, CMG, MP, was appointed as the Honorary Air Commodore to 604 Squadron. Sir Samuel, like his contemporary Winston Churchill, was one of the most air minded of Britain’s MPs. Born in 1880, Sir Samuel was educated at Harrow School and New College, Oxford, where he obtained a first class degree in history. He was elected as the Conservative MP for Chelsea in 1910 and held the constituency until 1944. He succeeded to his father’s baronetcy in 1915 and served as a member of the British Military Mission to Russia in 1916/1917 in the rank of lieutenant colonel and later on a similar mission to Italy in 1917/1918. In Bonar Law’s post-War Conservative Government, Sir Samuel held the post of Secretary of State for Air from 1924 to 1929. He participated in the first civil flight to India in 1926/1927, before becoming the Secretary of State for India in 1931 in Ramsey MacDonald’s National Government. In 1935, he assisted in the drafting of India’s constitution and helped smooth its passage through Parliament. That same year. In 1935 he was appointed Foreign Secretary under Prime Minister Stanley Baldwin, but was criticised for his part in the Hoare-Laval Pact, which ceded large parts of Abyssinia to Italy, and was forced to resign in 1936. He was not out of office long. Later in 1936 he returned as First Lord of the Admiralty, then served as Home Secretary, 1937 - 1939, during which he defended Chamberlain’s actions over Munich. From 1939 - 1940 he was Lord Privy
Seal and a member of the War Cabinet, and finally from 1940 - 1944 he was Ambassador to Spain, where he worked hard to maintain good relations between Britain and Spain that did much to persuade Franco to stay out of the war. He was created Viscount Templewood in 1944 and Chancellor of Reading University in 1937. He died in 1959 and thus had the unique distinction of seeing the AAF and 604 Squadron created, mature and disappear in his lifetime.

On the 12th June Air Marshal, His Royal Highness (HRH), the Prince of Wales, accompanied by Sir Samuel, visited the Squadron in his capacity as Honorary Air Commodore-in-Chief to the AAF. For the second year running, the Squadron’s Wapitis participated in the Hendon Air Pageant on the 25th. Promotions for the first half of the year included Pilot Officers Cherry, Griffiths and Anderson to Flying Officer and LACs Hitchen-Kemp, Hume, Mitchener and Barnett to acting, unpaid, Corporals.

The Squadron made a return to Tangmere by road and air on the 31st July to undertake its summer camp and participate in the annual air defence exercises run by No.1 (Air Defence) Group from RAF Manston, Kent. Seven Wapitis took part in the exercises, which ended on the 14th August with the Squadron’s return to Hendon. During the Tangmere detachment, 604 hosted a squadron sports day on the 11th and a guest night that same evening in the Tangmere Officers Mess. Competitive bombing tests by the Squadron’s Wapitis, in pursuance of the Esher Trophy, were undertaken at RAF Upper Heyford, Oxfordshire, between the 18th August and the 24th September. These must have been completed in an effective manner as the Squadron was advised later in the year it had been awarded the Trophy as the best all-round Auxiliary unit in the RAF; a not inconsiderable achievement for a such recently formed unit.

During October, 604 participated in the Heston Air Pageant by flying its Wapitis to Heston, Cornwall, and back in a single day. That same month a start was made on providing the Squadron’s pilots with night flying experience in the Gipsy Moth, which was no doubt chosen for its stable flying characteristics, with the airmen being exercised in the use of flares to mark and illuminate the airfield. A total of six hours night-flying was completed during the month. It should be noted that whilst many squadrons, both Regular and Reserve, were supposedly equipped with bombers and fighters with a day and night role, the RAF paid only nominal attention to night operations and the consequent problems of navigation, identification and aircrew orientation. This lack of foresight and training was later to cause 604 and the other night-fighter squadrons needless casualties in the early part of World War Two.
On the 1\textsuperscript{st} December 1932, the Squadron officially learned they had won the Esher Trophy for Auxiliary efficiency - a very considerable achievement for a squadron that was barely two years old. Squadron Leader Dore remembers:

‘We were sitting in the Mess when Air Commodore McNeece Foster, Commanding the Auxiliary Group - who by his keenness, and personal knowledge of almost every Auxiliary officer, led us on to greater effort - telephoned the good news and his congratulations. There was a whoop of joy from the boys. I ordered half a dozen Veuve Clicquot and when I left, discreetly, the celebrations had reached the stage of nose diving over the sofas and chairs’\textsuperscript{23}

\textsuperscript{23} Alan Dore, \textit{op cit}, page 2.
Promotions and postings in the second half of the year comprised Pilot Officers Hebard, Chisholm and Welby to Flying Officer and the arrival of Flying Officer P.Randle, AAF, from No.605 (County of Warwick) Squadron.

1933

On the 16th May, following the by now traditional ‘At Home’ to the Middlesex Territorial Association, the Esher Trophy was presented to the Squadron by HRH the Prince of Wales, in company with the recently retired CAS, Marshal of the Royal Air Force (MRAF) Sir John Salmond. Also present were Sir Samuel Hoare, Sir Philip Sassoon, Bt, GBE, CMG, MP, Under-Secretary of State for Air, Air Marshal Sir Robert Brooke-Popham, AOC-in-C ADGB, and Air Commodore MacNeece Foster, AOC No.1 (Air Defence) Group, who had patently recovered from his accident with Pilot Officer Chisholm in 1931 and obviously bore the Squadron no ill will. The Prince of Wales formally presented the Trophy in the hanger, following which Sir Samuel Hoare ‘said nice things’ about the Squadron. After the ceremony HRH was photographed with the Squadron’s officers.

Promotions for the half year contained advancement to Flight Lieutenant for Flying Officers Gabriel and Healy and to Flying Officer for Pilot Officer R.A.Budd. Flying Officer R.S.Darbyshire was posted in from the Calshot flying boat station, Flying Officer A.A.Adams from RAF Gosport for flying instructor and assistant adjutant duties and Flying Officer L.F.Caunter, from the Reserve of Air Force Officers (RAFO), as Squadron Stores Officer. On joining the Squadron Mr Caunter was granted an AAF commission in the rank of Flying Officer.

During July the Squadron introduced a party of boys from Mill Hill School to the joys of flying, with fifteen air-experience flights being undertaken on the 3rd. On the 30th the Squadron proceeded by road and air to Tangmere for the Summer Camp. Whilst there they were subjected to a number of visits by senior officers: the AOC-in-C Air Safety carried out an inspection of Squadron personnel and aircraft on the 3rd August, a further inspection was conducted by the AOC No.1 (Air Defence) Group on the 8th.

24 Sir John Salmond succeeded Trenchard as CAS in 1929 and resigned early in March 1933 in favour of his brother Sir Geoffrey Salmond, who died six weeks later. Sir Geoffrey was in turn succeed by MRAF Sir Edward Ellington, GCB, CMG, CBE.
25 Alan Dore, op cit, page 3.
26 The RAFO was established in 1923 from short service commissioned officers who were required to undertake three years regular service and four years with the reserves.
27 Alan Dore was educated at Mill Hill School before attending Jesus College, Cambridge.
and an aircraft was sent to RAF Bircham Newton, Norfolk, to convey Sir Samuel Hoare to Tangmere on the 9th and return him to Hendon the following day. No doubt Sir Samuel was the Squadron’s guest in the Officers Mess overnight. The Squadron returned to Hendon on the 13th.

During the second half of the year Flying Officer Statham was promoted to Flight Lieutenant and Pilot Officer Nimmo to Flying Officer.

1934

Like its fellow Auxiliary squadrons at Hendon who possessed a Town Headquarters (THQ), 604 was eager to find a building of its own where it could meet during the week and at weekends, drill, give lectures and hold parties and social events. For the previous two years, Squadron Leader Dore and Colonel Anwyl Passingham, the Secretary of the Middlesex Army & Air Force Territorial Association, “tramped London in search of suitable quarters.” Their footwork was eventually rewarded with the discovery of ‘Heath Brow’, on the summit of Hampstead Heath, near the Whitestone Pond and next to ‘Jack Straw’s Castle’ public house. Squadron Leader Dore described Heath Brow as being:

‘well named. From the west windows the rough and tumble of the Heath flowed downhill to the Vale which stretched level and wooded to the hump that is “The Hill” to generations of Harrow boys and to the ‘Welsh Harp’, silver in the setting sun, that guided home many an airman at eventide. From our Mess room you could step on to the roof of the drill hall, which we built and sank into the earth, to avoid an eyesore to the ramblers on the Heath. In the summer when twilight came, the twinkling lights beyond, and the muffled music of the band formed a perfect setting to the low voices of the gay and lovely girls that came on occasion to dance, or to sit on the terrace with their laughing cavaliers.’

Heath Brow was opened on the 7th April by MRAF Lord Trenchard. The ceremony, which took place in the Drill Hall, was attended by the AOC-in-C ADGB, the AOC No.1 (Air Defence) Group, the Mayor of Hampstead and representatives of the Middlesex Territorial Association, the Armed Services and senior public bodies. Not all of the good burghers of Hampstead were pleased with 604’s arrival at Heath Brow:

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28 Alan Dore, op cit, page 3.
The location of Heath Brow is not known for certain, however, based on modern ordnance survey maps, it is thought to have been in the position currently occupied by the car park to the rear of the Jack Straw’s Castle public house.

‘Our descent on Hampstead caused a turmoil amongst the landed gentry of this delectable borough. That the licentious soldiers should disturb their respectable tranquillity was unthinkable. They went and shouted in our ears, forgetting that “Appy Ampstead” was the scene of much light hearted debauchery on bank holidays. One old lady thought we should be flying our noisy aeroplanes from the roof of the drill hall. Thus England in 1934, when only a few heeded the rumble of war preparations across the Channel …… our coming to Hampstead was tolerated. We proved less drunken and besotted than expected, and, so far as I know, girls were never seduced.’

Affiliation training continued with No.29 Squadron, now fully equipped with Bulldog IIAs at North Weald, between the 29th April and 6th May. On

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30 Extracts from the Memoirs of Alan Sidney Whitehorn Dore, page 3.
the 13th, one flight was ordered to proceed to RAF Wellesbourne, Warwickshire, to participate in a gathering of AAF squadrons. Whilst at Wellesbourne one of the Wapitis was rendered unserviceable (u/s), requiring replacement parts to be flown from Hendon and repairs effected. The offending aircraft was returned by air to Hendon the following day.

The annual ‘At Home’ and air display in aid of the Middlesex Territorial Association took place on the 3rd June. On the 9th, air-experience flights, conducted tours of the hangers and inspections of the aircraft were undertaken for senior boys as part of a ‘liaison with public schools’ initiative. These visits, which in later years were formalised, would have been seen as an opportunity to attract boys and young men into the University Air Squadrons (UAS) and then into the RAF, or the AAF.

In March, Flight Lieutenant E.W.Long was posted to 604 to act as assistant adjutant to Flight Lieutenant Fogarty.

Lord Trenchard’s opening of the Squadron’s THQ in April 1934 marked the forth year of 604’s existence as an Auxiliary squadron. During this time it had successfully transformed itself from embryo unit to operational squadron and demonstrated its efficiency by winning the Esher Trophy in 1932. With the beginnings of the rise of National Socialism in Germany and the subsequent changes in the political map of Europe, and the possibilities offered by new defence technologies, the Government was forced to re-evaluate its policy of counter-bombing and examine the possibility that Britain could, after all, be defended from the air. These changes were destined to have significant effects on the role of the Auxiliaries and 604 Squadron from July 1934 onwards.
CHAPTER TWO

The Lead-in to War, 1934 - 1939

The legacy of Trenchard’s doctrine, with its concentration on the offensive use of air power in the defence of the UK and the means to provide control over the more recalcitrant subjects of His Majesty’s Empire, remained long after the great man had retired as CAS in 1929. Having been advised by the Air Staff in 1925 that there was no known defence against air attack, the Government placed an increasing reliance on universal disarmament and the League of Nations\(^1\) as instruments of international security. These two factors combined to bring about a malaise within the Country’s military and political leadership. Bombing was not defendable, and the only means by which Great Britain could protect itself was by massive retaliation against a potential enemy. This policy, sometimes referred to as the ‘Knockout Blow,’ was to feature prominently in Air Staff and Government thinking throughout the 1930s, and was the reason for the allocation of the AAF to the bombing role. In 1932 this policy was further reinforced by Stanley Baldwin’s oft quoted statement ‘the bomber will always get through’,\(^2\) and the subsequent collapse of the Geneva World Disarmament Conference in November 1934, which had attempted to eliminate bombing aeroplanes from the world’s air forces. The legacy of the Conference, as far as Britain was concerned, was to impede the implementation of the Fifty-Two Squadron Plan. By March 1932 the Plan had delivered forty-two squadrons, for Home Defence, roughly in the proportion of two thirds bombers to one third fighters. Since Ramsey MacDonald’s Government had no wish to prejudice the negotiations at Geneva with talk of expanding the UK’s defences, implementation of the full Plan was further postponed in June 1933.

The unintentional halt in the modernisation of the defences would have mattered little had it not been for the emergence in 1933 of a rearming Germany and the covert creation of the **Luftwaffe**. A realisation of what the future held in store, forced a reluctant Government to establish a committee in November 1933 under the chairmanship of Sir Maurice Hankey, to examine and advise on the means by which the ‘worst deficiencies’ in

\(^1\) The League of Nations was founded in 1920, principally by the United States and Great Britain, and its treaty was written into the peace treaties that ended World War One.

\(^2\) Stanley Baldwin, as Lord President of the Council, to the House of Commons, 10\(^{th}\) November 1932.
national and Imperial defence might be overcome. The Committee’s report, submitted in February 1934, identified Germany as the principal threat to Great Britain, a view agreed by the Imperial General Staff, who were also of the opinion that Germany was preparing for war in 1938 or 1939.³

The realisation that German militarism could no longer be ignored, triggered a whole series of expansion plans that were to last until the outbreak of war in 1939. The first, Scheme A, agreed by Cabinet in July 1934, called for the establishment of 138 squadrons, of which forty-one were to be equipped with bombers and twenty-eight with fighters, the Scheme being completed by 1939. By this means it was hoped that Britain would at least be able to maintain parity with the emerging Luftwaffe⁴. Since Government and the Air Ministry, then as now, was not averse to playing the ‘numbers game’, a convincing number of fighter squadrons could be established, albeit on obsolete equipment, by transferring the Reserve’s role from that of bombing to air defence.

1934

Before departing to Tangmere on 22nd July for the summer camp, 604 was advised that, in line with the other Auxiliaries, its role would be changed from bomber squadron to fighter squadron. Despite being equipped with an obsolete and most unfighter-like aircraft, the Wapiti, it was as a fighter unit that 604 participated in the annual ADGB Exercises, when based at Tangmere. With the Exercise completed on the 26th, the Squadron returned to Hendon, where its aircraft and personnel were inspected by the AOC-in-C ADGB, preparatory to a visit by the CAS and their old AOC-in-C, MRAF Sir Edward Ellington, on the 31st. The annual AOC No.1 (Air Defence) Group’s inspection followed two days later on 2nd August.

During September, the Squadron took delivery of two Hawker Hart trainers, on which all officers received dual instruction by means of a short conversion course, pending the arrival of new operational equipment in the form of the Hawker Demon, two-seat fighter. Based on the very successful Hart bomber, the Hart Fighter, later Demon, represented a modest redesign

⁴ It should be noted that in 1934 things were not as ‘black’ as some politicians, Churchill amongst them, were predicting. By the end of 1934 the Luftwaffe fielded twenty-two so-called ‘first line squadrons’. However, it should be emphasised that many were equipped with aircraft not capable of going to war and lacked the range to reach Great Britain from their bases in Germany. Consequently, the 560 aircraft available to Germany at the end of 1934 might have been better described as being useful for ‘operational training’ purposes only.

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of the airframe; deletion of all bombing equipment, the provision of two 0.303 inch (7.69mm) Vickers machine-guns synchronised to fire through the propeller arc, the installation of a super-charged, Rolls Royce Kestrel IIS in-line engine of 485-hp and a reduction in the height decking in the rear area around the air-gunner’s cockpit. The first production batch of Demons built by Hawkers were delivered to Fighter Command in February 1932. From 1936 onwards all Demons from the Boulton Paul production line were fitted with Frazer-Nash ‘lobster-back’ folding shield turrets to provide some degree of protection for the gunner from the slipstream, whilst earlier aircraft were modified to the same standard. The Demon was a fabric covered, all-metal aircraft of conventional Hawker design, that was capable of a maximum speed of 182 mph (292 km/hr) at 16,400 feet (5,000 metres), had a service ceiling of 27,500 feet (8,380 metres) and an endurance of 2½ hours. In addition to its gun armament, light bombs could also be carried under the wings. Although obsolescent, the Demon remained in front line RAF service until December 1938.

Little happened to change the pattern of Auxiliary life during the remainder of September and on into October when nine officers received periods of night instruction, with the AOC conducting yet another inspection in November. Over the weekend of the 15/16th December, the Squadron suffered its first serious accident since Flight Lieutenant Fogarty’s collision with the doctor’s house in Hampstead. Flying Officer Rendle and his passenger, Corporal Henderson, force landed Hart K3893 on Redhill aerodrome owing to bad weather. The Hart overturned on landing, slightly injuring Rendle, and badly damaging the aircraft. Corporal Henderson however escaped unscathed.

During the second half of the year the Squadron commissioned a number of Pilot Officers, AAF: Mr R.A.Skinner on the 24th July, Mr A.L.Maffey on the 3rd September, Mr E.N.Prescott on the 19th and Mr A.R.Fane de Salis on the 31st December. Flying Officer Chatterton, the Squadron’s first officer recruit, resigned his commission on the 24th October before entering the AAF Reserve of Officers, and a Regular, Flight Lieutenant E.H.M.David, was posted-in as an assistant adjutant to replace Flight Lieutenant Long who was posted to the RAF Staff College to attend a course.

1935

The proposals and agreement to proceed with Scheme ‘A’ for the expansion of the Metropolitan Air Force did not allow for the intervention of Adolf Hitler and Mr Winston Churchill. At a meeting with the Foreign Secretary,
Sir John Simon, in March 1935, Hitler informed the British Government that the *Luftwaffe*, officially established the previous month, had reached a strength of 1,888 aircraft and was set to expand further. At home, in a speech attacking the Government’s inadequate policies towards RAF expansion, Mr Churchill stated that the *Luftwaffe* would be numerically twice the size of the RAF by 1937. Though undoubtedly exaggerated, Churchill’s figures combined with Hitler’s boastful predictions of the *Luftwaffe*’s numerical superiority, persuaded the Government to reconsider its Air Force expansion programme. Consequently, during May, the Government approved Scheme ‘C’ that proposed to match the *Luftwaffe* in size by 1937. The emphasis of this programme was once again on bomber production, principally the Hawker Hart, which it was hoped would provide an interim type pending the introduction of more modern equipment, the Fairey Battle and Bristol Blenheim.

The year began quietly for 604 following the Christmas and New Year’s festivities. Sir Philip Sassoon visited Heath Brow on the 18th February and the CO was presented with the De Salis Trophy at the Middlesex Guildhall, Westminster on the 25th March, whilst on the 31st, Pilot Officer J.A.Davies managed to completely wreck Avro 504N, K2396, at London Colney during forced landing training.

After five years service with 604, during which he had seen it grow from embryo unit to the winner of the Esher Trophy, Squadron Leader Dore relinquished his command of the Squadron on the 8th April. His post as CO was filled by Flight Lieutenant Gabriel, on promotion to Squadron Leader. Squadron Leader Dore was granted a squadron leader’s (honorary wing commander) commission in the AAF Reserve of Officers, whilst Flying Officer Cherry was promoted to Flight Lieutenant to fill Squadron Leader Gabriel’s vacancy. Squadron Leader Dore expressed his feelings on his retirement from 604 thus:

‘Five years after Joe and I had “cranked up” the Squadron in a corner of a Hendon hanger, I handed over to Kit Gabriel. The Squadron gave me a farewell dinner at Heath Brow and a silver salver engraved with the signatures of my officers and the outlines of many types of aircraft we had flown. The Territorial Association presented my portrait by Frank Beresford to the Mess. The Air Council sent me a letter of thanks. A chapter of my life of which I am inordinately proud, had closed, but not for No.604 Squadron.’
Hawker Demon K4499 of 604 Squadron with its engine being run-up (note the airman holding the tail down) and showing the Squadron’s colours of red and yellow triangles along the fuselage side. K4499 was built by Hawker Aircraft Ltd at Kingston and does not appear to be fitted with the Fraser-Nash lobster-back shield for the gunner (RAF Museum, Hendon).

The following month, May, marked King George V’s Silver Jubilee. 604 sent a party of two officers and thirty-four airmen to Central London to participate in the celebrations.

June was a significant month for the Squadron with the delivery of its first Hawker Demon, two-seat fighter, with which to begin their transition to a proper fighter squadron. 604’s versions of the Demon were powered by the de-rated 584-hp, Rolls-Royce Kestrel engine, which were to cause the Squadron some problems during the next twelve months. Sufficient aircraft were available by the 30th for a section of four to be dispatched to Mildenhall, Suffolk, to participate in the Kings’ Review of the RAF. The aircraft were supported by an advance party of eight airmen who proceeded by road on the 29th, and the main party of four officers and fifteen airmen on the 4th July.

Personnel changes during the first half of the year comprised Auxiliary Pilot Officer commissions for Mr J.A.Davies (he of ‘504 wrecking fame) with effect from the 10th January and George Budd5 on the 15th June. Flying Officers Anderson and Hebard were promoted to Flight Lieutenant during June, and on the 28th Flight Lieutenant Statham relinquished his commission and was placed on the AAF Reserve of Officers. Finally, flying instructor,

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5 Later Wing Commander George Budd, DFC.
Flying Officer John Grandy\textsuperscript{6} joined from No.54 Squadron, Hornchurch, on the 15\textsuperscript{th} April.

On the 4\textsuperscript{th} August the Squadron decamped to Tangmere for their annual training camp. On the same day, 604 suffered a loss when Flying Officer Nimmo and his gunner, Aircraftsman 2\textsuperscript{nd} Class (AC2) S.J.Mabbutt, were killed when Demon K4502 crashed onto railway lines near Colindale Underground Station. This was the Squadron’s first fatal accident in five years of flying and, sadly, would not be their last. The AOC No.1 (Air Defence) Group conducted the first inspection of the year during the Summer camp, before the Squadron returned to Hendon on the 18\textsuperscript{th}.

September was not a good month for flying safety. On the 12\textsuperscript{th} Demon K4506 was damaged at Farnborough and required a repair when its top mainplane was written off, probably as the result of a ground-loop. Following this accident, the flying of Demons was restricted to ‘experienced pilots only, following a thorough flight test’, which would appear to indicate the Farnborough accident had, perhaps, more to do with the aircraft than the pilot. On the 28\textsuperscript{th}, Flying Officer R.A.Budd with Flying Officer Caunter as passenger, crashed de Havilland Moth, K1103, at Hendon. Both survived unhurt, but the damage to K1103 was sufficiently bad for it to be ‘struck off charge’. That same evening the Squadron held a dance at THQ which was well attended. It would be nice, therefore, to imagine that Messrs Budd and Caunter’s day ended on an enjoyable note!

On the 11\textsuperscript{th} October, Squadron Leader Gabriel presented a portrait of Air Commodore W.F.MacNecece Foster, CB, CBE, DSO, DFC, AOC No.1 (Air Defence) Group, to the Squadron. During December a number of lectures were delivered to Squadron personnel: Flight Lieutenant David on anti-gas measures and Flight Lieutenant G.F.Simond on super-charged engines. The latter being particularly relevant as the Squadron was experiencing trouble with the Kestrel engine, despite the flying ban being lifted on the 19\textsuperscript{th}. On the 18\textsuperscript{th} ten NCOs and airmen were given a conducted tour of the British Oxygen works at nearby Cricklewood.

Promotions and posting in the second half of the year brought Auxiliary Pilot Officer commissions for Mr P.C.Wheeler on the 27\textsuperscript{th} August, Mr M.R.Montague on the 5\textsuperscript{th} November and Mr J.W.Charters on the 24\textsuperscript{th} October. Flight Lieutenant John Cherry’s Auxiliary commission for a further year.

Political events began to deteriorate in the early part of 1936. Italian aggression in Abyssinia in 1935 and the failure of the League of Nations to act decisively to prevent an Italian invasion of the country, was matched only by Japanese belligerence in the Far East over Manchuria. In Europe, reductions in military spending by France and Britain had seriously weakened their ability and resolve to defend their Empires and maintain the peace in Europe. Germany having withdrawn from the League of Nations in 1934, and sensing that Britain and France were unwilling to interfere militarily, re-occupied the demilitarized Rhineland in March 1936. Although this action breached the terms of the 1919 Versailles Treaty, it brought no retaliation from France or Britain. These actions did however stir the Government to reassess the nation’s Air Force requirements yet again. During February 1936, the Cabinet approved the cancellation of Scheme ‘C’ and its replacement by Scheme ‘F’.\footnote{What became of Schemes ‘D’ and ‘E’ within the Air Ministry is not known.}

The new Scheme removed the Hart from its production schedules and instead emphasised four principal programmes that were to be accomplished by 1941: first, the building of significant aircraft reserves, second, the manufacture of sufficient bombers to equip forty-eight medium bomber squadrons and twenty medium/heavy bomber squadrons, third, the planning
for an RAF Volunteer Reserve (RAFVR) to supplement the AAF, whose numbers were no longer sufficient to meet the demands likely to be placed upon them, and, finally, the expansion and modernisation of the UK’s airfields.

The death of HM King George V in January provided yet another opportunity for the Squadron to demonstrate its prowess on Royal occasions. On the 28th, two officers and thirty-six airmen were dispatched to Central London to provide part of the ceremonial guard that lined the route for the state procession of the late King to Westminster Abbey. The earlier part of the month witnessed the arrival of two Regular officers, Flying Officer M.V.Gibbon, posted-in from No.56 Squadron, North Weald, for duty as an assistant adjutant and Flight Lieutenant H.C.Parker, attached to 604 for a period of instruction prior to taking up the post as the newly established No.611 (West Lancashire) Squadron’s adjutant. Flight Lieutenant Parker remained with 604 until early February when he departed for Speke, near Liverpool, to form 611. Flying Officer Grandy was attached to the Central Flying School, Upavon, to undertake a flying instructor’s course, after which he was posted in March as a flying instructor to the newly created No.9 FTS at Thornaby.

John Grandy subsequently went on to enjoy an illustrious career in the RAF: adjutant to the London University UAS, 1937, Chief Flying Instructor (CFI) at No.13 FTS, Drem, 1939, CO of the Central Gunnery School, CO of No.219 (night-fighter) Squadron, Catterick, in 1940, then of No.249 Squadron, in the same year, OC Training at No.52 Operational Training Unit (OTU), Debden, in 1941, Wing Commander Flying at Coltishall and Station Commander of Duxford, both in 1942, CO of No.73 OTU, Abu Sueir in 1943, and finally, CO of No.341 (Dakota) Wing in South East Asia Command from 1944 to 1945. Awarded the DSO in November 1945, John Grandy remained in the post-War RAF, eventually attaining air rank in January 1956 and CAS in 1967. He was appointed MRAF in 1971.

The flying restrictions on the Demon were lifted on the 17th April when each aircraft had undergone modifications by Rolls-Royce to its Kestrel engine and a five hour flying test had been completed. Unfortunately this did not appear to fix the problem, for during the following month (May) flying was again restricted pending the inspection of the Kestrel’s bevel gears. However, this was apparently not serious enough to prevent the Squadron participating in the Empire Air Display on the 23rd. The engines were apparently rendered ‘serviceable’ during June.

The Squadron was visited by a detachment of the Observer Corps on the 14th June and participated in the RAF Display on the 27th, where they performed Event No.5, ‘Air Drill’.
Commissioning and promotions during the first half of the year comprised the elevation of Flying Officer Gibbon to Flight Lieutenant on the 1st April and Pilot Officer Skinner to Flying Officer on the 7th, the commissioning of Mr John Selway and Mr John Cunningham as Pilot Officers, AAF, on the 5th and 7th May and the transfer of Flying Officer Rendle to the AAF Reserve of Officers.

The Air Force Reserves underwent significant changes in July 1936. Experience with the RAFSR and AAF units had shown that in terms of economy, recruiting success, professional standards, morale (esprit de corps) and popularity, the Auxiliary squadrons out-performed those of the Special Reserve. The AAF was less expensive to operate due to its having fewer regulars in its establishment, recruitment was easier as there were fewer constraints on the volunteers, professional standards were regarded as being higher, morale was also higher because each squadron was seen to belong to its members and in terms of popularity, several County Territorial Associations were keen to establish more AAF units. The realisation of these facts brought about the re-designation for administrative purposes on the 14th July 1936 of Air Commodore John Quinnell’s No.1 (Air Defence) Group, ADGB, as No.6 (Auxiliary) Group of the newly created Bomber Command and the gradual conversion of the five RAFSR squadrons. Nevertheless, since a number of the Auxiliaries were already equipped with fighter aircraft and their esprit de corps was more in keeping with a fighter tradition, it was agreed they should be transferred to a ‘Regular’ fighter group when judged to be ‘proficient’ in that role. The Air Staff’s decision may well have been influenced to some extent by Squadron Leader Dore, as he notes in his memoirs:

‘I had long held the opinion that the role of the Bomber was not suited to an Auxiliary Squadron. The two seater bomber was fast being ousted by the Heavies carrying a crew of four or five, which we should find difficult to keep together as a team. Moreover it would be more appropriate for us to defend our homeland as Fighters. Since the terms of our service at that time did not permit us to serve outside the United Kingdom in time of war. I put in a paper

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8 Later Wing Commander J.B.Selway, DFC.
9 Later Group Captain John Cunningham, DSO**, DFC*.
10 Jeff Jefford [1], op cit, pages 22 & 23.
11 Bomber Command was established on 14th July 1936 at Uxbridge.
12 Respectively: No.500 (County of Kent) on 25th May 1936, Nos.501 (County of Gloucester) & No.503 (County of Lincoln) on 1st May 1936, No.502 (Ulster) on 1st July 1937, & No.504 (County of Nottingham) on 18th May 1936.
Accordingly, for the last time the Squadron’s annual inspection, undertaken during the summer camp at Tangmere, was conducted by the AOC of No.6 (Auxiliary) Group on the 14th August, prior to its transfer to a Regular fighter group.

Whilst at Tangmere, a Territorial Army (TA) officer, Lieutenant Colonel Fawcus, was attached to the Squadron to gain experience working with the AAF. Sadly, Colonel Fawcus and his pilot, Pilot Officer Montague, were killed in a flying accident at Pagham Bay, Sussex, on the 10th.

September was a month of departures for 604. On the 7th the three Avro 504N ab initio training aircraft were replaced by a similar number of Avro Tutors. On the personnel front, four of the Squadron’s long-time officers, Flight Lieutenants Gibbon, Thomas and Cherry and Flying Officer Rendle completed their terms of service and relinquished their commissions, with Flight Lieutenants Gibbon and Cherry and Flying Officer Lawton transferring to the AAF Reserve of Officers. In compensation Messr’s P.C.Lawton and J.D.St Clair Olliff-Lee were granted commissions as Pilot Officers, AAF, and the Squadron gained its first medical officer (MO), Dr W.D.Coltart, MB, BSc, FRCS, LRCP, in the rank of Flying Officer. His impressive collections of professional qualifications and awards, particularly his Fellowship of the Royal College of Surgeons, must have been a great confidence to the Squadron members who might be in need of his services.

Flight Lieutenant Forgarty’s term of office as 604’s adjutant was also drawing to a close with the posting-in of his replacement, Flight Lieutenant R.C.Jonas from No.9 FTS, who arrived on the 19th October to begin the hand-over. With the departure of Flight Lieutenant Fogarty, the Squadron lost the second of the two men who were most influential in establishing 604 and guiding it through its formative years. It was the grounding in RAF ‘law’, administration and flying training provided by Joe Fogarty, combined with the Auxiliary spirit imparted under Alan Dore’s leadership, that enabled the squadron to mature in its later years to become one of Britain’s best night-fighter squadrons, with a war record that was second to none.

On the 30th November the AOC formally presented the Squadron with its badge and then used the occasion to break the news that they had won the Esher Trophy for the 1935/36 training year. The other significant event for 604 at the year’s end was the formal administrative transfer of the Hendon
Auxiliary Wing from Bomber Command to No.11 Group, Fighter Command on the 1st December. From this date onwards No.604 Squadron and its fellow Auxiliaries, Nos.600 and 601 squadrons, became an integral part of a regular fighter group, where they would remain until March 1945.  

Whilst the Squadron Operations Records Book, the ORB, notes the dates and early careers of officers, it completely ignores those who served in the ranks, perhaps because there were so many of them. It is also true that of those who did serve, very few recorded their time with 604. However we are blessed with the records of two who began their AAF careers in the ranks; Cecil ‘Jimmy’ Rawnsley and George Evans.

Jimmy Rawnsley’s experiences whilst holidaying in Germany with his wife Micky convinced him that war between the two countries was inevitable and the decisive battles would be in the air. He therefore decided to enlist in the AAF. Jimmy Rawnsley was not the ideal candidate for the AAF. He was married and comparatively old at thirty-two for a recruit and only five feet four inches (1.62 metres) in height. Jimmy was an electrical engineer employed by the London Electricity Board, with responsibilities for the maintenance of the supply for the Hendon, Golders Green and Mill Hill districts of London and therefore might reasonably be regarded as being in a reserved occupation. Nevertheless, as he describes, he presented himself at 604’s THQ:

‘I had to wait five months before I was summoned, along with a dozen other men, for an interview. A hawk-eyed Flight Lieutenant, a regular officer of the Royal Air Force, shrewdly looked us over as he explained the sort of job we were proposing to take on. He left us with no illusions. We were to join as aircraft-hands, general duties, and our work would be sweep out the hangers, clean oil trays, and push the aircraft around. We would be required to attend at the aerodrome every week-end, and two evenings a week for lectures at Town Headquarters …… “you realise of course” he said “that you won’t have any chance of flying?” Maybe not, but Jimmy was in.’

15 Later, Squadron Leader Jimmy Rawnsley, DSO, DFC, DFM*.
16 Later Flight Lieutenant George Evans, DFM.
In 1936 George Evans was an apprentice engineer at a firm manufacturing parts for motor vehicles, where two of his workmates, George Botterill and Eric Russell, were already members of 604 Squadron. As 604’s Hendon base was not too far from his home in Finchley, George decided to apply to the AAF rather than the TA:

‘George and Eric told me that they attended at Hendon on most week-ends and two nights a week at Town Headquarters, which was situated in a large country-style house on Hampstead Heath, immediately behind the very well known pub, Jack Straw’s Castle. Recruits were allowed to select a trade - Engineer, Fitter, Armourer, Rigger, Air-gunner, etc. Once you were approved in your trade you were trained in your spare time to efficiently perform your duties in both practical and theoretical aspects of that trade and, what is more, you actually got paid for your efforts! ..... I duly applied and eventually was accepted. Now in hindsight, it must have been one of the best decisions that I ever made. I certainly never had any regrets ..... It was June 1937 before I was sworn in as Aircraft and General
Duties ..... the lowest form of humanity in the Auxiliary Air Force - but no matter, I’m in!\textsuperscript{18}

1937

Towards the end of 1936 and only nine months after their last review, the Government cancelled Scheme ‘F’ following a reappraisal of Luftwaffe strength. In November 1936 the Cabinet endorsed Scheme ‘H’ to achieve parity with the Luftwaffe by March 1939 by fielding even more bombers (1,631).

The year 1937 was a quiet period for 604. The Esher Trophy was formally presented to the Squadron at Hendon on the 22\textsuperscript{nd} February by Lord Swinton, the Secretary of State for Air, followed no doubt with a very big party! One the 27\textsuperscript{th} March, four aircraft undertook a ‘long-distance’ flight from Hendon to Leuchars, Fife, and back on the 27\textsuperscript{th}.\textsuperscript{19} As part of the celebrations for the Coronation of HM King George VI, and no doubt because they were conveniently located around the periphery of the Capital, the Squadron sent a detachment of three officers and fifty airmen to Central London for parade duties. During this period, the 10\textsuperscript{th} to the 13\textsuperscript{th} May, the detachment was accommodated in a tented camp in Kensington Gardens.

In order to gain some experience of living and working with a Regular RAF squadron, Flight Lieutenant R.A.Budd was attached during July to No.1 Squadron at Tangmere, flying a mixture of Hawker Furies and Gloster Gladiators. Flight Lieutenant Anderson was similarly attached to No.23 Squadron at Northolt on Demons, as part of his annual training commitment. The Squadron experienced a change of venue for their summer camp. Instead of the usual and no doubt predictable trip to Tangmere, 604 was directed to undergo armament training at No.4 Armament Training Camp, West Freugh, near Stranraer, Scotland. On the 1\textsuperscript{st} August the unit embarked by air, rail and road for West Freugh where they spent the next fifteen days being instructed on the techniques and tribulations of air-to-air gunnery. At the beginning of the Camp, Flight Lieutenant Biggar reported for duty as a flying instructor and assistant adjutant.

West Freugh was George Evans’ first experience of a summer camp:

\textsuperscript{18} George Evans, Bless ‘Em All, (1998), pages 12 & 13.

\textsuperscript{19} It should be noted that the ORB infers this journey was undertaken in a single day - it might well have taken two.
We travelled from Mill Hill Station on a special train and it took a whole night to get there. The scenery as dawn broke was quite magnificent. It was first experience of my country north of Watford! ….. My main memories of West Freugh were hours spent sitting in the bottom of the airfield (we didn’t have runways) waiting to retrieve the drogues ….. One plane towed the drogue on a very long cable and then the crew of a second plane would shoot at the drogue. I was armed with a white flag on a pole. When I judged the time was right, I had to drop the flag and the pilot released the drogue. Then I had to go out and retrieve it and take it to a tent for the bullet holes to be counted, and for marks to be awarded to the responsible marksman. Yes, mine was a highly responsible job! I don’t know what 604 would have done without me at West Freugh!"20

On joining No.11 Group 604, was allocated to the North Weald Sector as its war station. In order to establish itself as a fully fledged fighter squadron it was necessary to integrate its operations with those of the other squadrons in the sector: Nos.29 (Demon), No.56 (Gladiator) and No.151 (Gauntlet) at North Weald and No.64 (Demon) at Martlesham Heath. Accordingly, during October, ‘A’ and ‘B’ Flights were detached to North Weald to undertake sector training with the other squadrons. On the 14th November the AOC No.11 Group carried out his first annual inspection of the Squadron. It must have gone well, since the Squadron was advised they had been awarded the Esher Trophy for the third time - it was becoming a habit!

1938

By the middle of 1937 it was obvious to many that the cost of rearmament was becoming unsustainable (Scheme ‘H’ was estimated to cost £664 million - in excess of £19 billion in today’s money). Having singularly failed to arrest the Luftwaffe’s development by out-building it, the Treasury imposed a halt and instituted a review by Sir Thomas Inskip to establish the imperatives for Imperial and Home Defence. Inskip’s Review of Defence Expenditure, published on the 9th December 1937, marked a fundamental change in the direction of the RAF. It concluded that rather than trying to ‘out-bomb’ the Germans, the RAF should endeavour to ‘prevent the

20 George Evans, op cit, pages 16 & 17.
Germans knocking us out
d21
by adopting a more defensive posture. This statement thereafter concentrated Air Force spending and production on fighters and air defence. Scheme ‘L’ approved by the Cabinet in April 1938, saw for the first time, an increase in the manufacture of fighters to 600 machines with priority over that of bombers. This was a significant event for the Country, which was shortly to witness the first of several crises in the coming year.

1938 was also a significant year for 604. It began optimistically on the 28th March when Air Chief Marshal Sir Hugh Dowding, GCB, GCVO, CMG, ADC, AOC-in-C, Fighter Command, presented the Esher Trophy to the Squadron, but matters on the international scene contrived to make the future a more gloomy prospect as the year progressed.

On the 12th March, German troops entered Vienna, and Austria joined Germany in Anschluss, again without interference from the European powers. Having met with little opposition, Hitler turned his attention to the so-called plight of the 3,000,000 Sudeten Germans of Western Czechoslovakia.

With the Czech Government hostile to Germany’s approach and fully capable of defending itself, and having alliances in place with France and Russia, Hitler resorted to a campaign of threats and internal agitation as a means of ‘restoring’ the Sudetenland to Germany. A weak and divided French government unwilling to become involved, and the Czechs not wanting Russian troops in their country, the job of resolving the crisis fell to Britain’s Prime Minister, Neville Chamberlain. Pre-warned by his intelligence agencies that Hitler was determined to attack Czechoslovakia during September, he believed that war could be averted if Germany’s grievances were discussed and settled. Chamberlain flew to Berchtesgaden on the 15th September, where he proposed the establishment of a plebiscite to provide legitimacy for the return of the Sudetenland to the Reich. Returning home to obtain the agreement of his government and that of the French Cabinet, Chamberlain went back to Germany on the 21st with confirmation of his plebiscite proposal. Hitler, however, objected to the plan on the grounds that its implementation was too slow and those areas that were already 50% German speaking should be occupied immediately by German troops. The following day Chamberlain agreed to Hitler’s proposals before returning home.

The situation was by now extremely grave. With the very real prospect of war in Europe, Chamberlain spoke to the British people on the 27th:

'How horrible, fantastic, incredible it is that we should be digging trenches and trying on gas masks, because of a quarrel in a faraway country between people of whom we know nothing.'\textsuperscript{22}

On the 27\textsuperscript{th} September, the TA and the Royal Naval Reserve were mobilised and the AAF embodied into the Regular Air Force. On the 29\textsuperscript{th}, 604 moved to its war station at North Weald, where preparations for defending the UK, including the camouflaging of its aircraft, went ahead. George Evans, by now an air-gunner, describes the scene at North Weald:

'We arrived at North Weald on a cold and damp autumnal evening. It was the 29\textsuperscript{th} September. We staked our Demons down - a gust of wind could turn these little machines over! We then gathered in the hanger for further orders. I'll never forget our feeling of utter disgust when the CO announced that it was necessary for the aircraft to be guarded by responsible people on this first night, so the air-gunners should carry out this duty. What? My God, here we are about to be bumped off, and we have to do guard duty?!! All that night, the lights were on in the hangers and there was loud hammering and banging going on throughout that night.'\textsuperscript{23}

George also had something to say about their chances against the \textit{Luftwaffe}:

'Here we were about to go to war to fight the biggest air force in the world and all we had were antiquated biplanes with one rear gun, for which we had no ammunition pans. By then (September 1938) I had done a total of fifteen hours in the air, armed mostly with camera guns which were hardly likely to be effective against the mighty \textit{Luftwaffe}!'\textsuperscript{24}

Fortunately for LAC Evans and 604, the RAF was not going to be called on to defend the realm in 1938. On the 28\textsuperscript{th} Hitler invited Chamberlain, Edouard Daladier, the French Prime Minister and Benito Mussolini to a conference at Munich to settle the Sudetenland question. The following day Chamberlain flew to Munich, where the four men discussed and agreed the

\textsuperscript{22} Neville Chamberlain in a radio broadcast on 27\textsuperscript{th} September 1938, quoted in Martin Gilbert’s \textit{History of the Twentieth Century, Volume Two, 1933 - 1951}, (Harper Collins, 1998), page 201.

\textsuperscript{23} George Evans: \textit{op cit}, page 27.

\textsuperscript{24} \textit{Ibid}, pages 27 & 28.
occupation of the Sudetenland by Germany without consulting the Czechs. Hitler informed Chamberlain and Daladier that honour was settled and he had no further territorial demands in Europe. Returning the following day with the phrase ‘Peace in our time’ ringing in everyone’s ears, the armed forces were stood down, the reservists demobilised and 604 returned to Hendon. On the 7th October the Squadron was officially ‘dis-embodied’ from the Regular Air Force.

What remained for the year proved uneventful. The AOC No.11 Group, held a delayed annual inspection on the 20th November, and on the 23rd of the following month, a Regular officer, Pilot Officer P.E.Lewis, was posted-in from CFS.

1939

Hitler’s word concerning his disinterest in further territorial gains in Europe proved short lived. France and Britain’s unwillingness to become involved in war over Czechoslovakia provided Hitler with the opportunity to break-up what was left of the country. In March 1939, with the various ethnic factions quarrelling amongst themselves, Hitler seized most of what was left of Czechoslovakia, including the capital, Prague, before allocating the remainder between Poland and Hungary. Hitler’s action had a profound effect on Chamberlain who could now see that his policy of ‘appeasement’ towards the dictators had failed. Germany’s occupation of Prague signalled the end of ‘paper guarantees’ with Hitler and the need for an Anglo-French strategy to contain the Fascist powers, Germany and Italy, and prevent their further expansion in Europe. The stand that Britain and France decided to take was that of Polish independence.

Sandwiched between the totalitarian states of the Soviet Union and Germany, Poland was threatened on one hand by a Soviet government wishing to absorb the neighbour, who, during the Russian Civil War, had invaded their country, and Germany, hoping to recover the lands she had lost at the end of World War One. Chamberlain therefore called for a declaration from the four powers, Britain, France, the Soviet Union and Germany, guaranteeing Polish independence. For a variety of reasons this failed, and fearing that Poland might be attacked, Chamberlain, on the 31st March, gave a public declaration of Britain’s support for a free Poland and backed this by a guarantee of military assistance. There was now no going back for the Country, or 604, as Jimmy Rawnsley realised:

‘The year of respite we had between the false hopes of Munich and the bitter facing of its reality was, in fact, put to good use so far as the squadron was concerned. By the time we were called up again -
on 24th August, 1939 - we had been re-equipped with Bristol Blenheims.25

In the late autumn of 1938 HQ Fighter Command began the re-equipment of several two-seat fighter squadrons with the fighter version of the Blenheim. Intended to operate in the long-range, day-fighter role, the standard bomber version, the Blenheim Mk.I, was modified by the addition of a ventral pack containing four 0.303 inch (7.69mm) American Browning machine guns, complete with 2,000 rounds of ammunition (500 rounds per gun). The gun-packs, built in the workshops of the Southern Railway at Ashford, Kent,26 were attached to the bomb-beams, and the resulting ‘Blenheim fighter’ was known as the Mk.If. The gun turret with its 0.303 inch (7.69mm) Vickers K machine-gun was retained, but later removed to save weight and maintenance effort. The Blenheim was a conventional, all-metal, stress skinned, cantilever, monoplane, powered by two 840-hp Bristol Mercury VIII radial engines, which gave it a top speed of 260 mph (418 km/hr) at 12,000 feet (3,660 metres), a service ceiling of 27,280 feet (8,315 metres) and an endurance of 5½ hours - figures that were reduced when the equipment boxes for AI Mk.III were installed. Four Regular squadrons, Nos.23, 25, 29 and 219 and two Auxiliary squadrons, Nos.600 and 604, were converted to the Blenheim fighter.

604 took delivery of its first Blenheims in January 1939 and said ‘goodbye’ to its Demons the same month. On the 12th February, Squadron Leader Gabriel stood down as CO in favour of Squadron Leader Richard Budd, the step-brother of Flying Officer George Budd.

The re-equipment of 604 with the Blenheim, and not, as with some Auxiliaries, with the Spitfire or Hurricane, provided the gunners with one consolation. Having a turret on the Blenheim meant they still had a job and a more comfortable ‘office,’ as Jimmy Rawnsley, by now an air-gunner, describes:

‘In this new aircraft (the Blenheim) the gunner was housed in a power-operated turret just aft of the wing, leaving a vulnerable blind spot behind and beneath the tail where an attacking fighter could neither be seen nor fired at. We pretended to overlook this defencelessness at first, happy in the excitement of being surrounded by so much expensive machinery. And there was the novelty of being able to swing the gun with the touch of a finger instead of

26 The Ashford Works would go on to build 1,300 Blenheim gun-packs for the RAF.
having to battle mightly with the effects of wind and the force of gravity. But we could not overlook the fact that we still had only one small machine-gun to match the much larger and more powerful cannon of the modern fighters. ... So it was with thankfulness that we stoned and oiled our new guns, and hoped that the rumoured new two-seat fighters (*perhaps thinking of the Defiant*) would appear before things got too hot.  

For George Evans the Blenheim was less appealing:

‘On that first trip I soon discovered that the air-gunner’s role in the Blenheim was completely different from what we had been used to in the Demons. I was now enclosed in a hydraulically operated turret, with a comfortable seat. I had an altimeter, an airspeed indicator, and oxygen supply for high flying. After the Demon, this was the height of luxury, but having said that, I will always have the happiest memories of my flying in the little open cockpit aeroplanes.’

The spring and early summer of 1939 were spent converting the crews to the Blenheim and taking part in a whole series of co-operative exercises: interceptions and fighter affiliations at North Weald, air raid precautions (ARP) with the Borough of Wembley, culminating in July with the wholesale move of the Squadron to Royal Naval Air Station (RNAS) Ford, Sussex, for the annual training camp. Whilst at Ford (HMS *Peregrine* to the Royal Navy) the Squadron was visited by the AOC and another Regular, Flight Lieutenant Locker, was posted-in as assistant adjutant and flying instructor.

Whilst 604 were undertaking their summer camp events were unfolding across the Channel. The 1919 Treaty of Versailles sought to re-establish Poland as a country and provide her with access to the Baltic, by awarding her the port of Danzig and a corridor through Germany, by which the Poles might reach the city. The so-called ‘Danzig Corridor’ was an awkward arrangement that disconnected a part of Prussia from the rest of Germany and naturally irritated the German people. Hitler tried to negotiate the return of the port, but the Polish Government refused to discuss the matter. This, then, placed the British Government in a difficult position,

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28 George Evans, *op cit*, page 30.

41
since they, and the French, wished the Polish and German Governments to come to some sort of accommodation to prevent them having to go to war should Germany invade Poland. The Poles only real hope was the Soviet Union. However, equally fearful of Germany and feeling badly treated by Britain and France and militarily weak, Russia sought instead to negotiate with Germany. On 24th August the two countries signed a non-aggression treaty, the Ribbentropp-Molotov Pact. The Pact was beneficial to both sides. Hitler was assured of Soviet neutrality if he intervened militarily in the West. The Soviet leader, Joseph Stalin, was given diplomatic clearance to ‘expropriate’ the Baltic States,\(^{29}\) Finland and Eastern Poland and absorb them into the Soviet Empire. Now assured that his back was well and truly covered, Hitler invaded Poland on the morning of the 1st September and, following a half-hearted attempt by Mussolini to avert a general conflict, Britain and France declared War on Germany two days later, as Jimmy Rawnslrey recalled:

‘That week before war was declared was our last at Hendon. Along with the rest of the country, we sat around and waited, and from the aerodrome we could see all day long the trains steaming north,\(^{29}\) Latvia, Estonia and Lithuania.
crowded with children being evacuated from London. Time was heavy on our hands. But after a few days the squadron was moved from Hendon to the aerodrome at North Weald, in Essex, our pre-arranged war station, and it was there on 3rd September 1939, as we stood on the grass by our aircraft, that we heard the tired voice of the Prime Minister as it came from a portable radio set. Now there could be no more pieces of paper, and that the time for words had passed. We knew that at last we were in for what we had been expecting.”

Aware that the political situation was sliding inexorably towards war, the Government called the reserves to the colours and embodied the AAF once again into the Regular Air Force on the 24th August. Embodiment was completed by the 26th, with all personnel present and accounted for, and the Squadron fully mobilised by the 1st September. The Squadron’s establishment in early September 1939 was as follows:

<table>
<thead>
<tr>
<th>Pilots:</th>
<th>‘A’ Flight</th>
<th>‘B’ Flight</th>
</tr>
</thead>
<tbody>
<tr>
<td>F/Lt M.F.Anderson (OC)</td>
<td>F/O J.Cunningham (Deputy OC)</td>
<td></td>
</tr>
<tr>
<td>F/O S.H.Skinner (Deputy OC)</td>
<td>F/O E.W.Prescott</td>
<td></td>
</tr>
<tr>
<td>F/O G.O.Budd</td>
<td>F/O R.H.Scott</td>
<td></td>
</tr>
<tr>
<td>F/O P.W.D.Heal</td>
<td>P/O A.S.Hunter</td>
<td></td>
</tr>
<tr>
<td>P/O C.D.E.Skinner</td>
<td>P/O M.D.Doulton</td>
<td></td>
</tr>
<tr>
<td>P/O H.Speke</td>
<td>Sgt R.E.Havercroft</td>
<td></td>
</tr>
<tr>
<td>Sgt P.E.Jackson</td>
<td>Sgt Forrest</td>
<td></td>
</tr>
<tr>
<td>Sgt A.W.Woolley</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: All the sergeants were posted to the Squadron from No.11 Group’s Aircrew Pool, St Athan, with no previous flying experience on Blenheims.

Aircraft Strength - 18 x Bristol Blenheim Mk.If (‘A’ Flight 9, ‘B’ Flight 7, Reserves, 2).

Commanding Officer - Squadron Leader R.A.Budd, AAF.
Adjutant - Flying Officer J.D.St Olliffe-Lee, RAF.
Medical Officer - Flying Officer W.D.Colart, AAF.
Stores Officer - Flight Lieutenant F.A.Mitchell, AAF.

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31 *No.604 Squadron Diary/ORB*, page 20.
Squadron call-sign - ‘Trophy’

Squadron identification code - ‘NG’

It was with these pilots, and the ground crews that supported and sustained them, that 604 was to go to war in September 1939 and emerge some six and a half years later as one of the RAF’s finest night-fighter squadrons.
CHAPTER THREE

The Phoney War to the Battle for France,
September 1939 - June 1940

Against all the dire predictions, World War Two began with a whimper, rather than with a bang. There were no air raids and Hitler’s panzer divisions did not roll-up Europe in a *Blitzkrieg*. France lay protected behind the Maginot Line and, alongside Britain, maintained control in the Mediterranean, whilst Franco’s Spain, the Scandinavian countries, Belgium and Holland remained neutral. Fascist Italy, although a signatory to the ‘Pact of Steel’ with Germany, but pessimistic regarding Hitler’s military ability, decided that discretion was the better part of valour and opted, for the time being, for neutrality. Overseas, the Dominions; Australia, New Zealand, Canada, South Africa and Imperial India, pledged material and manpower support to the Home Country and the continuance of mercantile trade.

Only at sea was the war brought home with immediate effect. On the day war was declared, 3rd September 1939, the German submarine *U*-30, sank the liner *Athenia* in the North Atlantic with the loss of 112 passengers and crew, of whom twenty-eight were American. In the South Atlantic the German pocket-battleship, *Admiral Graf Spee*, broke into the South African and South American shipping routes and sank nine ships of 50,089 tons, before being brought to action in the estuary of the River Plate on the 13th December and destroyed. On the 17th September the aircraft carrier *Courageous*, the flagship of a small anti-submarine group, was herself torpedoed by *U*-20 in the South-West Approaches. And finally, on the 14th October, *U*-47, with great skill and daring penetrated the defences of the Home Fleet’s anchorage at Scapa Flow and sank the elderly battleship *Royal Oak*, with the loss of 833 of her crew. The U-boats did not have things all their own way. On 14th September *U*-39 executed an attack on the aircraft carrier *Ark Royal*, but for some reason, probably faulty torpedoes, her commander missed the target, only to be destroyed in turn by the counter-attack from the destroyer escort.

The greatest threat to Britain on the outbreak of war therefore was the submarine, as these vessels clearly possessed the potential to disrupt the Country’s lines of communication and supply. By the end of September the Government instituted the convoy system for the escort of merchantmen, whilst the Royal Navy struggled to provide the escorts and man them.
Ironically it was not the much-vaunted Luftwaffe that was the cause of the greatest headache to Government and the public. It was a small, highly trained, well motivated and well equipped branch of the Kriegsmarine (War Navy) that was to attempt to deliver the ‘knockout blow’ to Great Britain.

By contrast the land and air battles got off to a much slower start, with that period of the war known to public and press alike as the ‘Phoney War,’ or ‘Sitzekrieg.’ The air forces of Britain and Germany gingerly probed each other’s defences and restricted their bombing to clearly defined military targets. Bomber Command flew its first sorties of the war on 4th September against coastal targets of the German Kriegsmarine in and around Heligoland and the naval anchorages at Wilhelmshaven. It continued bombing maritime targets until December 1939, when losses to Luftwaffe fighters forced an end to day-light operations and a switch to night-bombing. The Command’s other priority, leaflet-dropping over Germany proper, began during this period and as far as is known, never seriously injured a single German.

From Germany’s perspective, the only viable area of operations for its bombers and maritime aircraft, based along the German west coast between Holland and Denmark, was the east coast of Britain and from Scapa Flow in the Orkneys to the Scilly Isles in the extreme south-west. In the main these operations comprised strikes against coastal shipping, mine-laying operations within and around the principal British ports and estuaries and reconnaissance flights, particularly over Scotland. These achieved little in the way of serious damage and loss of civilian life, with perhaps the single exception of coastal mine-laying, which claimed a number of ships following the introduction of the magnetic mine. German raids in the autumn did, however, serve one useful purpose, they exercised Fighter Command’s tracking and reporting network and gave its pilots and their controllers experience in placing their aircraft in the right tactical positions to intercept and destroy the enemy.

The defence’s greatest asset in the forthcoming air war was undoubtedly the development and deployment of radar,¹ both on the ground and in the air, and the command, control and communications network that supported it. The ground Chain Home (CH) network for day-fighter direction had grown considerably since its first use in the September 1936 air defence exercises. By the summer of 1936 planning was advanced for the

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¹ The term ‘radar’ or Radio Detection and Ranging, was not introduced until America joined the conflict late in 1941. The correct term in the early days of the War was RDF - radio direction finding - however, with the universal acceptance of the term, we will employ the term ‘radar’ throughout this narrative.
installation of the first phase of five CH stations\textsuperscript{2} covering the Thames Estuary, with a proposed completion date of early in 1937.\textsuperscript{3} Although this date was not met, three stations\textsuperscript{4} were up and running in time for the 1937 exercises in August of that year. That same month Treasury approval was granted for an expansion of the network to twenty stations, under the designation Air Ministry Experimental Station (AMES) Type 1. This second phase would provide protection from Portsmouth in the south-west, north to the Firth of Forth and Scapa Flow, with the ability to track bomber aircraft at a height of 15,000 feet (4,572 metres) out to a range of 100 to 200 miles (160 - 320 km) depending on conditions. By the outbreak of war, all twenty stations were completed, on twenty-four hour watch and passing information (aircraft plots) to Fighter Command’s Filter Room at Bentley Priory, near Stanmore, to the north-west of London. Fighter Command’s radar stations and fighters were to remain on constant watch for the next six years.

Whilst the installation team at Bawdsey under Arnold Wilkins struggled to complete the CH chain before hostilities commenced, another under the leadership of Dr Edward Bowen strove to condense a radar set sufficiently for it to be installed in an aircraft. The idea for an airborne radar set sprang from the fertile mind of Mr Henry Tizard,\textsuperscript{5} who in a letter to Air Vice Marshal Hugh Dowding, the Air Ministry’s Member for Research & Development, outlined his ideas for the interception of aircraft by day and by night. This paper, dated 27\textsuperscript{th} March 1936, stressed the need to destroy the enemy wherever he was found by means of a radar set installed in a fighter aircraft. Tizard’s ideas were in turn passed to the Superintendent of the Air Ministry’s Research Station at Bawdsey Manor, Suffolk, Mr Robert Watson-Watt,\textsuperscript{6} for him to investigate the feasibility of fitting a radar set in an aircraft for interception purposes. The resultant Airborne Group was set-up under the leadership of ‘Taffy’ Bowen in March 1936 to assess the practicability of the idea. Using an Avro Anson as a flying laboratory, Bowen’s group demonstrated the functionality of both air intercept (AI) and air-to-surface vessel (ASV) radar during September 1937. By May 1939 a practical radar was installed in a Fairey Battle light-bomber and demonstrated to the AOC-in-C, Fighter Command, Sir Hugh Dowding. It was Dowding, in conversation with Bowen in June 1938, who decided that a

\begin{itemize}
\item \textsuperscript{2} Bawdsey, Canewdon, Dover, Great Bromley and Dunkirk (Kent).
\item \textsuperscript{3} The last two stations, Great Bromley and Dunkirk were not completed until August 1938, just in time to monitor Mr Chamberlain’s aircraft flying to Germany the following month.
\item \textsuperscript{4} Bawdsey, Dover and Canewden.
\item \textsuperscript{5} Later Sir Henry Tizard, KCB, AFC, FRS.
\item \textsuperscript{6} Later Sir Robert Watson-Watt, KB, FRS.
\end{itemize}
twin-engined aircraft capable of accommodating a crew of two or three (pilot, navigator and radar operator), with good endurance and a heavy armament, was best suited to the night-fighter role. His preferred choice was the Bristol Beaufighter, which met the criteria, but was still in the initial stage of its development. As an interim solution it was agreed to install AI radar in the Blenheim II, by which means it was hoped that fighter crews might gain valuable training and experience of night-fighter operations.

In the summer of 1939 the first AI radar, AI Mk.I, was released to Fighter Command for installation in the Blenheims of a special flight of No.25 Squadron, at Northolt. On the evening war was declared, two Blenheims of No.25 Squadron stood guard over London in anticipation of a strike by German bombers that never came. A second, series production version of AI Mk.I, AI Mk.II, was delivered to Fighter Command in February 1940 for installation in a limited number of Blenheims of Nos.23, 25, 29, 219, 600 and 604 Squadrons (two/three sets apiece). This version unfortunately suffered from poor minimum range performance which rendered them useless for anything other than training. Deliveries of the first ‘series’ production AI set, AI Mk.III, to No.32 Maintenance Unit (MU), St Athan, began in June 1940 and it was with these sets that the embryo night-fighter squadrons went to war in the summer of 1940.

1939

During September the Auxiliary Wing at Hendon was broken up. 600 Squadron had moved to Northolt in late August, whilst 604 moved to North Weald on the 1st and 601 departed for Biggin Hill the following day. A care and maintenance party of one sergeant and forty-eight airmen (eight regulars and forty auxiliaries) was left behind at Hendon to ‘clear-up.’ All personnel at North Weald were accommodated in tents, with the aircraft located on a dispersal along the northern boundary of the airfield. A Bellman hanger adjacent to No.56 Squadron’s hanger was used for aircraft inspection and maintenance. 604 shared North Weald with two other squadrons, the Hurricane equipped No.56, commanded by Squadron Leader E.V.Knowles and No.151 by Squadron Leader E.M.Donaldson, also Hurricane equipped. Both 56 and 151 maintained detachments at Martlesham Heath. Personnel strength was expanded on the 3rd by the

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7 The Beaufighter prototype, R2052, did not fly until 17th July 1939 and was cleared for RAF service on 26th July 1940.
8 Later Air Commodore E.M.Donaldson, the CO of the RAF’s High Speed Flight in 1946 and the air correspondent of the *Daily Telegraph*. 
48
Flying Officer Hugh Speke, from a photograph taken prior to his award of the DFC. Speke was killed in a flying accident on 26th July 1941 (604 Squadron Archive).

arrival of ten volunteer airwomen from No.11 (RAF) Company, Women’s Auxiliary Air Force (WAAF) and aircraft strength was improved with the delivery on the 8th of four new Blenheims.

The Squadron’s war record got off to a roaring start the same day, when Pilot Officer Speke, in Blenheim L6615, crashed on the approach to the airfield following his return from a training flight, cartwheeled and finished up in a hedge opposite 604’s dispersal. Speke fortunately escaped unhurt. A second accident on the 18th concerned the CO, Squadron Leader Richard Budd, who landed L4907 ‘wheels-up’ at the conclusion of a weather flight. His gunner, Corporal Love, survived with nothing worse than a good shake-up. George Evans comments on Speke’s crash:

‘Our first casualty was F/O Speke9 with Sid Shirley in the back seat. “Spekie” undershot the airfield coming into land and touched down a bit short in a field, but fortunately the only casualty was a cow! We all trooped out in the morning to inspect the wrecked Blenheim and

9 There appears some confusion as to Hugh Speke’s rank on this occasion. George Evans gives it as Flying Officer in his book, Bless ‘Em All, page 37, and this is confirmed in Kenneth Wynn’s, Men of the Battle of Britain, page 473, but the 604 Diary states Speke’s promotion to Flying Officer as 6th December 1939. By way of explanation, it is possible that Speke was promoted to Acting Flying Officer on 24th August 1939 and substantitively promoted on 6th December.
the cow. The poor beast was laying on its back and was blown up like a barrage balloon.’

An air raid alarm generated at 07.00 hours on the morning of the 6th had ‘A’ Flight’s aircraft patrolling Chelmsford and ‘B’ Flight overhead North Weald. The alarm was probably spurious as the enemy failed to put in an appearance. Although designated as a long-range, day-fighter squadron, much of 604’s time during the remainder of the month was taken up with intensive night flying training.

The Squadron’s first wartime casualties occurred not at North Weald, but at Manby in Lincolnshire on the 13th October, where two air gunners, LAC’s Melvin and Warry, attending a course at No.1 Air Armament School, were killed when the Fairey Battle they were flying in crashed. More was to follow. On the night of the 18th, Flying Officer Prescott and his gunner, LAC ‘Robbie’ Roberts, were killed when their aircraft undershot approaching Croydon Airport in bad weather. On the 20th, news was received of the death of the Squadron’s last regular pre-war adjutant, Flight Lieutenant W.A.L.Locker, who was killed instructing a pupil in a Miles Master. Flying Officer Prescott was buried at Redhill on the 23rd and LAC Roberts at Hendon the following day, both with full military honours. Flying Officer George ‘Georgie’ Budd very nearly repeated Prescott’s accident a few days later as George Evans recalls:

‘I vividly remember the occasion we were approaching to land at North Weald. We were flying down an avenue of trees in the forest, and I noticed the trees were above us! I casually said to Georgie, “Should the trees be above us, Sir?” “Oh my God” said Georgie as he yanked the stick back and we quickly gained altitude. It was very nearly a carbon copy of the Prescott/Roberts prang.’

On the lighter side, 604’s ‘tally’ was opened on the 4th October when Flying Officers Cunningham and Selway were instrumental in the destruction of two errant barrage balloons. The month was also one for visits. The Secretary of State for Air, Sir Kingsley Wood, MP, accompanied by the Chancellor of the Exchequer, Sir John Simon, MP, on the 8th. The AOC-in-C, Air Chief Marshal Sir Hugh Dowding inspected the Squadron at their dispersal on the 10th, as did Viscount Trenchard and the AOC No.11 Group, Air Vice Marshal Gossage, on the 15th. What was described as

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10 George Evans, op cit, page 37.
11 Ibid, page 38.
George Budd from a photograph taken when he was a Flight Lieutenant wearing the ribbon of the DFC (Margaret Budd).

‘atrocious bad weather’ compounded by ‘very leaky tents’ persuaded someone to move the airmen into 151’s hanger and a second Bellmen, an action that was ‘much appreciated by all.’ However, the bad weather persisted and it was not until the Squadron moved into new barrack blocks on the 17th October that the problem was finally resolved to everyone’s satisfaction. On the 22nd, 56 Squadron departed North Weald to join their detachment at Martlesham.

At the end of the month the Squadron learned they were to be used exclusively for night-fighting, but in what circumstances and with what equipment they were not told, other than night flying practise was now to continue as a routine. It was nevertheless clear to the crews that the Blenheim was totally unsuited to day fighting, as it lacked the performance, manoeuvrability and firepower required of a day-fighter and hence the recourse to night-fighting.

The bad weather not only affected the men, but also the aircraft and accounted for another pilot, Pilot Officer Ross, killed in a flying accident on the 17th November. The dampness got into the aircraft’s instruments and all had to be removed, cleaned, overhauled and re-installed in the early part of the month. The opportunity was also taken to fit reflector sights to the Vickers ‘K’ gun in the turret and flash attachments to the Brownings in the fuselage tray. Problems were also encountered with the ammunition belt

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12 No.604 Squadron Diary/ORB, page 22.
feeds for the Brownings. During the first half of November the weather situation failed to improve, but this did not deter the Squadron from implementing an extensive programme of flying training. A second crew were lost that month, when Flying Officer Wheeler and his gunner, LAC Oliver, crashed in Blenheim L6601, near to the Bell Hotel in Epping Village, whilst on the approach to North Weald. Both were killed.

It would appear that the *Luftwaffe* took the opportunity of the bad weather to penetrate the sector. The first incursion occurred on the 8\(^\text{th}\), but the aircraft quickly moved on. Three ‘flying-boats\(^{13}\) were detected on the 18\(^\text{th}\), but bad weather again prevented their interception, and on the 22\(^\text{nd}\), another enemy aircraft was seen over Hornchurch probably engaged on a daylight reconnaissance. Finally, on the 24\(^\text{th}\), Flight Lieutenant Anderson and his gunner, Sergeant Hawke, attempted to intercept an enemy aircraft near Felixstowe, but failed to catch it. Attempts to intercept a number of enemy aircraft on the 29\(^\text{th}\) also failed due to the bad weather.

On the 30\(^\text{th}\), the Squadron formed a maintenance section under Warrant Officer Hamilton, comprising Flight Sergeant Davis, Sergeant Day, Sergeant Coost, Corporal Payne, Sergeant Bullingham, Corporal Rees and Corporal Surfleet. Throughout November the officers and men of Nos.151 and 604 Squadrons were entertained by a number of show-biz personalities, included amongst whom were the orchestras of Mantovani and Henry Hall and the singers Jack Buchanan and Leslie Henson.

December opened with the funerals of Flying Officer Wheeler at Whitchurch on the 4\(^\text{th}\) and LAC Oliver at Liphook, Hampshire, the following day, with the Squadron represented at both services. On the 2\(^\text{nd}\), the Honorary Air Commodore, Sir Samuel Hoare, visited the Squadron in its hanger and out on the dispersal. One of the Squadron’s pre-war officers, Pilot Officer Speke, was promoted to Flying Officer and posted to Hendon on the 6\(^\text{th}\), and the Maintenance Section’s Sergeant Bullingham was posted to Harwell, Oxfordshire, on the 16\(^\text{th}\). Aircraftsman Martin rather unpatriotically contracted German measles on 17\(^\text{th}\), resulting in him and his fellow airmen being confined to barracks and having their Christmas leave cancelled!

From the 4\(^\text{th}\) December the Squadron was placed at readiness throughout the hours of darkness, but, whilst enemy aircraft were frequently reported, none were sighted. Forgetting to observe the colours of the day, Flight

\(^{13}\) It should be noted that the coastal squadrons of the *Luftwaffe* operated both flying-boats and seaplanes, particularly Dornier Do 24, the Blohm und Voss Bv 138, the Heinkel He 115 and the Arado Ar 196. Of these the Do 24 and the Bv 138 were flying boats and the He 115 and the Ar 196 were seaplanes.
Lieutenant Anderson was fired on by the guns until he complied. Fortunately their gunnery was as good as 604’s interception rate. 56 Squadron returned from Martlesham Heath on the 12th, having been absent for barely four weeks, leaving behind Red Section of 604 on the Suffolk airfield, where they stood on alert over the Christmas period. On Christmas Day, and in line with service tradition, the officers served dinner to the airmen, as George Evans recalled:

‘We celebrated our first wartime Christmas at North Weald and they did us proud, a really great turkey dinner plus the Xmas pudding. The highlight had to be the Christmas card that we each received bearing portraits of the King and Queen which they both had signed.’

The New Year got off to a good start with Sergeant Arthur Woolley suffering engine failure and having to force-land Blenheim L8399 in the vicinity of Epping on 3rd January. The AOC visited on the 5th, and shortly afterwards the Squadron began their preparations for a move to Northolt, to the west of London. An advanced party under Sergeant Dixon set out on the 13th by road, but the main party was delayed twenty-four hours due to fog, with ‘B’ Flight’s aircraft departing first on the 16th. The main party under Flight Sergeant Davis left North Weald in the morning and arrived at Northolt later that afternoon. Coaches were provided to transport the Squadron personnel and return with those of No.25 Squadron (Squadron Leader Hallington-Pott, DSO), who were to take over 604’s duties at North Weald. The Red Section detachment at Martlesham Heath was also transferred to Northolt, courtesy of the Great Eastern and Great Western Railway Companies. That evening 604 Squadron stood their first night alert at Northolt alongside their day-fighter colleagues, the Spitfire-equipped No.65 Squadron (Squadron Leader D.Cook). The occupation of their new premises was regarded by the Squadron’s ‘scribe’ as something of a ‘hotch-

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14 George Evans, op cit, page 41.
15 Later Flight Lieutenant Arthur Woolley, RAFVR, who left 604 and converted to single-seat fighters before joining No.601 Squadron in June 1940 and fighting in the Battle of Britain where he was twice wounded. He was transferred to the Administrative Branch in 1941.
Blenheim Ifs of 604 Squadron at Northolt in late 1939/early 1940. The nearest aircraft, L8798, was from a batch built by Rootes Securities Ltd at Speke, Liverpool. (Imperial War Museum, Neg No.HU2303).

Potch,’ with no washing arrangements being available for the men on their arrival. More suitable accommodation was found two days later on the 19th when 604 took over one of Northolt’s ‘A’ Type hangers.

Technical training got underway in January, with a number of airmen and NCOs attending courses at Derby on Rolls-Royce Merlin engines (strange when their aircraft were all Mercury powered), Lockheed’s at Leamington for hydraulics, de Havillands, Hatfield, for propellers and Filton for the Bristol Mercury.

The time afforded by poor weather was put to good use at the end of the month for increased maintenance and the fitting of armour plating to the back of the pilot’s and observer’s seats and the air-gunner’s turret. The air intake guards on the Mercury engines were also removed to prevent them becoming blocked by snow. The bad weather continued into February with snow and later fog and mist interrupting the flying training programme and, conveniently, operations by the Luftwaffe.

Northolt was reinforced on the 11th February with the arrival of No.253 Squadron’s Hurricane (Squadron Leader E.D.Elliott) Hurricanes to take the place of No.65 Squadron who departed the following month for Hornchurch. Also joining the Squadron that month was the first of 604’s commissioned air gunners, Pilot Officer Eric Smith, RAFVR. Smith joined the RAFVR in

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16 It should be noted that the ORB records 253 Squadron in error as 255 Squadron. See page 24 of the No.604 Squadron Diary/ORB.
June 1939 as an Airman Under-Training, Aircrew. He completed his training, was commissioned on 4\textsuperscript{th} February and joined 604 on the 16\textsuperscript{th}. A second air-gunner officer, Pilot Officer Scott, RAFVR, joined two days later from No.92 Squadron, a Blenheim If unit based at Croydon.

604 undertook its first naval co-operation flight on the 18\textsuperscript{th}, when three aircraft were allocated to provide an escort for Royal Navy destroyers and minelayers operating in and around the North Goodwin sands. No enemy intervention was reported.

On the 23\textsuperscript{rd}, the Squadron suffered its first accident at its new location, when Flying Officer Lawton,\textsuperscript{17} with Pilot Officer Doulton as his observer, was returning from Sutton Bridge in Blenheim L8714 in bad weather. Forced down to a low altitude by cloud, L8714 crash-landed in a field near Hatfield, Hertfordshire and was written off. Thankfully, Lawton and Doulton escaped unhurt. A second accident on the 29\textsuperscript{th}, again involved Sergeant Woolley. His Blenheim, L8681, crashed at North Weald and was so badly damaged it was returned to the manufacturer, the Bristol Aeroplane Company, for repairs. Co-incidentally the Squadron’s CO from its days at Hendon, Squadron Leader, now Wing Commander Gabriel, visited his old unit.

Towards the end of the month the Brownings in the under-fuselage tray were fitted with asbestos stockings to assist their cooling and protect the breeches from air blast. All aircraft had their forward protection improved by the simple expedient of replacing two of the lower port-side cockpit glazed panels with ones in armoured plate.

The flying training programme suffered a further delay, the weather being the other problem, when the majority of the officers succumbed to German measles and laryngitis, a powerful combination. The officers’ discomfort was no doubt offset by the pleasure of the gunners being entitled to wear the new air-gunner’s ‘AG’ brevet.

The 1\textsuperscript{st} March was a day for postings: Flying Officers Lawton and Gillies, Pilot Officer Rabone and Sergeants Havercroft and Forrest were posted-out and Flying Officer Le Rougetel,\textsuperscript{18} Pilot Officer Bryson, Sergeants Rust and MacDonald and Pilot Officer Mathews (Equipment Officer) were posted-in. The following day the Squadron was presented with an HQ Fighter Command movement order advising them of the imminent arrival of desert equipment for their motor transport (MT) and their departure for tropical climes. To support the subterfuge, for subterfuge

\textsuperscript{17} Flying Officer Lawton rejoined 604 Squadron in November 1939 from the AAF Reserve of Officers.

\textsuperscript{18} Later Squadron Leader Stanley Le Rougetel.
it was, the MO was instructed to lecture all personnel on healthcare in the tropics. Flight Lieutenant Anderson flew to Wittering on the 2\textsuperscript{nd} for consultations with higher authority, whence the Squadron was informed on the 4\textsuperscript{th} they were to be relieved from operational flying, effective immediately, to enable all personnel to concentrate on the move.

The stand-down was confirmed by the AOC, who also ordered fuel tank and armour modifications to the aircraft, four days embarkation leave for all ranks and fourteen days pay in advance. It should be noted that self-sealing fuel tanks arrived at Northolt on the 8\textsuperscript{th} and these were immediately installed in eight Blenheims. Whilst fully immersed in the move on the 5\textsuperscript{th}, Northolt Operations enquired if the Squadron was able to provide an escort for HRH, the Duke of Kent, on a flight from Horsham to Wyton and thence to Hendon. The ‘honour’ fell to Flight Lieutenant J. Davies, with Sergeant Archie Crump and LAC Nesbitt in L8673, and Flying Officer Doulton, with Corporal Baker and Aircraftsman Kennedy in L4906.

The subterfuge was enforced the following day, the 6\textsuperscript{th}, in the form of a further movement order from Fighter Command instructing that all vehicles were to be fitted with tracks and chains. In an apparent move to strengthen the Squadron, Flying Officers Doulton and Lawton collected two Blenheims, L1517 and L6640, from 601 Squadron at Tangmere. That same day Flying Officer Speke and Pilot Officer Skinner delivered L4906 to the Royal Aircraft Establishment (RAE) at Farnborough, Hants. Why these two officers should deliver a Blenheim to a research establishment, when logically the Squadron was supposedly in need of every aircraft it could lay its hands on, is not known. One possible explanation is that L4906 was taken to Farnborough and thence to the MU at St Athan for the installation of AI radar. This is, however, pure conjecture on the author’s part.

From further movement orders it was apparent that 604 was to form a wing with 23 Squadron, also Blenheim equipped at Wittering, and they were to be based on a single airfield somewhere in the tropics. The wing’s strength was to comprise forty-two bomber aircraft and therefore the squadron’s fighter Blenheims would require conversion to bombers, with preparatory work beginning immediately! This order was fortunately countermanded later on the day it was issued, the 9\textsuperscript{th}, but altered again the following day, when Command instructed the Squadron to continue to prepare a number of Blenheims for conversion to bombers.\footnote{L1226, L1256, L6602, L6609, L6611, L6612, L6626, L6640 and L7133 were subsequently converted and passed to Bomber Command.} Meanwhile all preparations for the move overseas were halted. The cancellation order failed to prevent both 23 and 604 from collecting aircraft to raise their
compliments to twenty-one aircraft apiece. Five pilots from 604 collected a number of Blenheims from Nos.92 and 222 Squadrons on the 9th, so that by the 12th the Squadron had its requisite twenty-one aircraft. At 0923 hours on the 14th, the Squadron received a signal from Command stating the movement order was cancelled. However, conscious of all the effort that had gone into preparing 604 for its overseas deployment, Command sent a further signal on the 16th:

‘From HQ Fighter Command: With reference to emergency, this is now cancelled; - it is desired to express to all service personnel appreciation of rapid and skilful work - with due regard for secrecy. All personnel to be informed.’

It was known from the 11th that 604 was destined for service in Finland, since on that date the blue and white Swastikas of the Finnish Air Force were applied to the Squadron’s Blenheims. 604’s intended role was to support that country in its defence against the soldiers of the Red Army, who invaded on the 30th November 1939, in an attempt to annex Karelia for the Soviet Empire. Despite a valiant defence and frequently giving the Red Army a ‘bloody nose’, the Finns were forced to seek an armistice with the Russians on the 12th March 1940. It would appear the Government waited too long before committing to the Finns aid and by the time they had organised troops and air support, the battle was over. Coincidently, 604’s old CO, Wing Commander Dore, was serving in a diplomatic capacity in the Scandinavian countries at the time of the Winter War, and may possibly have been involved in the decision to send 604 to Finland.

On the 23rd March, Flight Lieutenant Anderson was promoted to Squadron Leader in preparation for his taking over the Squadron from Squadron Leader R.A.Budd, on his posting to HQ Advanced Air Striking Force in France on the 28th. A group of airmen, Sergeant Beagle, Corporal Love, Corporal Sellars and Aircraftsman Beale, were posted to No.1 Elementary Flying Training School (EFTS) on the 25th to begin their careers as trainee airmen pilots.

‘B’ Flight, under the command of Flight Lieutenant Davies, moved to Kenley on the 25th to provide escorts for shipping and undertake convoy patrols in the English Channel. The main purpose of these patrols was the protection of troopships taking the British Expeditionary Force (BEF) to France between Dover - Dunkirk, and Dover - Calais. Whilst there, Flight

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21 Ibid, page 27.
Lieutenant Davies, with Sergeant Rust, escorted the French Prime Minister, Monsieur Reynard, and the French Air Force C-in-C’s Dewoitine aircraft to Dieppe on the 28th. ‘B’ Flight were set to spend quite a time patrolling the Channel.

Sir Samuel Hoare, recently reappointed to his old post of Secretary of State for Air, visited the Squadron at Northolt on the 6th April. The event was deemed sufficiently important to recall ‘B’ Flight from Kenley for the day, as George Evans confirms:

‘On the 6th April we were ordered back to Northolt to be paraded for inspection by the Minister for Air, Sir Samuel Hoare. This, of course, was a real PR exercise and pictures were published in the National Press for the benefit of the general public, showing the fighter aircraft of the Auxiliary Air Force ready to do battle with anything Herr Hitler chose to send. One photograph was published in the Sunday Pictorial showing F/O George Budd and his crew being introduced to the Minister. I remember it well because at the time I was having difficulty in keeping a straight face. As the Minister stepped forward to shake hands with my pilot, I could see a spider crawling up the back of Georgie’s neck and he was in no position to defend himself at that moment.’

604’s ability to escort VIPs undoubtedly reached the senior echelons of Government, for on the 22nd, Squadron Leader Anderson, Flight Lieutenant Skinner and Flying Officer Cunningham were detailed to provide an escort for a group of Cabinet Ministers enroute to France from Hendon. A similar operation was carried out on the 25th, when three Blenheims flown by Flight Lieutenant Skinner, Flying Officer Hunter23 and Flying Officer Scott, escorted a Lockheed Hudson from Boscombe Down to France, but due to bad weather, were forced to land at Tangmere. The flight was continued on the 29th when two crews, Flying Officer Scott with LAC Moody and an unspecified crew-member named Botterill, and Flying Officer Hunter, with Flight Sergeant Wheadon and Corporal Sandifer, escorted the Hudson to Chaleandon and thence to Brioy Orleans. Finally, on the 3rd May, 604 provided an escort for a captured Messerschmitt Bf 109 flying from Amiens to RAE, Farnborough, but for some inexplicable reason they were diverted to Hendon. In a similar operation, Flying Officer Speke was instructed to

22 George Evans, op cit, page 49.
23 Pilot Officer Hunter was promoted to Flying Officer on 17th September 1939.
Sir Samuel Hoare, Secretary of State for Air and Honorary Air Commodore of 604 Squadron, visits the Squadron at Northolt on 6th April 1940. The then Flying Officer Cunningham is to the left of the officer being presented to Sir Samuel (Mirrorpix).

report to Heston Aerodrome on the morning of 11th April to fly a passenger, General Lewin, to Perth in very bad weather.

Throughout April the CO was involved in the testing of a fluorescent gun-sight and this attracted some attention from the AOC, who visited on the 13th to inspect the device, as did the AOC-in-C on the 29th. What type of sight this was is not known. In a similar vein, 604 had been testing ‘PE’ bombs and these too were deemed sufficiently important for the Secretary of State for Air’s deputy, Captain H.Balfour, the Under-Secretary of State for Air, to visit Northolt and discuss the weapons with Squadron personnel on the 28th.

The nature of the war in the West changed during the spring of 1940. In April German troops went over to the offensive by invading Norway and Denmark to secure their lines of communication for Swedish iron ore supplies and oppose Franco-British naval intervention in the region. On the morning of the 8th April, German troops crossed the border with Demark and within a few hours the Danish Government capitulated without a shot being fired. The same day, troops covertly transported from bases along the German Baltic coast the previous night and supported by heavy units of the Kriegsmarine, landed at a number of Norwegian ports. Air support and parachute troops were flown in by the Luftwaffe from their new airfields in Denmark and although the Norwegians and an Anglo-French force in the
north put up something of a fight, the defence proved untenable. Norway was under effective German control by the 24th, and an evacuation of Allied troops by the Royal Navy began on the 28th. The defeat in Norway was a considerable setback for the British Government and Prime Minister Chamberlain, for whom support in and out of Parliament began to decline. The war in Norway served to illustrate just how unprepared Britain, its Armed Forces, with the possible exception of the Royal Navy, and the public were for war. This situation might be ascribed to successive years of military unpreparedness and neglect. Things, however, were set to get progressively worse.

Having completed his conquest of Norway and Denmark, Hitler turned his attention to Operation YELLOW, the invasion of France and the Low Countries. Achieving complete surprise on the morning of the 10th May, German troops crossed the borders of neutral Holland and Belgium in a feint to draw the BEF and the French from their prepared positions along the Franco-Belgium frontier. In a wholly unexpected move, German armoured units attacked the Allied line through the heavily wooded Ardenne Forest. With the BEF and some French forces advancing into Belgium, German panzer divisions broke through the French lines at Sedan to outflank the static defences of the Maginot Line. By the 15th, the Germans had unexpectedly crossed the River Meuse, wheeled to the west and effectively split the BEF from the French Army. By the 24th, German forces reached the coast at Abbeville and pinned the BEF with its back to the sea at Dunkirk. Only the personal intervention of Hitler saved the BEF from certain annihilation. Why Hitler chose to halt his panzer forces outside Dunkirk is not known. Whatever the reason, the delay enabled the British Government to institute the famous evacuation of the port by the flotillas of ‘Little Boats’.

In response to the dawn attacks by Luftwaffe aircraft on Holland on the 10th May, Blenheim bombers of No.2 Group, Bomber Command, based in England and in France with the Advanced Air Striking Force (AASF), flew a number of sorties to ascertain the strength of the German advance. Support for one of these operations was provided by 604 on the 10th, who flew escort to twelve Blenheim IVs attacking German aircraft on beaches to the north of the Dutch capital, The Hague. The aircraft were drawn from ‘B’ Flight at Kenley, under the command of Flight Lieutenant Davies. With no enemy aircraft in the vicinity, 604 followed up the bomber’s attacks with strafing

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25 The number of the squadron to be escorted is not known, however, they were almost certainly drawn from No.2 Group.
runs of their own against the grounded aircraft, which resulted in the destruction of four Junkers Ju 52/3m transports and damage to a further three. During one of these attacks the Blenheim flown by Pilot Officer Joll was brought down on the beach. All crew members emerged unhurt from the aircraft and were eventually returned to the Squadron.

On the 14th, ‘B’ Flight was moved from Kenley to Manston, to be followed the next day by ‘A’ Flight and the remainder of the Squadron. Here they replaced 600 Squadron led by Squadron Leader D.de B.Clarke, who had suffered badly, losing five out of six aircraft during a daylight raid on Waalhaven airfield, Rotterdam, on the 10th. 600 were transferred to Northolt to take 604’s place while they re-grouped and re-equipped. Being closer to the Continent, 604 was tasked to provide defensive dawn-to-dusk standing patrols over the French airfields at Bethune, Merville, Saint Pol and Saint Omer on the 17th, but no action ensued. The following day the AOC, Air Vice Marshal Keith Park, MC*, DFC, was visiting Manston when ‘A’ Flight received instructions to proceed to Hawkinge. By dusk that evening the Flight was safely ensconced at Hawkinge and ‘B’ Flight undertook the day’s standing patrols. Whilst these moves and changes were being accomplished, the Squadron recorded its first enemy aircraft ‘destroyed’.

The Squadron had already experienced a number of inconclusive combats over the Straights of Dover, but on the evening of the 18th May, Flying Officer Hunter and his gunner, AC2 Gordon ‘Tommy’ Thomas, on a dusk intruder operation over France, detected a seaplane, as Jimmy Rawnsley describes:

‘The weather was clear and there was a bright moon, and from sixteen thousand feet (4,875 metres) they could see for miles. They had patrolled as far as Cambrai, and were flying along the French coast from Griz Nez towards Calais when Tommy saw a small light move out from the coast and over the sea. Hunter could not see it, but finally Tommy convinced him that it was an aircraft and they went down to two thousand feet (610 metres) to investigate. They found it but could not recognise it, although it was obviously a German, since we had nothing that resembled that large, twin-engined seaplane flying along with its navigation lights on. They followed it for about five minutes, only thirty yards (27 metres)

26 Later Air Chief Marshal Sir Keith Park, GCB, KBE, MC*, DFC, DCL, was appointed AOC No.11 Group on 20th April 1940.
behind and just below it. Then Hunter pulled up and opened fire with a good long burst.

The enemy aircraft wobbled about, as Tommy put it, and spewed out oil, which came back on the windows of the Blenheim. Hunter pulled up on a parallel course and very close to the other aircraft, and Tommy got in a good burst amidships. The enemy replied by firing a multiple white signal cartridge, which rather put Tommy off his second burst.

The Germans still left their lights on, and Hunter came around for a second attack. But this time they were too low for him to be able to use his front guns, and Tommy got in two more short bursts as they went past. Then the German seaplane crashed into the sea and the lights went out.27

On his return to Manston, Thomas positively identified his victim as a Heinkel He 115 seaplane28 (see Appendix 3 for a list of 604’s aircraft claims in World War Two).

On the 19th, ‘A’ Flight returned to Manston to rejoin the Squadron and share in the Channel patrols. That evening, Flying Officer Skinner sighted an enemy aircraft clearly defined by its navigation lights, and attacked with some success, as its undercarriage was seen to extend before the aircraft was lost to view. Later the same evening, Flying Officer George Budd and his gunner, AC2 George Evans, were airborne over Merville airfield on an intruder sortie, as George Evans recalls:

‘Georgie and I were ordered to carry out an offensive patrol over Saint Omer in France. We managed to find Merville aerodrome, then being used by the Luftwaffe. Incredibly, it was all lit up, with bombers circulating to land with their lights on. They were apparently oblivious of our presence! How Amazing! We joined the circling bombers and Georgie closed in on an He 111 and opened fire. He registered “hits” but we failed to see it crash, so could only claim a “damaged.” Then all hell broke loose. All the lights went out and ack ack was firing in all directions. George dived on the runway and attacked another He 111 taxiing on the ground. Now we were attracting quite a lot of ack ack and machine gun posts as we dived on the runway. Tracer bullets were coming at us from all directions.

28 The He 115 was employed in the coastal maritime reconnaissance and search & rescue roles with the Luftwaffe’s coastal aviation (Kustenflieger) units.
and it was quite fascinating. They came up first apparently very slowly and then suddenly streaked past us at incredible speed. It was all very exciting and, naïve me, I felt quite secure in my turret and I had no thought that we might get hit! Georgie had emptied his front guns, so decided to go home to Manston.\(^\text{29}\)

The following day, after an inspection of the aircraft by the ground crew, it was discovered that three machine-gun rounds had entered the port wing fuel tank. Had it not been for the recently installed self-sealing fuel tanks, the fuel in the port wing would have been lost, with potentially serious consequences for the crew. The evening of the 19\(^\text{th}\) recorded a sadder event, when Flying Officer Gillies and his gunner were reported missing on a patrol over France and the English Channel.

Day and night patrolling continued throughout the remainder of May and particularly during the period the BEF was being evacuated from the beaches at Dunkirk, beginning on the 27\(^\text{th}\). On the 22\(^\text{nd}\), during a patrol by ‘B’ Flight off Dunkirk, an He 111 was encountered, which Flying Officers Budd and Rabone attacked with apparent lack of success as the enemy aircraft ‘disappeared’. On the same day, Squadron Leader Anderson engaged three He 111s, again with no results. On the 23\(^\text{rd}\) the Squadron’s complement was temporarily enhanced with the arrival of additional pilots detached from 615 Squadron with their Gloster Gladiators, to fly alongside 604 at Manston.\(^\text{30}\) It is probable these pilots were posted-in to fly the Gladiators on behalf of 604 and provide daylight ‘top-cover’ for Manston, before returning to 615 at Kenley sometime in June.

The contingencies of war and the need to expand the RAF brought about a number of personnel changes within the Squadron in May 1940. Pilot Officers Miller and Boyd\(^\text{31}\) were posted to 600 Squadron and Flight Sergeant Smee was promoted to Warrant Officer on the 12\(^\text{th}\) May. Sergeant Price was posted to the Middle East, whilst Sergeants Brook and Sunley attended No.1 (Coastal) OTU, Silloth, for air observer training, and Corporal Hawke was promoted to Sergeant on the 24\(^\text{th}\) May. Two VIPs visited the Squadron in May, Lord Trenchard on the 30\(^\text{th}\) and Air

\(^{29}\) George Evans, \textit{op cit.}, pages 60 & 61.

\(^{30}\) The ORB states that Flight Lieutenant Sanders, Flying Officer Gaunce and Pilot Officers Roberts, Evans and Mudie, were ‘transferred’ to 604. Reference to Kenneth Winn’s \textit{Men of the Battle of Britain}, shows that these officers flew operationally in France with 615 Squadron and must have joined 604 for a very short period, since 615 at that time (May 1940) was in the process of converting to the Hawker Hurricane. The ORB also states that a number of the Gladiators were returned to Aston Down on the 29\(^\text{th}\) May.

\(^{31}\) Later Wing Commander Archibald McNeill Boyd, DSO, DFC.
Commodore Sir Quinton Brand, who had served as a Home Defence pilot during World War One, gave a lecture on night-fighting on the 29th.

The most significant event for the junior ranks was the promotion of all aircrew to the rank of sergeant, with effect from 28th May. This Air Staff policy directive was enacted to ensure that non-commissioned aircrew were entitled to be treated with some respect by the enemy, should they be captured. The decision was not, however, universally well received in the Sergeant’s Mess. According to George Evans, a number of regular NCOs, not unnaturally, did not take kindly to the invasion of their domain by a number of ‘jumped up sprogs’ who assumed ranks they themselves had taken so long to achieve by merit and service. The situation was not helped by a number of the new mess members doing their best to annoy the regulars at every opportunity, by enacting practical jokes and monopolising the radiogram.32

Much of May and the early part of June were taken up with daylight patrols over Dunkirk (the last were flown on the night of 3/4th June) and work was beginning on introducing AI radar and VHF radio telephony (R/T) sets into the Squadron’s Blenheims. The installation of AI Mk.II sets began sometime between March and April/May. However, from June onwards No.32 MU began the delivery of the improved, but by no means perfect, AI Mk.III set. It is probable that 604 received reasonable quantities of AI.III equipped Blenheims in June or July 1940, since the ORB states that five AI operators were posted to the Squadron in June. These unfortunates, classified simply as ‘operators’ were non-technical men drawn mainly from the ground radar trades, some of whom had seen action with the AASF in France. Their job was to interpret the signals on the screens of two cathode ray tubes (CRT) and from this information provide steering instructions to the pilot. Though not technically qualified in radio, or radar, and hardly knowing one end of an aircraft from the other, they were expected to fly at all times of day or night. Finally, like the regular NCOs, the operators were badly treated by the air gunners, as Jimmy Rawnsley describes:

‘They had neither distinguishing flying badges nor NCO rank ….. they trod on all the wrong places; they picked up their parachute packs by the rip handle; they tried to walk into propellers. And since they were classed as aircraft-hands, neither technical tradesmen nor aircrew, they were easy prey to every Disciplinary Flight Sergeant who might be looking for hanger sweepers, ablution cleaners or extra

32 George Evans, op cit, pages 62 to 64.
guards. No wonder they wore a bewildered, harassed look. And I am afraid we gunners did not help much. We rather resented the presence of these groundlings in the aircraft, and we treated them with scant courtesy and very little respect. But it was not long before even we began to feel these poor unfortunates were really getting a raw deal. Slowly they won from everybody a reluctant recognition. Their intelligence was rewarded with a name instead of the humiliating anonymity of “Operator” and they emerged with restored personalities.33

The first group of operators comprised Fred Larcey, a radar mechanic who had applied for flying duties, the big northerner Bernard Cannon,34 Irishman Mike O’Leary,35 the thoughtful John Philipson36 and the quiet Arthur Patston.37 They had all completed the short AI course at RAF Yatesbury, which taught them the basic operating procedures of AI radar, but not its electronic operation. Nevertheless, they were expected to provide results with a mass-produced radar set that was unreliable and whose operation they did not understand. In a situation where much was expected of them, it is no wonder that the many were destined to be disappointed by the few!

As if to compensate for the arrival of the operators, a number of changes within the officer and NCO ranks occurred in June. Flight Sergeant Davis was appointed Senior NCO In-Charge of ‘B’ Flight, with Flight Sergeant Knight as his deputy, whilst Sergeant Woolley, Sergeant MacDonald and Flying Officer Doulton were posted to 601 Squadron at Middle Wallop and Flying Officers Chisholm and Pickard were posted-in. Promotions comprised Flying Officers Budd and Cunningham to Flight Lieutenant, Pilot Officer Rabone to Flying Officer, Warrant Officer Hamilton to Flying Officer Engineering Branch and Sergeant Letby to Flight Sergeant. Flying Officer Rory Chisholm was one of the Squadron’s founder members in 1930 and had trained to wings standard before relinquishing his Auxiliary commission and returning to his job in the oil industry in Persia, modern Iran. With the outbreak of war he returned to Britain to find he still held a commission in the AAF Reserve of Officers. Being eligible for flying duties, he was re-commissioned as a Pilot Officer, AAF, and posted to

33 George Evans, op cit, page 34.
34 Later Warrant Officer Bernard Cannon, DFM.
35 Later Flying Officer Mike O’Leary, DFC**, DFM
36 Later Warrant Officer John Philipson, DFC, killed in a flying accident on 5th January 1943.
South Cerney in February 1940 to undertake advanced training and twin-engined conversion on the Airspeed Oxford. He passed out from South Cerney in June in time to rejoin the Squadron at Gravesend. Unlike other student pilots, Flying Officer Chisholm was not required to attend an OTU to convert to the Blenheim, for him this would be done on the Squadron’s dual-control machine.  

France finally capitulated on the 22nd June. With German forces of occupation firmly entrenched across the country and along the coast, the English Channel was now no place for Blenheim day-fighters and 604 returned to the relative tranquillity of Gravesend. They were there barely a month before moving once again on the 26th July to Middle Wallop, where the Squadron would spend the next two and a half years and make its reputation as one of Fighter Command’s premier night-fighter squadrons.

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38 Roderick Chisholm, *Cover of Darkness*, (Elmfield Press, 1953), pages 15 to 34.
CHAPTER FOUR

The Night Blitz, September 1940 - May 1941

By the end of June 1940 German forces had occupied a number of airfields in France and the Low Countries and begun a reorganisation in preparation for the assault on Great Britain. Throughout most of his political career it had been Hitler’s intention not to invade Britain, but to come to some sort of accommodation whereby Germany would retain the control of Europe, whilst Britain would be free to maintain its Empire and continue international trade. Therefore, at the beginning of July the German Chancellor was expecting the British Government to sue for peace and accept his generous settlement. Hitler waited in vain. On 10th May, the day the Germans invaded Holland, Winston Churchill replaced Neville Chamberlain as Prime Minister and changed Britain’s attitude towards Germany. On 2nd July Hitler directed the High Command of the German Armed Forces, the Oberkommando der Wermacht - the OKW, to begin preliminary planning for the invasion of Britain; Operation SEALION. On the 16th, having heard nothing further from the British Government, he ordered the planning to proceed and be completed by the middle of August. Three days later Hitler’s final appeal to the British people was rejected by the Cabinet and military planning was accelerated. The Luftwaffe’s part in the forthcoming invasion was simple:

‘The English Air Force must be so reduced, morally and physically, that it is unable to deliver any significant attack against an invasion across the Channel.’\(^1\)

On the 21st Hitler confirmed his intention to invade Britain and Reichsmarshall Hermann Goering, the Luftwaffe C-in-C, gathered his senior Luftflotte (air fleet) commanders for a conference at his country seat, Karinhall, to inform them of the Fuehrer’s decision. The invasion proper would not begin for ‘a week or so,’ but in the meanwhile operations were to commence with small-scale attacks on shipping in the English Channel, minelaying in harbours and estuaries and probing attacks to ascertain the strength of the British defences.

\(^1\) Instruction to the Luftwaffe quoted in Alfred Price [1]: Blitz on Britain, 1939 - 1945, (Ian Allen, 1977), page 37.
The responsibility for these operations was allocated to three Luftflotten. Luftflotte 2 headquartered in Brussels under the command of Generalfeldmarschall Albert Kesselring, based on the airfields of northern France, Belgium and Holland, would undertake maritime operations in and around British coastal waters and bombing operations over eastern England. Luftflotte 3 at Saint-Cloud, near Paris, under Generalfeldmarschall Hugo Sperre, occupied airfields in northern France to the west of the River Seine and was responsible for air operations in western Britain. Finally, the smallest Luftflotten, Luftflotte 5 under Generaloberst Hans-Jurgen Stumpff at Oslo, Denmark, undertook air operations over northern England and Scotland in conjunction with Luftflotte 2, from its airfields in Norway and Denmark.

By 20th July, following a significant airfield construction programme to provide all-weather surfaces on a number of captured airfields and an equally rapid re-equipping and provisioning effort, the three Luftflotten between them were able to field: 864 serviceable long-range bombers (He 111, Do 17 and Ju 88), 248 dive bombers (Ju 87), 656 single-engined fighters (Bf 109) and 280 twin-engined fighters (Bf 110). To oppose this formidable force, Fighter Command possessed some 600 serviceable fighters: Hurricane, Spitfire and Defiant and some fifty Blenheims that were ‘of doubtful value during the day against escorted bombers.’

It is not the author’s intention to document the Battle of Britain, which was principally a day-fighter battle in which 604 did not participate, but rather to highlight its outcome and progression into the Night Blitz and its effect on the Squadron. The Battle began on 11th August 1940, when a force of seventy-four He 111 and Ju 88s, escorted by ninety Bf 109 and Bf 110s, struck at the naval base at Portland, Dorset. The second phase of the Battle (the first was the attacks on Channel shipping) was the attempt by the Luftwaffe to destroy the RAF by attacks on its airfields and radar stations in the south of England and the destruction of its fighters in the air. Between 24th August and 6th September the RAF lost 295 aircraft destroyed, 171 seriously damaged and 231 fighter pilots killed or wounded. Although very hard pressed, Fighter Command held on. During that same period the Luftwaffe lost some 200 twin-engined bombers, in excess of 200 fighters and had to suffer the indignity of German cities, including Berlin, being raided by Bomber Command during the last week of August.

Prior to August’s raids Hitler had been opposed to the bombing of London, however, in what was subsequently viewed as a military error, the

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2 Alfred Price [1], op cit, page 39.
3 Ibid, page 76.
Fuehrer changed his mind and ordered large scale daylight attacks on the capital in retaliation for the bombing of Berlin. The first of these occurred on 7th September when 350 bombers of Luftflotte 2, escorted by 600 fighters, bombed Greater London in the late afternoon and followed this up with a night raid by a further 318 bombers. On the 11th bombers with their fighter escort struck at London by day and by night, causing a large number of serious fires and killing 412 of its citizens. These attacks culminated in the heaviest daylight raid on the 15th, when the escort screen was penetrated by No.11 Group’s fighters, scattering the raid and causing serious losses amongst the German crews. A further raid in the afternoon was equally well dealt with. Once again the screen was penetrated and aircraft shot down, making German losses for the day: thirty-one bombers and twenty-one fighters. The 15th September is celebrated to this day as ‘Battle of Britain Day.’

The Luftwaffe’s losses at the beginning of the daylight campaign against London ‘were not particularly heavy’, but by the end of September ‘the losses suffered by formations led thereafter to a reduction in the forces engaged …… to one Ju 88 Gruppe and from the beginning of October to the use of fighter-bomber formations.’ The night raids, which spread to other parts of the UK during October and November, brought better results: greater damage to residential and commercial property, dislocation of industry and communications and fewer losses in men and machines. In recognition of these facts, Hitler postponed the invasion indefinitely on 17th September.

Fighter Command’s assets to defend Britain at night were considerably less than those available during the hours of daylight. The CH radar network provided early warning of raids, but lacked the precision to guide night-fighters with any accuracy to their targets. AI radar was in its infancy, lacking, in the case of AI Mk.III, performance in minimum range, reliability, proper technical back-up, spare parts and training, both on the ground and in the air. Its night-fighters comprised the barely adequate and obsolescent radar equipped Blenheim If, the non-radar equipped (so-called ‘Cats Eyes’) turretted Defiant, which when circumstances proved favourable was an effective fighter, and the Hurricane, chosen for its stability as a gun-platform, good handling characteristics and availability in large numbers. At

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5 Ibid, page 79.
6 Hauptmann Otto Bechtle in a report on the Air War against Britain, July 1940 - June 1941, written at Berlin-Gatow, 2nd February 1944 and quoted in Winston Ramsey (Ed) [1]: The Blitz, Then & Now, Volume 2, (Battle of Britain Prints, 1988), page 42.
the beginning of September 1940 Fighter Command fielded eleven squadrons of night-fighters: five of Blenheims, three of Defiants, two of Hurricanes and one with a mixture of Hurricanes and Defiants.

This force was inadequate to protect London, the industrial Midlands, the North-East and the ports and dockyards. Consequently the commercial and residential districts in these centres were very badly hit during the autumn and early winter of 1940. There was however hope on the horizon. The scientists at the Air Ministry’s Research Establishment (AMRE)\(^7\) in conjunction with engineers from the EMI (Electrical & Musical Industries) company had produced AI Mk.IV, the first AI set with an effective maximum and minimum range. Production of this version began in August 1940, with small quantities being supplied to No.32 MU at St Athan the following month. September also saw the first deliveries of the twin-engined Bristol Beaufighter. Fitted with AI Mk.IV, the Beaufighter provided Fighter Command with its first effective high performance, cannon armed, night-fighter.

1940

604 arrived at Middle Wallop on 26\(^\text{th}\) July, the aircrews by Bristol Bombay transports and the ground crews and equipment by train. 604 was now in the territory of No.10 Group, commanded from its HQ at Rudloe Manor, Wilts, by Air Vice Marshal Sir Christopher Quinton Brand, KBE, DSO, MC, DFC, the former World War One night-fighter pilot. Alongside 604 at Middle Wallop was No.238 Squadron (Squadron Leader H.A.Fenton) flying Hurricanes, No.609 Squadron (Squadron Leader H.S.Darley) with Spitfires and ‘A’ Flight of No.23 Squadron with Blenheim fighters. The station was commanded by Wing Commander D.N.Roberts, DFC.

On 11\(^\text{th}\) August 604 was involved in a minor battle in the English Channel. Tasked by the controller to investigate an He 59 seaplane apparently floating on the sea some 30 miles (48 km) off the French coast, and its escort comprising two rescue ships, one of thirty tons and the other of 150 tons. The Blenheims found the Heinkel and succeeded in setting it ablaze. Three escorting Spitfires then became entangled with six Bf 109s and in the ensuing fight, two 109s were claimed as destroyed, with no losses on the ‘home’ side.

Middle Wallop was subjected to the first of many air raids on the 15\(^\text{th}\) when a force of some 300 - 400 enemy aircraft struck at targets in the Portsmouth, Weymouth and Middle Wallop areas between 1720 and 1810

\(^7\) The Bawdsey Research Station was retitled AMRE in September 1939.
hours. The attack cost the Squadron three Blenheims destroyed and a further one damaged. A second raid on the 21st resulted in damage to another Blenheim.

Throughout August the Squadron continued its night patrols in the hope of catching the enemy and increasing the aircrew’s proficiency in night flying and interception. Getting airborne, flying the course and landing safely were something of a trial, as Rory Chisholm, who did not find night flying particularly easy, explains on the night of his first operational patrol:

‘Thus I and my crew found ourselves on the night of August 16th as No.5 on the programme, with I believed, little prospect of flying. Several patrols were sent off, and then two aircraft were reported as unserviceable for the rest of the night. We were next off. It was getting late and there were only a few more hours of darkness. I thought there would probably be no more flying, and so I lay down and tried to sleep. I must have slept because the ringing of the telephone made me come to with a start. Orders were passed for a patrol on a certain line near Bristol.

This was it. I stumbled out into the darkness. I felt scared but stoical … I hurried as best I could towards the aircraft, towards the torches of the ground crew who were waiting. We flew for two and a half hours in beautiful weather, came back and landed successfully at the third attempt.

The patrol was a mixture of nervous tension and great exhilaration. Bristol was being blitzed 15,000 feet (2,415 metres) below me. I saw bombs explode and anti-aircraft fire and plenty of fires, but since I was never sure of myself, of the attitude of the aircraft or of my own position, this patrol was of no potential value to our night defence.\(^8\)

The Blenheims flew with a crew of three: pilot, air-gunner and radar operator, with the conditions for the latter in the rear fuselage being very uncomfortable. Although the height of summer, the crews were forced to wear a combination of service issue clothing and items of their own invention to stay warm at the higher altitudes of their patrol. First a pair of pyjamas, over which one thick silk and wool aircrew vest, a roll-neck pullover and serge battledress. To keep the feet warm, two pairs of caste off ladies silk stockings, followed by two pairs of thick woollen socks. Having

\(^8\) Roderick Chisholm, *op cit*, pages 40 & 41.
got all items properly ‘installed’ the completed apparel was covered by fur-lined leather trousers and jacket (Goon Skins) and flying-boots.\footnote{C.F.Rawnsley & R.Wright, \textit{op cit}, page 37.}

Whilst the gunner had a properly designed station in the turret, the operator was forced to kneel down on the floor of the fuselage to operate the radar. With nothing to do until commanded to switch-on the set (flash the weapon) and contribute to the patrol, many fell asleep swathed in flying suit and blankets, much to Jimmy Rawnsley’s disgust:

‘Then came the coded instruction from the ground to switch on the radar set. “Flash your weapon” the Controller said. So there was something ahead of us! I stooped down again and looked at the magician. He was still asleep. Reaching out, I prodded him with my flying-boot. “Hi ….. Abracadabra!” I exclaimed. “It’s time to do your stuff.” He stirred and unwound himself, and thrust the blankets into an untidy heap on the floor in front of the seat, and knelt on them. A familiar humming came over the intercom as he switched on ….. “Have you got anything?” John (\textit{Cunningham}) asked, eager but patient. The only answer the operator made was a series of muffled grunts. “It … it’s very indistinct” the operator muttered. “I don’t think …” The muttering died away into incoherence. “Well keep trying” John said ….. no response came from the kneeling figure amidships. I wondered if he was praying. We went blundering on impotently into the darkness, but it was no good: we found nothing at all.’\footnote{\textit{Ibid}, pages 41 & 42.}

The dangers of night flying were highlighted on the 24\textsuperscript{th} when Flying Officer Speke crashed at Odiham, fortunately without injury to himself, or his crew. On the 31\textsuperscript{st} the Squadron learned that one of its previous members, Flying Officer Duke Doulton, who had been posted to 601 Squadron in June 1940, was ‘missing believed killed,’ following a combat over the Thames Estuary.\footnote{Doulton’s Hurricane, R4215, was located along with his body near Wennington Church, Rochford, Essex, on 27\textsuperscript{th} April 1984. His remains were cremated at a private service at Hastings and his ashes were interred in Salehurst Churchyard, East Sussex.}

The first of 604’s new equipment in the form of the Bristol Beaufighter If, was delivered to the Squadron on 2\textsuperscript{nd} September and was on patrol that evening. Powered by two large Bristol Hercules radial-engines, each developing 1,400-hp, and armed with four 20mm cannon and six 0.303 inch
Bristol Beaufighter If ‘F’ of 604 Squadron, circa autumn 1940/winter 1941. The dipole aerials for the AI Mk.IV radar can clearly be seen on the nose and the outer wings. The aircraft is from a batch of 500 built by Fairey Aviation at Stockport, Cheshire, (RAF Museum, Hendon).

(7.69mm) Browning machine-guns, the Beaufighter had a mesmerising effect on everyone, more particularly on the gunners:

‘There she stood, sturdy, powerful, fearsome, surrounded by an enthusiastic crowd …… Pilots, engineers, fitters, riggers, armourers and signals mechanics were in attendance …… For the gunners, however, there was a shattering disappointment. Where the turret should have been there was nothing but a plain, moulded dome of perspex. But where were the four free guns in the turret in the back that could fire forwards and upwards into the belly of an enemy bomber? There was not even a single free gun with which we could foster our delusion of usefulness.12

As an apparent confirmation of the gunner’s continuing usefulness in the night battle, the Blenheim’s turrets were removed and the resulting hole faired-over. The CO, Squadron Leader Anderson, was the first Squadron pilot to fly the Beaufighter, closely followed by Flight Lieutenant Cunningham.13

12 C.F.Rawnsley & R.Wright, Night Fighter, pages 46 to 48.
13 Flying Officer John Cunningham was promoted to Flight Lieutenant on 22nd June 1940.
Shortly after the arrival of the Beaufighter, the Squadron’s establishment was increased by the addition of the Special Signals Officer, in the form of Pilot Officer K.A.B. Gilfillan, ‘a large, forceful man who was to make his mark not only in the affairs of the squadron but also in the whole story of the radar war.’ A professional radio engineer in civilian life, Gilfillan successfully completed a ‘crash’ course in radar before being posted directly to 604. Although new to the RAF and the Squadron, Gilfillan was not one to let the grass grow under him. He had a way of acquiring servicing tools and spare parts and had little fear of senior officers, he once tackled the AOC over the supply of badly needed equipment. Through his drive and determination he devised mobile servicing gear and converted one of the married quarters into a workshop, complete with its own generator purchased in the Holloway Road. He flew regularly as an operator, and although not particularly good in the role, according to Jimmy Rawnsley, he nevertheless spoke with authority and experience on AI matters and was a good judge of the ability of individual crews.

With no turret in the Beaufighter and the increasing need for night-fighter crews, the gunners were given the opportunity to re-train as radar operators. However, before this training could take place, the suitability of operator-candidates was first assessed by a psychologist, whose principal

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14 C.F. Rawnsley & R. Wright, *op cit*, page 53.
duty was ‘to weed out the goons’\textsuperscript{16} before they progressed to technical training. The job of training the erstwhile ‘magicians’ was the responsibility of a civilian scientific officer, otherwise known as a ‘boffin’, Donald Parry, who instructed the students in the principles and practice of AI in a closely guarded lecture room. Having completed the boffin stage the gunners were introduced to a visiting training section who demonstrated, by means of a ground trainer, the functionality of the AI set in the aircraft. The ground trainer was in the capable hands of Corporal Brian Cape, who was studying to become an engineer before the war broke out. Recruited into the RAF he built the first ‘synthetic’ AI ground trainer, with which he toured the night-fighter squadrons to demonstrate its capabilities. Under Corporal Cape’s tuition each gunner was shown the characteristic ‘Christmas Tree’ trace on the two screens of the AI set and the ‘blips’ representing target aircraft.\textsuperscript{17} Having completed the theory part, each student had the system demonstrated in the air by one of the Squadron’s crews, using another crew as the target. However, training time was restricted by the need of the operational crews to have aircraft available for patrols and the gunners requirement to fly at night in the remaining Blenheims. A few stripped-down Blenheims with the gun-turret removed, were made available for operator instruction, but it was as late as October before some gunners got their chance to gain their first AI air experience.

On 7\textsuperscript{th} September ‘B’ Flight’s commander, Flight Lieutenant John Davies, left the Squadron to join No.6 OTU at Sutton Bridge, to convert to single-seat Hurricanes, before being posted on the 18\textsuperscript{th} to command No.308 (Polish) Squadron at Squires Gate.\textsuperscript{18} His place as OC ‘B’ Flight was taken by Flight Lieutenant Cunningham.

On the 9\textsuperscript{th} Flying Officer Speke and his gunner in a Blenheim engaged an enemy aircraft that was illuminated by the fires over dockland area of East London. No claim was made. With the Spitfires of No.152 Squadron flying top cover, two Blenheims flown by the CO and Pilot Officer Crew, attacked a Do 18 flying-boat that was under tow by a pair of E-boats in the English Channel on the 11\textsuperscript{th}. They succeeded in setting the aircraft on fire and sinking it.

On 3\textsuperscript{rd} October the CO in a Beaufighter affected the type’s first interception, but failed to complete his attack due to a gun malfunction.

\textsuperscript{16} C.F.Rawnsley & R.Wright, \textit{op cit}, page 54.
\textsuperscript{17} Most 1.5 metre AI radar sets (AI Mks.III & IV included) had two screens; one displaying range/azimuth information and the other range/elevation information.
\textsuperscript{18} Squadron Leader Davies was killed on 16\textsuperscript{th} October 1940 when his Hurricane struck a barrage balloon cable in bad weather over Coventry.
Further interceptions were made on the 17th, again with no results. Because of the longer nights and poor weather, the Squadron suffered a number of accidents. On the 8th Pilot Officer Bayliss overshot the flarepath on the approach to Middle Wallop, wrecking Blenheim L1281, but avoiding injury to himself and his gunner. In a similar situation on the 25th, Pilot Officer Wheatcroft lost a propeller on the approach and was only able to extend one wheel. The machine crashed on landing, but once again no one appeared to have been injured. Nigel Wheatcroft’s luck and that of his air-gunner, Sergeant Ronald Taylor, ran out a month later, when their Blenheim L6728 crashed at Danebury Hill on 26th November, destroying the aircraft and killing them both.

‘Trade’ for the Middle Wallop Sector was provided by the bombers of Luftflotte 3 who transited the sector to the west of London before turning north on their way to bomb the cities of the industrial Midlands; Birmingham, Coventry and Wolverhampton. These raids were led by specially trained Pfadfinder (Pathfinder) He 111s of Kampfgruppe (KGr) 100, the 3rd Gruppe of Kampfgeschwader 26 (III./KG 26) and II./KG 55, equipped with the blind bombing and navigation aid, X-Gerat, based on the Lorenz overlapping beam system. X-Gerat (X-equipment) was for its time a very sophisticated system, which comprised a ‘main approach beam’ transmitted from a site on the Cherbourg Peninsular that was intersected by three ‘cross beams’ located on sites in northern Germany. All operated on frequencies between 30.0 to 33.3 MHz and could be steered to intersect a target.19

It was the job of the Pfadfinders to accurately bomb the target, usually part of an industrial city (factory, gas works, railways, etc), with incendiary bombs to provide a marker for the following ‘main force’ to bomb with high explosive (HE) ordnance, making these aircraft particularly valuable targets. The most notorious raid of 1940 occurred on the night of 14/15 November, when 304 aircraft from Luftflotte 3, supported by 145 from Luftflotte 2, severely damaged the City of Coventry in apparent retaliation for an RAF raid on Munich on the 8th. The raid was led by the ‘firelights’ from KGr 100 and II./KG 55 who successfully marked the factories within the city limits on a night of bright moonlight and good visibility. The defence was overwhelmed, with only a single Do 17Z being brought down by anti-aircraft fire, despite the good conditions.

The bombers returned to strike at Birmingham on the night of 19/20 November, when 400 aircraft inflicted widespread damage on the industrial and residential districts of the city. Further damage was also recorded in

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Coventry. However, on this occasion the RAF scored a small, but nevertheless, significant victory over the *Luftwaffe* that would provide a pointer for the future conduct of the night battle.

Shortly before midnight on 19th November, a Ju 88A-5 of *I./KG 54* from *Luftflotte 3* piloted by *Unteroffizier* Kaspar Sondermeir, took-off from its base at Evreux in France bound for the West Midlands and the raid on Birmingham. Earlier that same evening Flight Lieutenant John Cunningham and his radar operator, Sergeant John Philipson, in a Beaufighter of 604 Squadron, took off from their base at Middle Wallop for a normal late evening patrol in their assigned area, coded ‘Slap B’. Cunningham sighted a series of contrails above the Beaufighter and set off in a southerly direction. Climbing to intercept the trails Cunningham and Philipson soon encountered ‘trade,’ but lost it in cloud cover. Returning to their patrol line, Philipson detected a target on his AI radar and guided his pilot to affect the interception of Sondermeir’s Ju 88 in the vicinity of Brize Norton airfield.

Opening fire from astern with a six to seven second burst, Cunningham’s cannon and machine-gun rounds struck the Junkers in several places, mortally wounding gunner *Unteroffizier* Heinrich Liebermann and setting fire to the starboard engine. Ordering the bomb load to be jettisoned, Sondermeir throttled-back the damaged engine and feathered its propeller, before turning on to a heading that would return him to Evreux. Falling gradually to 6,000 feet (1,828 metres) and no doubt desperate to reach the French coast, Sondermeir attempted to re-start the starboard engine, but only succeeded in rekindling the fire. Realising there was nothing further he could do, the pilot ordered the crew to abandon the aircraft when it was somewhere over the Sussex coast. Sondermeir and his wireless operator, *Gefreiter* George Seuss, parachuted to safety, but the second gunner, *Flieger* Peter May, was blown out to sea and perished in the cold waters of the English Channel. Sondermeir and Seuss were captured and sat-out the remainder of the war as prisoners-of-war (PoW). Their ’88 crashed on open ground, near Stubbs Farm, East Wittering, Sussex, at 0035 hours on the morning of 20th November and was completely destroyed. *Flieger* May’s body was subsequently recovered from the sea and buried in St Nicholas Church, Thorney Island, on 12th December.²⁰

Although John Cunningham and John Philipson failed to see their victim crash, following an examination of the wreckage by an RAF intelligence officer, they were officially credited with one Ju 88 destroyed by radar interception. Thus to Flight Lieutenant John Cunningham and Sergeant John

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Philipson, of 604 Squadron, goes the credit for the destruction of the first enemy aircraft by a radar equipped Beaufighter in World War Two, or as Jimmy Rawnsley described it: ‘between them they had made the magic (AI) work and had produced the result for which it was created’. 21

The night bombing campaign was expanded during December 1940 to include the industrial cities of Manchester and Sheffield and the naval port facilities in Portsmouth. There were eleven major raids 22 against London, Manchester, Liverpool, Birmingham and Southampton and a further five classified as ‘heavy’ 23 against Portsmouth, Sheffield and Birmingham. The weather, which was described as ‘typical for December’, precluded bombing operations on eight nights. 24

Flying was restricted in late November and on into early December by fog, however, on 6th December conditions improved sufficiently for Sergeant Peter Jackson to engage a Ju 88 that was illuminated by searchlights. Like the CO on 3rd October, Jackson’s guns failed after he had opened fire, but this did not appear to prevent him filing a claim for one enemy aircraft ‘probably destroyed’. On the 22nd the ever eager Sergeant Jackson and his operator, Sergeant Mike O’Leary, intercepted a Ju 88 with its navigation lights on. Closing to a mere thirty yards (27 metres), partly in order to identify the intruder and partly to make sure he could not miss, the Beaufighter was hit by return fire from an alert German gunner. Jimmy Rawnsley takes over the story:

‘Mike saw the tracer coming in through the roof of the fuselage and out of the back of Peter’s head; and then he was hit. He saw Peter sag as the aircraft rolled into a dive, but he managed to open the escape hatch and bale out. Eventually he was found and carted off to hospital. One bullet had gone through one of his legs, and another had grazed his stomach.’ 25

Although wounded and rendered unconscious, Jackson quickly recovered, pulled the aircraft from its dive and flew back to Middle Wallop on his own. Covered with blood from a head wound when he walked from the aircraft, but otherwise ‘quite unshaken’, Sergeant Jackson was reluctantlty led off to the sick bay, where the following day, ‘the core of an

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21 C.F.Rawnsley & R.Wright, op cit, page 66.
22 The Luftwaffe classified a major raid as one involving more than 100 aircraft.
23 A raid involving fifty or more aircraft.
24 Winston Ramsey (Ed) [1], The Blitz, Then & Now, Volume 2, (Battle of Britain Prints, 1988), page 309.
25 C.F.Rawnsley & R.Wright, op cit, page 73.
armour-piercing bullet was extracted from between his scalp and his skull.26

Flight Lieutenant Cunningham and Sergeant Philipson had better luck. On the evening of the 12th they claimed a Ju 88 destroyed, before engaging an He 111 in moonlight with no perceptible result. The Squadron was by now aware of the special role of the He 111H-327 employed by KGr 100 and the necessity for them to lead every significant raid. In order to have the target alight for the main force, the pathfinder Heinkels were forced to cross the Channel over Cherbourg and make their landfall between the Needles, off the Isle of Wight, and Portland Bill, Dorset, during the last few minutes of daylight, after which they would fly inland towards their target in darkness. The Squadron’s aircrews thought that by sending out special low-level patrols in the late evening, it might be possible to spot the incoming Heinkels silhouetted against the afterglow of the setting sun. They could then be intercepted visually and/or by AI.

On the 23rd December Flight Lieutenant Cunningham and Sergeant Philipson took-off to fly the first of these patrols. Departing Middle Wallop at 1700 hours in darkness, Cunningham climbed the Beaufighter into broad daylight at 15,000 feet (4,570 metres), where, as they supposed it might be, he identified an incoming He 111 to the south of Lulworth Cove:

‘After a long, cautious stalk John hit the pathfinder squarely in the bomb load. It blew up in a ghastly display of fireworks, with coloured flares and burning incendiaries showering out as the big machine lurched into a dive that was nearly vertical. The wreck, burning furiously, plunged into the cloud below and vanished from sight. Three parachute flares that had fallen out went swinging after it, garishly lighting the scene for a brief moment.’28

1940 ended on a high note as far as the Squadron was concerned. They began the year flying an aircraft that was hopelessly outclassed as a day-fighter, but when switched to night-fighting it provided the air and ground crews with a stable and reliable machine on which to learn their trade. 604 opened its ‘score’ in June 1940 and continued to claim further enemy aircraft ‘destroyed’ throughout the year. However, by December the

26 C.F.Rawnsley & R.Wright, *op cit*, page 75.
27 The H-3 sub-type of the He 111 bomber employed by the pathfinders were designated He 111H-3x to indicated their carriage of the X-Gerat radio bombing system. Visually these aircraft were distinguished by the addition of a third radio aerial on the fuselage spine.
28 C.F.Rawnsley & R.Wright, *op cit*, pages 76 & 77.
Squadron was completely re-equipped with the very best night-fighter and AI radar of its day, flown and operated by crews who were beginning to gain success in the night skies over south-west England.

1941

The inability of the CH stations to guide a night-fighter and position it with sufficient accuracy for its AI radar to detect a target, had long remained a problem within the night-fighter fraternity. The situation was resolved in January with the introduction by Fighter Command’s No.60 (Signals) Group of several Ground Control of Interception (GCI) radar stations in southern and eastern England. Designed by the scientists and engineers at the Telecommunications Research Establishment (TRE), Swanage, to a Fighter Command specification, these ground-based radars operated on the same wavelength as the Beaufighter’s AI (1.5 metres/200 MHz), had a range of fifty to sixty miles (80 - 97 kms) and were able to simultaneously measure the bearing, range and height of several targets with considerable accuracy. It was also the first radar set to provide a 360º coverage of the surrounding area by means of its unique rotating sweep (timebase) system, centred on the middle of a CRT display (the Plan Position Indicator - PPI). The GCI station was connected to a parent CH station, where incoming enemy aircraft were first detected, before being passed to the GCI controller when they entered his sector. The controller had charge over several night-fighters flying a ‘beat’ patrol, whom he guided by R/T until the target came within the range of the fighter’s AI. 604’s GCI in the Middle Wallop sector was based at Sopley, Hampshire, a few miles inland from Bournemouth. With its call-sign of ‘Starlight’ Sopley began operations under the command of Squadron Leader John Lawrence ‘Brownie’ Brown during January 1941 (see over page). The combination of Beaufighter, AI Mk.IV and GCI were to prove decisive during the remainder of the Night Blitz.

The German bomber offensive at the beginning of the New Year was hampered by poor weather over the British Isles, and more importantly for the Luftwaffe, over the bomber airfields of Northern Europe, which curtailed flying on thirteen nights during January. Nevertheless, conditions were sufficient to enable simultaneous major raids to be mounted against London and Manchester (9/10th), the coastal ports, a further four against London and one against Derby (15/16th) centred on the Rolls-Royce engine works. In

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29 Durrington, Sopley, Avebury, Willesborough, Waldringfield and Orby.
30 Later Wing Commander John Brown, killed in action at Arnhem, September 1944, whilst commanding the mobile radar stations of Nos.6080 & 6341 Light Warning Units.
addition to these, the minelaying aircraft of IX Fliegerkorps maintained their assault on coastal shipping.\textsuperscript{31}

For 604 the year began in a congratulatory manner with the award of the Squadron’s first decorations: a DFM to Sergeant Peter Jackson on 1\textsuperscript{st} January and the DFC to Flight Lieutenant John Cunningham two days later. Continuing bad weather restricted flying for most of the month and may well have been the cause that led to a successful bale-out over Stratford-on-Avon by Flight Lieutenant Scott on the night of the 17\textsuperscript{th}.

The weather in February 1941 severely restricted bombing to such an extent that the Luftwaffe was unable to mount any major raids on the British Isles. Despite the conditions the German bomber crews managed to undertake raids on all but five nights and cause serious damage in London, Swansea, Derby, Liverpool and Chatham. Attacks on RAF airfields were also undertaken alongside minelaying operations in coastal waters.\textsuperscript{32}

On 7\textsuperscript{th} February the Squadron suffered its first loss of the New Year when the popular Flight Lieutenant Alastair Hunter and his operator, Pilot Officer Terence Genny crashed whilst approaching to land at Middle Wallop. Hunter was a long-time member of 604, having joined the Squadron in 1937 and destroyed its first enemy aircraft in June 1940. Genney, who had been awarded the MC in 1918 when serving with the Lincolnshire Regiment, was commissioned into the RAF as a gunner in May 1940, aged forty-four. Although it was known the aircraft spun on the approach, the cause of the accident was put down to ‘an error of judgement’,\textsuperscript{33} there being insufficient time to convene a proper enquiry and reach a considered conclusion.

On the night of the 15/16\textsuperscript{th} Flight Lieutenant Cunningham, accompanied by his old gunner-turned-radar operator, Sergeant Rawnsley, destroyed the first enemy aircraft of their famous partnership. Taking off from Middle Wallop in the late afternoon of the 15\textsuperscript{th}, Cunningham climbed to their patrol height of 15,000 feet (4,570 metres) some forty miles (64 km) to the south of Lulworth and awaited a target from Starlight GCI. Not long after ‘Brownie’ advised them of an incoming raider flying at 12,000 feet (3,660 metres) ‘on their track’. Reducing altitude to place the Beaufighter in the ‘misty obscurity’ 4,000 feet (1,220 metres) below, with the enemy illuminated by the lighter sky above them, the pair scanned the sky for an aircraft.

\textsuperscript{31} Ken Wakefield (Ed) [1], op cit, page 376.
\textsuperscript{32} Ibid, page 420.
\textsuperscript{33} Roderick Chisholm, op cit, page 70.
Reverting to his air-gunner training in quartering the sky, Rawnsley was the first to identify a ‘speck’ high on the port quarter coming straight at them. ‘Wheeling the Beaufighter around on its wing-tip’ Cunningham brought the night-fighter behind the enemy aircraft, quickly identified as an He 111, and on the same course. Obscured by the mist, the Heinkel proceeded north in the general direction of Birmingham, unaware of the Beaufighter tracking beneath it. The chase continued in this way until the enemy was completely engulfed by the gathering darkness approaching Lyme Bay. At this juncture Cunningham ‘opened up the throttles, and the Beaufighter rose like a lift, with the bomber swelling monstrously above’ their heads. Checking everything was in order (AI working, gun safety catches ON and air pressure OK)\textsuperscript{34} and there were no other aircraft in their vicinity, Rawnsley reported ‘all set’ and ‘nothing behind’. Gently lifting the Beaufighter’s nose as the ‘Heinkel sank slowly’ into the sight, Cunningham opened fire hitting the ‘111 in, amongst other places, the starboard engine, causing it to turn in a gentle dive.

Whilst Rawnsley changed the empty 20 mm cannon drum for fresh ones (the original Hispano cannon installation on the Beaufighter only held fifty to sixty rounds per gun) the Heinkel had disappeared. Calling Starlight for assistance the pair were advised by an alert Brown that the enemy was heading west over land and gradually losing height. Within a short time Rawnsley had re-established contact on the AI. Following the enemy down to 3,000 feet (915 metres) Cunningham and Rawnsley watched the Heinkel jettison its load of incendiaries before crashing on farmland near Harberton, Devon, at 2015 hours.\textsuperscript{35} The aircraft from III./KG 27 commanded by \textit{Oberleutnant} Beckmann, was completely destroyed and its crew of four were killed.\textsuperscript{36}

The weather deteriorated during the second half of the month, but despite these limitations the Squadron managed six patrols with four contacts on the 20\textsuperscript{th} and five the following day with three contacts. All with no positive results. On the 25\textsuperscript{th}, in line with Fighter Command policy that night-fighter squadrons be commanded by a wing commander because the size of their establishment warranted a more senior officer, Wing Commander Charles Appleton replaced Squadron Leader Anderson as CO.

\textsuperscript{34} The Beaufighter’s cannons were ‘cocked’ pneumatically by the radar operator as they were out of the reach of the pilot. At times this was a difficult task in a dark and cold fuselage that was bucking about in turbulence. It also required the operator to leave his AI set whilst his pilot hopefully retained the target in his vision.
\textsuperscript{35} C.F.Rawnsley & R.Wright, \textit{op cit}, pages 91 to 94.
\textsuperscript{36} \textit{Oberfeldwebels} Unseld, Bunge and Streubel.
Before joining 604 Squadron, Wing Commander Charles Appleton had served as a pilot in Bomber Command and had been awarded the DFC (from an unidentified newspaper cutting, via Margaret Budd).

The following day Squadron Leader Anderson and Sergeant Alfred Sandifer\textsuperscript{37} damaged an intruding Ju 88 under the control of Sopley GCI.

By the time Charles Appleton took over as CO, the Squadron had lost much of its Auxiliary character according to Jimmy Rawnsley:

\begin{quote}
‘It would be difficult to imagine a greater contrast than that which existed between Mike (Anderson), as we called him, and Wing Commander Charles H. Appleton, every inch a regular officer in spite of the swagger stick under his arm. He had that razor-sharp look of a man who habitually drove himself hard, and expected those under his command to do the same thing. It looked as if we might have to amend some of our easy going ways ..... But Charles Appleton was no mere parade-ground martinet. Within a very short time of his arrival he was up in a Beaufighter and painstakingly getting the feel of things, although he never completely mastered all the difficulties of the job’\textsuperscript{38}
\end{quote}

\textsuperscript{37} Later Flight Lieutenant Alfred Sandifer.
\textsuperscript{38} C.F.Rawnsley & R.Wright, \textit{op cit}, pages 104 & 105.
Movements and promotions during February comprised postings for Flight Sergeant Davis to No.86 Maintenance Unit (MU) at Sundridge, Kent, on the 16th and Pilot Officer MacLaren to No.2 Signal School at Yatesbury on the 24th and the promotion of Sergeants Thomas and Taylor to Flight Sergeant (22nd and 28th).

With Wing Commander Appleton now leading the Squadron, Squadron Leader Anderson’s status became somewhat vague, however, on 3rd March the officer responsible for postings at HQ Fighter Command saw fit to reinstate Anderson as a supernumerary Squadron Leader. As if to celebrate the occasion Squadron Leader Anderson intercepted an He 111H-5 of I./KG 28 on the night of 4/5th and shot it down into the sea off Beer Head, Dorset, at 2158 hours, destroying the aircraft and killing all four crew members. For this action and his previous work with the Squadron, Squadron Leader Anderson was awarded the DFC on the 11th.

The Luftwaffe’s policy of conducting successive raids against individual targets was introduced during February 1941 and accentuated during March. With the weather steadily improving throughout the month and the full moon period aiding the raiders, the month was to record the heaviest bombing of the war to date. Cardiff was raided on three successive nights, whilst London, Glasgow, Clydebank, Hull, Bristol, Plymouth and Southampton were damaged in repeated attacks. ‘The worst night was March 19/20th when there were 479 bombers over London.’

On the positive side, the defences recorded their best month of the war, with a total of twenty-two enemy aircraft claimed as destroyed, against the enemy’s estimated sortie rate of 3,510 - a loss rate (0.6%) the enemy was easily able to sustain.

The weather at the beginning of March continued to be poor, with few patrols and even fewer interceptions. However, by the middle of the month the conditions improved, along with the sortie rate. On the 10th the Squadron managed six patrols which resulted in eight AI contacts and one inconclusive engagement by the CO. The weather on the night of the 12/13th was ‘excellent’ with clear skies and bright moonlight, which the flying crews used to their best advantage. Seven patrols were flown, which three crews turned into successful interceptions: Flying Officer Geddes and Sergeant Cannon destroyed a Ju 88A-5 of III./KG 76 that crashed at Kingston Deverill, Wilts, whilst Flight Lieutenant Cunningham and

39 Later Flight Lieutenant Archibald MacLaren.
40 Winston Ramsey (Ed) [1], op cit, page 446.
41 Air Historic Branch (AHB) estimates conducted after the World War Two and quoted in Volume 5 of the Official Signals History.
Sergeant Rawnsley claimed an He 111 as probably destroyed and a Ju 88 damaged and Sergeant Wright damaged an unknown enemy aircraft.

The results the following evening were even better, with Flying Officer Chisholm and his radar operator, Sergeant Ripley,\(^{42}\) claiming their first and second enemy aircraft destroyed on the same night, as Rory Chisholm records:

‘On that night there was almost a full moon and the weather was very fine. We had been flying for more than an hour when we were put on to a bomber that was going back empty. We were overtaking fairly well, and by the time we passed over Bournemouth were about a mile (1.6 km) behind. We closed a bit more and my observer, Ripley, got a close radar contact over to the left. I turned a little to the left, and I could hardly believe my eyes, for there was another aircraft about a hundred yards (90 metres) and on the same level. It was black and its fish-like fuselage glistened dully in the moonlight; it was unmistakably a Heinkel. Converging rapidly, I turned to come behind and dropped below with an automatism that surprised me; my machine seemed to be on rails, so easily did it slide into position ….. The enemy gunners were not keeping a good lookout’ and ‘I was able to creep up unmolested until I was within a hundred yards (90 metres) and forty-five degrees below ….. The moment had come to shoot; it was now or never. Holding my breath I eased the stick back a little and the Heinkel came down the windscreen and into the sight. I went too far and I found myself aiming above. Stick forward a bit and the sight came on it again. There was a terrific shaking and banging, and to my surprise I saw flashes appearing, as it seemed, miraculously on the shape in front of me. Pieces broke away and came back at me. I kept firing, and it turned away slowly to the right, apparently helplessly and obviously badly damaged. My ammunition finished I drew away farther to the right. I had overshot, and I could see the Heinkel over my left shoulder still flying all right ….. And then I saw a lick of flame coming from the starboard engine. It grew rapidly, and enveloped the whole engine and soon most of the wing. The machine turned east and started to go down slowly; it looked by now like a ball of flame. We followed it down from 11,000 feet

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\(^{42}\) Later Flight Lieutenant William Ripley, DFM, died of injuries sustained as a result of enemy action on 16\(^{th}\) November 1943 whilst serving with No.141 Squadron.
Rory Chisholm alongside Beaufighter If. Note the position of the transmitting aerial for AI Mk.IV on the nose and the trolley-ack to provide power to start the aircraft’s engines (604 Squadron Archive).

(3,350 metres) until, minutes later, it hit the sea, where it continued to burn.\textsuperscript{43}

Returning to Middle Wallop to rearm and refuel, Chisholm and Ripley were airborne for a second time that night at ‘about midnight’ and following a fruitless chase with an unidentified enemy aircraft, were vectored onto another returning from a raid on the Midlands. This chase resulted in the destruction of another He 111 that fell into the Channel ‘a few miles to the south of the Isle of Wight.’ In addition to the Squadron’s first double kill, Flight Lieutenant Lawton also claimed a Ju 88 as destroyed and Flight Lieutenant Skinner an He 111 damaged. Further success came to Pilot Officer Geddes and Sergeant Cannon on the night of the 14/15\textsuperscript{th}, when they intercepted and shot down an He 111P-4 of II./KG 55 that crashed at Falfield, Gloucester.

The three nights of the 12\textsuperscript{th} to the 15\textsuperscript{th} March represented the Squadron’s best performance of the War thus far and one that earned a message of congratulations from the AOC-in-C and the award of the DFC to Flying Officer Chisholm on 1\textsuperscript{st} April.

Poor weather once again intervened to restrict flying in the middle of March, but this did not prevent Flying Officer Geddes and Sergeant Cannon damaging an He 111 on the night of the 16\textsuperscript{th}. Enemy activity declined throughout the remainder of March, which, combined with more bad

\textsuperscript{43} Roderick Chisholm, \textit{op cit}, pages 71 to 73.
weather at the month’s end, resulted in a reduced sortie rate and a general lack of interception opportunities.

The month did however see the departure of some old friends and the influx of new blood. Flight Lieutenant Ronald Scott\(^{44}\) was posted to RAF Exeter, Pilot Officer Cordingly to No.85 Squadron at Debden, Warrant Officer Bowmaker and Squadron Leader Kelly across the airfield to No.93 Squadron, Sergeant Perry (groundcrew) to No.52 OTU, also at Debden, and Sergeant Travell to CFS. It is perhaps worth noting that the posting-out of valuable, pre-war trained ground crew, reflects the quality of Auxiliary personnel that, starting within a year of war, those that had shown the potential and could be spared, were posted to other units to use their experience at a higher rank. The incomers comprised Flight Lieutenant J.R.Watson from No.54 OTU, Church Fenton, Pilot Officer Willis from No.3 Radio School, Prestwick, Flight Lieutenant Gomm and Pilot Officer Curnow, DFC, from No.54 OTU and help with the Special Signals Section in the form of Flying Officer Ryder. There were promotions for Pilot Officers Joll, Boggis and Gilfillan to Flying Officer and Flight Lieutenant Cunningham to Squadron Leader (squadrons commanded by wing commanders now required flights to be commanded by squadron leaders) and a DFM for Sergeant Rawnsley, plus a Mentioned in Dispatches for Squadron Leader Anderson and Flight Lieutenants Speke and Lawton. Quite a month!

The poor weather of late March extended on into April, reducing the number of sorties flown by the Luftwaffe and a further decrease in trade for the Middle Wallop Sector. Nevertheless, the month was destined to be one of the busiest of the war, with the Luftflotten mounting sixteen major raids and there being only three nights with no enemy activity. A record was set on the night of 19/20\(^{th}\) April when 712 bombers dropped 1,000 tonnes (1,016 tons) on London, killing some 1,200 people. The industrial and port centres of Bristol/Avonmouth, Glasgow/Clydeside, Liverpool/Birkenhead, Coventry, Birmingham, Tyneside, Belfast and Plymouth/Devonport were subjected to a number of major and heavy raids that incurred serious damage to industrial and residential property. These factors combined to make April the worst month of the war thus far for bomb damage,\(^{45}\) but also the best for enemy aircraft destroyed, 48½, for 4,835 enemy sorties flown - a loss rate of 1.2%. The doubling of the previous month’s figures may be attributed in part to the greater number of bombing sorties flown, with a

\(^{44}\) Later Wing Commander Ronald Scott.

\(^{45}\) Winston Ramsey (Ed) [1], *op cit*, page 502.
corresponding increase in the interception opportunities, the shortening nights and the improved efficiency of the defences.

An improvement in the weather during April increased the sortie rate of the German bomber crews and the fighter opposition. On the 3rd the Squadron was reinforced by two Beaufighters from No.25 Squadron at Wittering, which enabled six patrols to be flown that night, resulting in four contacts and one inconclusive combat. The following night, the 4/5th, Flying Officer Edward Crew and his radar operator, Sergeant Norman Guthrie, destroyed an He 111H-5 of III./KG 26, which crashed at West Hewish, near Weston-Super-Mare. This was a valuable catch as the aircraft was one of the pathfinders from KG 26’s IIIrd Gruppe and three of its all-NCO crew survived to undergo interrogation before incarceration in a PoW camp. Flight Lieutenant Watson claimed an He 111 probably destroyed, as did Flight Lieutenant Lawton and his operator, Sergeant Patson. Unfortunately the latter crew were forced to abandon their aircraft when it ran out of fuel after repeated attempts to land at Middle Wallop and Boscombe Down. Both landed safely and unhurt.

The following two nights were quiet with no enemy aircraft reported in the sector. On the night of the 7/8th the bombers returned to the offensive and nine patrols were flown, seven under Starlight control and two under GCI’s predecessor, GL Carpet. This system relied on the Army’s GL gun-laying radars to provide a means of tracking and guidance for the night-fighter. The improved capability of GCI and the subsequent greater coverage of these radars (in excess of twenty by the end of 1941, with more planned) rendered GL Carpet redundant. One of the Starlight controlled interceptions resulted in the destruction of another of KG 26’s pathfinders by Squadron Leader Cunningham and Sergeant Rawnsley. The aircraft, an He 111H-5 of KG 26’s IIIrd Gruppe, was claimed as destroyed by 604 when it fell into the sea off Branscombe, Devon, with the loss of its five crew members. Unfortunately, the Heinkel was also claimed by Flight Lieutenant D.H.Ward, a Hurricane pilot and flight commander with No.87 Squadron at Charmey Down. Flight Lieutenant Ward not withstanding, 604 maintained their claim on the Heinkel and recorded it as such in the ORB.

On the 9th Squadron Leader Mike Anderson was posted to command RAF High Ercall, Shropshire, the home of No.29 MU and the rare Blenheim

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46 Later Air Vice Marshal Edward Crew, CB, DSO*, DFC, destroyed thirteen enemy aircraft and twenty-one V1s.
47 Later Flight Lieutenant Norman Guthrie, DFM.
48 Later Flight Lieutenant Derek Ward, DFC, killed in action in North Africa on 17th June 1942.
IVFs of No.68 Squadron. That evening Flying Officer Chisholm and Sergeant Ripley repeated their performance of 13/14th March by destroying two enemy aircraft: one unidentified, but possibly an He 111H-2 of II.KG 1, and the other a valuable He 111H-3 of KGr100 brought down near Cranborne, Dorset. This aircraft also yielded two crew members for interrogation and internment. Squadron Leader Cunningham and Sergeant Rawnsley claimed another (unidentified) Heinkel destroyed and a further one damaged and Flight Lieutenant Gomm winged a Ju 88.

The following night, the 10/11th, two crews opened their scorecard with the Squadron. Flight Lieutenant Watson (operator not known) shot a Ju 88A-5 of I./KG 54 into the sea off St Aldhelms Head, Dorset, whilst Flight Lieutenant Budd and Sergeant Evans destroyed yet another He 111 from KGr100, as George Evans describes:

‘We got airborne that night and quickly recognised Brownie’s voice on the R/T. We didn’t have long to wait before we heard the magic words “I think I have a customer for you Red 1 Vector 180°” (that takes us out over the channel). “The customer is about 4 miles (6.5 km) away from you and coming towards you. Flash your weapon.” I immediately got a contact and turned Georgie in behind and below. We closed in and Georgie got a visual. We both confirmed it was an He 111. Up came our nose and Georgie let him have it. We saw strikes, but it went into a vertical dive into cloud and we lost it. I couldn’t find it on the radar again, damn! One damaged and probably extremely frightened Heinkel. But this was our night. A little later Brownie put us on to another “customer.” It was jinking a little, but I managed to get it to a visual and again we both identified a He 111. This time Georgie made absolutely certain, he very gently throttled back until the target was just above us at about 100 yards (90 metres) range. Very slowly, he brought our nose up and let them have a five second burst from our four cannon. Bingo! The port engine burst into flames and the bandit went into a vertical dive. We were able to watch it all the way down until it exploded on the Isle of Wight.’

The Heinkel crashed at Chale Green, Isle of Wight, with four of its crew of five surviving for interrogation and imprisonment.

The next day, the 11th, Sergeant Peter Jackson was commissioned as a Pilot Officer RAFVR and moved himself and his kit into the Officers Mess.

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49 George Evans, op cit, pages 95 & 96.
Trade that evening was brisk, with the Squadron putting up eleven patrols. Squadron Leader Cunningham and Sergeant Rawnsley claimed a north-bound He 111P-2 of III./KG 27 destroyed and crashing at Shaftesbury, Dorset, and another probably destroyed. Flying Officer Chisholm and Sergeant Ripley destroyed an unknown enemy aircraft destroyed, plus a Ju 88 damaged and Sergeant Poole claimed an He 111 damaged. The Cunningham/Rawnsley He 111 was also claimed by a Defiant of No.307 (Polish) Squadron flown by Sergeants Jankowiak and Lipinski. The following three nights were very quiet, with only eleven patrols being flown and one inconclusive combat being reported.

The Squadron’s servicing arrangements were reorganised on the 13th. From this date the aircraft servicing echelon, comprising Sergeants London and Evans and forty-five corporals and airmen under Flight Sergeant Letley, were transferred to Squadron HQ to become No.604 Squadron Beaufighter Servicing Echelon reporting through the Squadron Engineering Officer to the CO.

On the 15th Pilot Officer Derek Jackson, air gunner, arrived on the Squadron to begin his career as a radar operator:

‘It was while Appleton was making up his mind who should fly with him as his regular operator that one of the strangest creatures we had yet seen arrived on the squadron strength. He was a Pilot Officer, and he was wearing an air-gunner’s flying badge ….. we very soon discovered what a mistake we had made in laughing at this extraordinary character. His name was Derek Jackson, and he was a university professor, a physicist of world-wide reputation, and a hard riding amateur jockey ….. he was one of the prize finds in the great drive to recruit master brains for our new trade.’ Night-fighting ‘may all have been a trade to us: to Jackson it was a science’ and ‘in selecting his operator, our new CO decided that this was the man for him.’

A further Squadron record was set on the night of 15/16th April when Squadron Leader Cunningham and Sergeant Rawnsley destroyed three enemy aircraft and Flight Lieutenant Gomm a further two on the same night. The exact chronology of these attacks is not known, suffice to say that Cunningham and Rawnsley shot down an He 111 over Monmouthshire after

50 Later Squadron Leader Derek Jackson, Chief Airborne Radar Officer, HQ Fighter Command.
51 C.F.Rawnsley & R.Wright, op cit, pages 105 & 106.
an independent chase (no GCI control), before returning to Middle Wallop to rearm and refuel. Taking off again (probably after midnight) Cunningham spotted an He 111 near Marlborough, Wilts, illuminated by a searchlight battery. With Starlight fully engaged he was given permission to undertake a second independent search, catching another Heinkel and shooting it down over Southampton. Their final victim of the night, an He 111P-2 of III./KG 55 was also shot down over Southampton at 0200 hours on the morning of the 16th, killing everyone on board. Flight Lieutenant Gomm and his operator, Pilot Officer Curnow, destroyed a Ju 88A-5 of the staff (Stab) flight of II./KG 54. Intent on raiding Liverpool, the Junkers crashed at Holcombe Burnell, Devon, at 2245 hours, destroying the aircraft and killing two of the four crew members. Gomm and Curnow destroyed their second, an He 111P-4 of StabII./KG 55, off Portland Bill, Dorset, at 0230 hours.

Aircraft from the Gruppenstab flights, along with those from KGr 100, were valuable targets since these aircraft invariably carried one of the senior officers of the Gruppe (the Kommandeur, the adjutant, or specialist technical officers), whose loss would be a serious blow to the parent Geschwader.

Five enemy aircraft claimed in one night was certainly a Squadron record and a Fighter Command record. Shortly afterwards the Squadron received the personal congratulations of the CAS, Air Chief Marshal Sir Charles Portal, KCB, DSO, MC,52 and the Secretary of State for Air, Sir Archibald Sinclair, for their achievements on the night of the 15/16th and the award of the DSO to Squadron Leader Cunningham and the DFC to Flight Lieutenant Gomm. On the 20th the AOC-in-C, Air Marshal Sholto Douglas, visited Middle Wallop and spoke to all pilots of the Squadron.

The night of the 24/25th was a quiet evening for the defences, however, this did not prevent Flying Officer Crew intercepting an He 111 and claiming it as destroyed, at the expense of damage to his Beaufighter by anti-aircraft fire. On the 25th the Squadron took delivery of a R-R Merlin engined Beaufighter II for flying practise. This mark was built as a hedge against the perceived shortage of Bristol Hercules engines that were to be installed in the Handley Page Halifax and Short Stirling bombers, then coming off the production lines in Radlett and Cricklewood. In the event the shortage did not occur, but many of the new night-fighter squadrons forming in 1941 were equipped with the Beaufighter II. The job of testing the new Beaufighter was given to Squadron Leader Cunningham.

The Squadron was to achieve two more victories before the month was out to add to an already significant ‘bag’: an He 111 claimed by Flying

52 Later MRAF Lord Portal of Hungerford, GCB, CBE, DSO, MC.
Officer Crew on the 28/29th, and confirmed by the CO, and another ‘111 to Flying Officer Chisholm and Sergeant Ripley on the 29/30th. Sergeant Ripley’s success in guiding Flying Officer Chisholm to his steadily mounting number of victories, was recognised with the award of the DFM on the 28th.

April 1941 was by far the most successful month for 604 with the Squadron flying 146 sorties and claiming seventeen enemy aircraft destroyed, three probably destroyed and a further three damaged. The GCI network set-up in late December 1940, was gradually expanded to cover the whole of 604’s ‘patch’ by early-May, to provide an electronic barrier through which Luftwaffe aircraft attacking Birmingham and the West Midlands had to pass (see page 26).

May 1941, one of the busiest months for Fighter Command and the Civil Defence organisations, signalled the end of the Blitz. Targets as diverse as Belfast, Merseyside, Glasgow and Glasgow/Clydeside and Birmingham were hit by severe raids with heavy casualties. The heaviest raid of the War occurred on the night of the 10/11th when a force of some 500 bombers struck at the Capital, causing extensive damage, disruption and casualties in excess of 1,000 persons killed. The last major raid took place on the 16/17th when the Luftflotten returned to Birmingham before beginning their withdrawal to re-group and begin their preparations for the assault on Soviet Russia.

On the night of 1/2nd, during an engagement with an He 111, Flying Officer Joll’s operator, Sergeant O’Leary, was wounded in several places as the result of return fire from an alert gunner. Nevertheless, a claim for one He 111 damaged was submitted. The following night Flight Lieutenant Budd and Sergeant Evans destroyed a Ju 88A-6 of III./KG 77 that crashed at 2230 hours near Lyndhurst, Hants. The aircraft was completely destroyed, with three of the crew surviving the crash to become PoWs. A heavy raid on Birmingham on the 3/4th brought a steady stream of bombers transiting the Middle Wallop Sector and with them the opportunity for 604 to score again. Flight Lieutenant Speke (radar operator not stated, but probably Sergeant Dawson) claimed his first enemy aircraft destroyed, an He 111H-5 pathfinder of III./KG 26, that crashed at Crowcombe, near Taunton and from which all four members of the crew escaped by parachute. The Cunningham/Rawnsley partnership brought down an He 111P-2 of III./KG 27 near Corton Denham, Somerset, at 2245 hours. With serviceability high, the Squadron flew eleven patrols on the night of 4/5th that resulted in a good number of contacts, but no enemy aircraft destroyed. Pilot Officer Peter Jackson engaged an He 111 and claimed it as damaged, as did Sergeant Reeves, following a long running chase with a Ju 88. The latter crew forced-
The deployment of GCI radar stations in May 1941. 604 Squadron’s STARLIGHT GCI was located at Sopley on the south coast, to the west of Bournemouth. The GCIs at Exminster and Durrington were also used by the Squadron to intercept enemy bombers on their way to bomb targets in Birmingham and the West Midlands (Ian White & Judith Last).

landed at Middle Wallop with the undercarriage retracted due to the jamming of the mechanism. Both crew members escaped unhurt.

Things did not always go according to plan and mechanical failures did occur. On the night of 5/6th Sergeant Ripley placed Flying Officer Chisholm behind and below an He 111, but when he opened fire only twenty-two rounds were released before the guns jammed, forcing Chisholm to break off the engagement to prevent him from being hit by return fire from the Heinkel’s by now fully alert crew. However, Flying Officer Joll and Sergeant Dalton provided some compensation by claiming their first enemy aircraft destroyed, a Ju 88A-5 from II./KG 54, that crashed near Chawleigh, Devon. On this occasion, Flying Officer Joll’s guns worked splendidly, with just thirty-six rounds of 20mm ammunition being necessary to complete the destruction. The following night Wing Commander Appleton

53 Later Squadron Leader Ronald ‘Hank’ Dalton, DFM.
and his operator, Pilot Officer Derek Jackson, suffered a similar experience
to that of Flying Officer Chisholm. Having opened fire and damaged an He
111, the pair were subjected to return fire that hit their Beaufighter and
resulted in a ‘belly’ landing on Middle Wallop’s grass. The interception by
Pilot Officer Peter Jackson and Sergeant Hawkes went well, with another
He 111 claimed as destroyed for the Squadron.

With little warning it was announced on the 7th that His Majesty the
King was to visit Middle Wallop. There followed a short, but intensive
period, of ‘scrubbing and polishing’ to make the airfield as presentable as
possible before the King’s arrival. Aircrews of all three squadrons were
paraded and inspected in full flying gear over ‘best blues’, with, as Jimmy
Rawnsley comments, everyone ‘feeling very self-conscious’ and looking
‘like a lot of unemployed bandsmen.’

The King arrived by road, accompanied by Sir Sholto Douglas, and dined in the Officers Mess before
inspecting and talking to the crews. Halting at one of the ex-magicians he
asked why, unlike the air-gunners, he was not wearing a flying badge:

‘Hurried explanations were produced to explain the difference
between ex-gunners and magicians, and the lack of any flying badge
to cover the new trade. The King made some comments to the C-in-
C which was passed quickly down the ranks of the retinue from
Great Rings to many Rings to Fewer Rings and Lesser Rings until it
reached the tail end, where it was furiously scribbled into The
Notebook.’

Stopping at Sergeant Rawnsley he asked his score and on being told nine
he commented ‘Nine eh? Will you get one for me tonight?’ Rawnsley very
much overcome by the occasion, promised to do his best. His Majesty then
left to be shown around Starlight GCI at Sopley.

Rawnsley and Cunningham were first on the flying programme for the
night of the 7/8th. They hurriedly dressed, boarded their Beaufighter ‘R for
Robert,’ took-off and climbed to their patrol altitude over the Channel to
await the orders of Squadron Leader Brown. With the King by his side and
the early evening raider appearing as if on cue, Brown carefully vectored
John Cunningham until he was three miles (4.8 km) above and behind the

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54 C.F.Rawnsley & R.Wright, op cit, page 129.
55 Ibid, page 130.
56 ‘R’ was the same aircraft in which John Cunningham and John Philipson had destroyed
their first enemy aircraft in November 1940. The aircraft’s full code was ‘NG-R’: ‘NG’ for
604 and ‘R’ for the individual aircraft.
The visit of HM George VI to 604 Squadron on 7th May 1941, speaking with Sergeant Jimmy Rawnsley (upper) and (lower) Squadron Leader John Cunningham (both Imperial War Museum, Neg Nos.CH2663 & CH2659).
enemy and within the range of Rawnsley’s AI. At two miles (3.2 km) Rawnsley established contact and Brown handed-over the interception. Whilst the King and Brown monitored the pursuit over the loudspeaker in Starlight’s operations caravan, the range closed as the ‘bandit’ flew on towards the English coast. Instructing Cunningham to reduce his height and close on the contact, Rawnsley was able to hear a satisfactory confirmation that his pilot could now see the target. With the Beaufighter clearly illuminated by the moonlight, Cunningham waited until the enemy aircraft crossed the coast into a darker background. They were now directly above Sopley, whereupon Squadron Leader Brown suggested to his Majesty that he might care to step outside to see the interception completed. Checking that all was well in Rawnsley’s department and there were no aircraft behind them, Cunningham pulled up the Beaufighter’s nose and opened fire:

‘Then came the blessed relief of the crash of the guns, and the sudden surge upwards to get out of the way of the hurtling wreckage. A wicked orange glow appeared inside the fuselage of the Heinkel, and the wheels fell down in the most forlorn way. As we flew alongside, watching the glow burst through the skin and the flames took over. The whole aircraft trembled and broke into a violent pitching, and with a plume of flames streaming out behind it the Heinkel went down in a headlong plunge to earth. The show was over.’

The He 111H-5 from III./KG 27 crashed near Western Zoyland, Somerset, at 2330 hours. Surprisingly, given Rawnsley’s description of the Heinkel’s demise, two of the crew of four survived to become PoWs. For his action that night, Sergeant Rawnsley was awarded a bar to his DFM.

Cunningham and Rawnsley returned to Middle Wallop and handed the aircraft to Sergeant Wright and his operator, Sergeant Vaughan, who took-off for another patrol in ‘R.’ Vectored on to another Heinkel by Starlight, Sergeant Wright succeeded in shooting it down into the sea, but was in turn wounded by return fire. Some fifteen miles from the coast at Bournemouth the Beaufighter’s port engine caught fire, forcing Wright and Vaughan to quickly evacuate the aircraft by parachute. Both landed safely in the sea

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57 The first version of GCI was designed to be fully mobile and housed in caravans. Later versions were designated ‘Intermediate Transportable’ and were semi-mobile but required permanent foundations for the rotating aerial arrays.
58 C.F.Rawnsley & R.Wright, op cit, pages 130 to 132.
They were about fifteen miles [24 km] from the coast at the time and survived to be picked up by the rescue services. The enemy aircraft, an He 111P-4 of I./KG 55, fell into the sea off Portland Bill at 0040 hours. There were no survivors.

The Deputy Prime Minister and leader of the Labour Party, Major Clement Attlee, PC, MP, visited Middle Wallop on the 8th and liked the King the day before, was introduced to all the aircrews and NCOs. No claims for aircraft destroyed were registered for the next three nights, although Flight Lieutenant Speke and Flying Officer Crew claimed damaged He 111s on the 9/10th. On the following night (11/12th) Flying Officer Crew engaged and shot down a Hurricane. Fortunately the pilot escaped by parachute and survived, albeit he was later hospitalised. That same evening Middle Wallop was bombed, perhaps in error as the main target in the area that night was Weymouth, or as the result of an enemy aircraft jettisoning its bombs. Whatever the reason, the station suffered no casualties.

The experience of shooting down a friendly aircraft also befell Flying Officer Chisholm. One night during May he and Sergeant Ripley were detached to a point off the Channel coast to the west of Portland, with instructions to intercept low-flying aircraft operating in the vicinity. After patrolling for an hour and a half on a clear moonlit night in good weather, they were ordered to turn due south and search an area ten miles (16 km) off the coast. They were then advised they were being followed and ordered to ‘orbit once’ (complete a 360º turn) by the GCI controller to place them behind their shadower. Sergeant Ripley quickly acquired a target going west and closing rapidly, which Chisholm then saw at a range of 2,000 feet (610 metres) silhouetted in the half moon. Expecting a hostile aircraft, Chisholm closed rapidly and as ‘the shape became more distinct; it had all the squatness of the Heinkels I had seen before.’ There was no doubt in the pilot’s mind that it was anything other than an He 111. Opening fire Chisholm observed hits on the starboard wing and the port engine. Overshooting to starboard and pulling around for another attack, the moonlight caught the ‘Heinkel,’ whose outline Chisholm thought closely resembled that of a Ju 88, which he had not seen before at night. Reporting one enemy aircraft destroyed, Chisholm was taken aback to discover that no answering ‘congratulations’ were received, only the controller saying “that was probably a friendly aircraft. Follow it and report its position.” The damaged Beaufighter, for that is what it was, crashed into the sea, but not before the pilot and radar operator had successfully baled out. Both were picked up from the sea by the rescue services safe and well.59

59 Roderick Chisholm, op cit, pages 80 to 85.
From the 12th the interception opportunities lessened, due in part to a reduction in raiding by the enemy and poor weather. However, on the night of the 28/29th the CO succeeded in breaking his ‘duck’ and destroying his first and only enemy aircraft. With Pilot Officer Derek Jackson as his operator, Wing Commander Appleton intercepted an He 111P-2 of III./KG 27 over Liverpool, which eventually crashed near Buckley, Flintshire, at 0120 hours, after the crew of four had successfully baled out to become PoWs. Sadly that same night Pilot Officer Peter Jackson, along with Sergeant Bolton and Sergeant Hawkes were killed in a flying accident near Swanage. Whilst conducting air-to-ground firing the weather deteriorated and they were instructed to return to Middle Wallop. Unfortunately Jackson failed to gain sufficient height and the Beaufighter struck a hill in low cloud, destroying the aircraft and killing all on board instantly. ‘It was such a sad blow’ wrote George Evans and ‘another stupid accident. They were such a popular pair (Jackson and Hawkes). We were all devastated.’

604’s last kills of the Blitz and for May 1941, occurred on the night of 31st May/1st June, when Flight Lieutenant Gomm and Pilot Officer Curnow destroyed an He 111H-5 of I./KG 27 that crashed near Tarrant Gunville, Dorset, at 0115 hours. An hour and a half later a second aircraft from KG 27, an He 111P-2 from the third Gruppe fell to the guns of Squadron Leader Cunningham and Sergeant Rawnsley near Cranborne, Dorset, at 0248 hours on the morning of 1st June.

Throughout what came to be known as the Blitz, September 1940 - May 1941, 604 Squadron claimed thirty-six enemy aircraft destroyed and many more probably destroyed or damaged, which placed it in the top echelon of the RAF’s night-fighter squadrons in terms of its expertise, experience and success. The cost, in comparison to others, had been relatively light: seven killed and two wounded. Success brought with it recognition in the form of awards and decorations: four DFCs and one bar and three DFM and one bar, in addition to a number of Mentioned in Dispatches. The days of groping around the night sky virtually blind were over. By May 1941 the situation for Fighter Command had changed dramatically. The Bristol Beaufighter with its reasonably reliable AI Mk.IV radar and flown by experienced crews that were directed by an expanded GCI network, represented a quantum leap in night-fighting capability since the summer of 1940. 604 along with the other squadrons in the Command now had the potential to provide Britain with the best night air defence system in the world, bar none. In this respect the Squadron would not be found lacking in the months ahead.

60 George Evans, op cit, page 98.
May 1941 was undoubtedly the most successful month in terms of aircraft destroyed at night that Fighter Command had enjoyed since the beginning of the Blitz the previous September. This news was certainly welcome. The high number of raids throughout May is sufficient testimony to the fact that the Luftwaffe was able to bomb Britain almost at will and cause serious damage to industry and residential property. The raids continued undiminished into June, at which point external events conspired to provide some relief for the defences.

With Britain temporarily neutralised, Hitler turned his attention to the ideological foe in the East, Soviet Russia. It had always been Hitler’s intention, and therefore part of his strategic planning, to undertake the invasion of Russia to eradicate Bolshevism, enslave its ‘Slav’ peoples and provide ‘living space’ (Lebensraum) for German migration. His treaty of friendship and co-operation with Stalin, signed in August 1939, was designed to keep the Soviet Union out of the war until such time as the Western Allies were defeated. With that objective completed, it was time to change the direction of the war towards the East and begin the preparations for the invasion of Western Russia.

To accomplish Operation Barbarossa, Hitler, with the necessary planning and logistical support of the OKW, assembled an army of some 3,000,000 men in 120 divisions, into three Army Groups, each spearheaded by a large Panzer force of 3,350 tanks in total, and supported by over 2,000 aircraft. The air element of the plan required the wholesale reorganisation of the Luftwaffe in the West. Luftflotte 2 and its subordinated units were transferred to Poland in support of Army Group Centre and to the Mediterranean to assist the Italians, whilst Luftflotte 5’s area of responsibility was expanded to encompass Finland and Army Group North. Luftflotte 3 was reduced in strength, and its area of responsibility redrawn to cover Holland, Belgium and occupied France, to provide additional aircraft for the coming invasion. By the 24th June 1941, the bomber arm of Luftflotte 3 comprised just 112 serviceable bombers: twenty-three Do 217s from KG 2, thirty-four He 111s from KG 4, four Focke Wulf Fw 200 Condor maritime patrol-bombers, five Do 217 and nineteen He 111s from KG 40, a further fourteen He 111s from KGr 100 and thirteen Ju 88s from KGr 606.¹

Four Ju 88s from *Kustenfliegergruppe 106 (KfGr 106)* were available for minelaying duties and coastal patrol. Although much reduced in size and importance, *Luftflotte 3* retained the services of *Generalfeldmarshall* Sperrle.

By way of compensation the *RLM* were able to introduce the Dornier Do 217E bomber to replace the aged Do 17. The new aircraft represented a scaled-up redesign of the ’17 to meet an *RLM* requirement for a longer range bomber with an increased war-load, on a heavier airframe. The resultant Do 217E ‘heavy bomber’, powered by two BMW 801L, 14-cylinder radial engines of 1,580-hp, carried a crew of four and a maximum bomb-load of 5,510-lbs (2,500 kg). Defensive armament comprised one 15mm cannon, a 13mm machine-gun in a powered dorsal turret, a first for the *Luftwaffe*, and four 7.9mm machine-guns. Its maximum speed of 273 mph (440 km/hr) at sea level and 320 mph (515 km/hr) at 17,000 feet (6,000 metres) represented a welcome increase over the Do 17 and the He 111H/P series. The deployment of the Do 217E during the spring and early summer of 1941 undoubtedly represented a useful addition to the armory of *Luftflotte 3*.

With the invasion of Britain finally cancelled on the 16th January 1941 and the focus of the air war moving towards the Russian Theatre of Operations from June, the much reduced strength of the bomber *Gruppen* was realigned to concentrate on a more modest set of objectives. In alliance with the *Kriegsmarine*, *Luftflotte 3* was tasked to undertake attacks on the ‘most vital ports’, continue its mining operations and the destruction of shipping in and around British coastal waters and persist with attacks on British industry by means of hit-and-run raids. Because of the poor weather that persisted over the British Isles during the autumn of 1941, the bombing of the important ports was relegated to a secondary importance after sea-mining and anti-shipping operations.

The reduction in *Luftwaffe* operations over Britain from June 1941 provided a welcome break for the defences and, more importantly, for the public and the armament industry. At the beginning of the month, Fighter Command were able to field fifteen night-fighter squadrons: eight twin-engined AI fighters and seven single-engined Cats-Eyes fighters. Only one unit, No.406 (Polish) Squadron continued operations with the Blenheim If, whilst another, No.85, persevered with the Douglas Havoc. Apart from these two, the Command’s AI fighters were wholly based on the Beaufighter If and the Merlin-engine Mk.II. The Boulton Paul Defiant remained the principal Cats-Eyes fighter, but these were scheduled for replacement with Beaufighters during the autumn and winter of 1941/42. The programme to increase the number of GCI stations continued
throughout the remainder of the year. By November 1941, there were twenty-eight stations in operation throughout England, Wales and Northern Ireland and a further four in the planning phase. Following the installation of the first six mobile stations, the Intermediate Mobile AMES Type 8, the Air Ministry introduced the first twelve of a semi-mobile version with a fixed aerial gantry, the Intermediate Transportable AMES Type 8, giving improved range and more accurate height finding. These equipments and the increasing availability of AI night-fighter squadrons, would, by the early spring of 1942, provide Britain with a formidable air defence network with which to oppose a weaker, but still defiant, *Luftwaffe*.

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Patrolling in the Middle Wallop Sector, diminished from the beginning of June 1941 in direct proportion to the number of night sorties flown by the *Luftwaffe*. Nevertheless, a number of interceptions were affected and the Squadron continued to score: on the night of the 4/5\(^{\text{th}}\), Flying Officer Geddes and Sergeant Cannon destroyed an He 111H-5 of *L/KG 27* that crashed into the sea off St Catherines Point,\(^2\) whilst Squadron Leader Budd\(^3\) and Sergeant Evans claimed another one of *KGr 100s* pathfinders, an He 111H-3, that crashed into the sea ten miles (16 km) south-south-east of Selsey Bill at 0100 hours on the morning of the 14\(^{\text{th}}\). Only twenty-eight rounds were expended in the Heinkel’s destruction, a Command record, according to the ORB. The following night, the 14/15\(^{\text{th}}\), *KGr 100* suffered again when Flying Officer Geddes and Sergeant Cannon shot-down an He 111H-1 that came to earth at Sturminster Newton, Dorset, killing all five crew members. A new pilot, Pilot Officer Gossland on only his third operational sortie, with Sergeant Philips operating the AI, claimed his first enemy aircraft destroyed, when they intercepted and shot-down yet another of *KGr 100s* Heinkel’s, an H-2, that crashed near Maiden Bradley, Wilts, at 01.20 hours on the morning of the 17\(^{\text{th}}\).

Pilot Officer Derek Jackson’s perseverance with his CO, amongst other things, paid off with the award of the DFC on the 6\(^{\text{th}}\). Promotions and awards abounded in the first half of the month. Flight Lieutenants Budd, Skinner and Gomm were promoted to Squadron Leader on the 1\(^{\text{st}}\) and six ROs, Sergeants Rawnsley, Guthrie, Moddy, Sandifer, Kennedy and Lawton,  

\(^2\) It should be noted that the confirmed destruction of this He 111 was quoted by the ORB/Diary as occurring on the night of 2/3\(^{\text{rd}}\) June 1941. Contemporary records however confirm this as the night of 4/5\(^{\text{th}}\).

\(^3\) Flight Lieutenant George Budd was promoted to Squadron Leader on 1\(^{\text{st}}\) June 1941.
were elevated to Flight Sergeant on the 19th. Squadron Leader Budd and Flying Officer Geddes were awarded the DFC on the 21st, Sergeant Evans the DFM on the same day and Sergeants Guthrie and Cannon the DFM on the 17th. Flying Officer Chisholm was posted to Tangmere to work with No.219 Squadron and the Squadron Engineering Officer, Flying Officer Evans, departed for Heston and promotion to Station Engineering Officer, a flight lieutenant’s post; two further examples of 604’s expertise being passed around the Command. Flying Officer Evans’ place as Engineering Officer was taken by Flying Officer Dalton who reported for duty on the 17th.

The end of the month was equally quiet with recourse to practise interceptions to help maintain the aircrews’ skills. It was during one of these exercises on the night of the 26/27th that Pilot Officer Gossland and Sergeant Philips’ Beaufighter suffered engine failure and crashed some eight miles (13 km) to the south-east of Middle Wallop. Gossland broke a leg in the crash and had to be rescued by his operator, who successfully pulled his pilot unconscious from the wreckage.

The Squadron’s establishment was increased at the beginning of July with the arrival of Flight Lieutenant Hartley, Flying Officers Molian and Edwards, Pilot Officer Clements and Sergeant Binks. On the 3rd, Squadron Leader Gomm, Pilot Officer Curnow and Sergeant Binks, were detached to Hunsdon and Colerne to learn the intricacies of Turbinlight operations in the Douglas Havoc Turbinlight. On the 7th, Flying Officer Clennell joined the Squadron as assistant adjutant and Flight Lieutenant Olliff-Lee’s eventual replacement. A number of the old Auxiliaries, being ‘tour expired,’ left the Squadron during the month. Squadron Leader George Budd and his operator Sergeant George Evans, were posted to No.54 OTU at Church Fenton, near Leeds, Yorkshire, as was Flight Sergeant Guthrie.

Light bombing across the whole country, as far afield as Cornwall, East Anglia, Yorkshire, Humberside, the Midlands and the South-West, characterised Luftwaffe operations during July. The numbers of aircraft involved were small, with never more than seventy-five sorties in a night. Little material damage WAS accomplished for the loss of some fourteen of

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4 Later Air Marshal Sir Christopher Hartley, KCB, CBE, DFC, AFC.
5 The Turbinlight concept comprised an un-armed Havoc night-fighter, fitted with a nose-mounted searchlight and AlIV radar, and accompanied by a pair of Hurricanes. When the Havoc detected a target and closed to a reasonable distance, the light was lit, illuminating the target for the Cats-Eyes Hurricanes to shoot down. It subsequently proved a dismal failure and a gross waste of time and effort.
6 After undertaking sixty operational sorties crews were regarded as ‘expired’ and posted to less arduous duties for six months ‘rest.’
their bombers, the first two of which fell to 604 on the night of the 4/5\textsuperscript{th}. An He 111H-5 from \textit{III./KG 26} was hit by fire from Flight Lieutenant Pattern and Flight Sergeant Moody’s Beaufighter, before crashing near Frome, Somerset, at 0125 hours, killing one of its crew. Flying Officer Joll and Sergeant Dalton claimed a second ‘111, an H-4 of \textit{III./KG 4}, that crashed at Oakford, Devon, at 0345 hours, again with the loss of one crew member. Joll and Dalton’s Beaufighter was in turn hit by return fire from the Heinkel.

Two nights later, on the 7/8\textsuperscript{th}, in conditions of ‘brilliant moonlight’ Flight Lieutenant Speke and Sergeant Dawson downed an He 111P-2 of \textit{KGr 100} that crashed into the sea off Bournemouth at 0058 hours. Landing back at Middle Wallop for rearming and refuelling, Pilot Officer Jackson took Sergeant Dawson’s place as operator before Flight Lieutenant Speke returned to his patrol. An hour or so after his first interception, Pilot Officer Jackson guided Speke on to a second Heinkel, an He 111P-3, also of \textit{KGr 100}, that was duly dispatched near Lymington, Hants at 0125 hours. The other two enemy aircraft claimed that night most probably fell to Flying Officer Crew: an He 111H-5 of \textit{I./KG 28} that crashed near Lymington at 0135 hours and an ‘H-2 of \textit{StabIV./KG 27} that crashed into the sea off Selsey Bill at 0305 hours. This was an unusual victim as \textit{IV Gruppe} was the non-operational training \textit{Gruppe} of KG 27 and its crew must therefore have contained one or two experienced officers.

More was to follow on the night of the 8/9th, with the CO and two of the Squadron’s crews submitting claims for enemy aircraft destroyed and damaged. Wing Commander Appleton, probably with Pilot Officer Jackson operating for him, claimed an enemy aircraft destroyed, circumstances unknown, whilst Flight Lieutenant Chisholm\textsuperscript{7} and Sergeant Ripley caught an He 111H-5 of \textit{III./KG 4} and brought it down near Kenton, Devon, at 0130 hours. Flying Officer Geddes and Sergeant Cannon, who were unsure of a victory and reserved their claim until it was confirmed by the Observer Corps, were subsequently awarded a Ju 88A-6 of \textit{I./KG 30} which crashed near Aderholt, Dorset, at 0235 hours. Flight Lieutenant Speke also submitted a claim for one enemy aircraft destroyed, again the circumstances were unknown. The last claim for the month was submitted by Squadron Leader Skinner and Flight Lieutenant Watson, who shot down an unknown enemy aircraft into the sea after it had the temerity to enter the Sector alone on the night of the 9/10\textsuperscript{th}.

\footnote{Flying Officer Chisholm was promoted to Flight Lieutenant in June 1941.}
By the 10th July 1941, fifty-three enemy aircraft had been claimed as shot down by the Squadron.\(^8\) To celebrate the event, the Squadron held a smoking party on the evening of the 15th when some 400 officers, NCOs and airmen ‘were entertained to a glass of beer or two with the CO and an informal concert ….. given by Members of the Squadron. The occasion was also used to say goodbye to Flight Lieutenant Olliff-Lee’ who had served ‘so long as the Squadron Adjutant,’\(^9\) his place being taken by Flying Officer Clennell. Also to welcome Flight Lieutenant Lee, a pilot from Brize Norton, and Flying Officer J.W.White as supernumerary Engineering Officer. The celebrations continued the following day, when all the Squadron’s pilots and ROs were hosted at an informal party at Sopley. Further acknowledgement of 604 success came a few days later with the award of the DFC to Flight Lieutenant Speke and Flying Officer Crew, and the DSO to Wing Commander Appleton.

604’s celebrations were (apparently) taken as a signal by the Luftwaffe to stop flying. Few, if any, enemy aircraft entered the Sector in the last half of the month and consequently not many patrols were flown and no contacts were made. On the return from one of these patrols, Sergeant Luing misjudged his approach, bounced and made a heavy landing. The inevitable crash wrote off his aircraft, but thankfully no one was hurt.

By July 1941, few only a small number 604’s gunners remained on the Squadron and by the month’s end most of what Jimmy Rawnsley described as the ‘old guard’ had departed. Some were posted to the OTUs as instructors to pass on their knowledge to a new generation of ROs, whilst others were posted overseas and the remainder reverted to their old trade as air-gunners in Bomber Command.

‘Among the last to go were Sandi (Flight Sergeant Sandifer) Sid Shirley, Tommy (Flight Sergeant Lawton) and his great chum Nobby (Flight Sergeant Kennedy). Sandi, Tommy and Nobby went, with some misgivings to No.109 Squadron,\(^10\) a hush-hush outfit part of whose activities was the early tracking down of the German bomber beams ….. A long time afterwards I heard that Nobby Kennedy had been lost in a Halifax. He had completed his tour of

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\(^8\) Including the two aircraft destroyed afloat in the Channel during the early summer of 1940.
\(^9\) 604 Squadron ORB/Diary, page 39.
\(^10\) Formed from the Wireless Intelligence Development Unit during December 1940 at Boscombe Down, Wilts, No.109 Squadron (Wellington & Anson) was responsible for the operational development of radio counter-measures and radar aids, particularly the navigation aid OBOE.
flying and was doing one fatal extra trip when they were either shot down or collided with another aircraft over the North Sea. His body was washed up on the Dutch coast. Sid Shirley, who had been posted to a squadron in Bomber Command, went down with his crew in a Halifax during a daylight raid on La Pallice. With all my intimate friends of such long standing gone, the buoyant craziness of the life we had led in the Sergeant’s Mess seemed to abate.  

Flight Sergeant Rawnsley also left the Sergeant’s Mess on the 14th on commissioning to Pilot Officer.

On the night of the 19/20th July, the station was subjected to an invasion practise exercise, Operation LOCUST, designed to test the airfield’s ground defences. ‘Action stations’ were maintained all night, but no untoward incidents were reported, so presumably the Army were not able to penetrate the perimeter defences. LOCUST was called off at 1500 hours on the 20th. The same day, the 24th, that Flight Lieutenant Olliff-Lee left Middle Wallop by air to report to No.2 Personnel Disposal Centre (PDC), another one of 604’s future characters, Pilot Officer Gonsalves, joined the Squadron for flying duties. Like John Cunningham, Gonsalves had joined de Havilland’s Technical School where he learned to fly. He was an experienced pilot having instructed at de Havilland’s Flying Club, where he taught Jimmy Rawnsley’s wife to fly, before transferring to commercial aviation.

Following the ‘high’ experienced by 604 in exceeding its claims for fifty enemy aircraft destroyed and the lift this imparted to all members, the month was to end on a sad note. On the afternoon of the 26th, Flight Lieutenant Speke and his RO, Sergeant Dawson, took-off at 1520 hours for a routine night-flying test. Nothing more was heard until the RAF station at Upavon rang to confirm an aircraft had crashed in their vicinity. At 1900 hours further information confirmed the aircraft carried the codes ‘NG-S’, the serial number X7548, and two bodies had been found. The crash-site on the top of Oare Hill, to the north of Pewsey was surveyed by the Adjutant and the Engineering Officer. They established that Speke’s Beaufighter had dived into the hill at an angle of 80° at very high speed, with both engines deeply embedded and the wreckage burned out. Both men would have been killed instantly. A further investigation by the Coroner and the Accident Investigation Branch failed to establish a cause for the crash. Sergeant Dawson was buried at Brookwood Cemetery on the 29th and his pilot at Ilminster the following day. It goes without saying that Hugh Speke was greatly missed by the Squadron.

As the result of little ‘trade’ in the Middle Wallop Sector, Fighter Command ordered on the 10th August that one flight of 604 be detached to Coltishall, Norfolk, to provide some support to No.255 Squadron who had recently converted from the Defiant to the Beaufighter II. The main party comprising the ground crews, equipment spares and ammunition, travelled by road. They left Middle Wallop at 1145 hours, followed by three lorries and a trailer with the Special Signals Officer, Flight Lieutenant Gilfillan, and the Intelligence Officer, Flying Officer Jones. A Harrow transport filled with lighter equipment and personal kit flew out later. The aircrews, Wing Commander Appleton, Squadron Leader Cunningham, Flight Lieutenants Lawton, Lee and Pattern, Flying Officers Geddes and Edwards and Sergeant Philips and their operators, flew to Coltishall in six Beaufighters and a Blenheim. They were joined the following day by Flying Officer Motion and Pilot Officer Jackson, and on the 14th by Flight Lieutenant Chisholm. By the evening of the 10th the 604 detachment of eighty-eight officers, NCOs and airmen, was firmly ensconced at Coltishall.

No sooner had the detachment arrived at Coltishall than it was announced that Wing Commander Appleton was to step down as CO and take up a staff appointment at Group HQ. His replacement was Squadron Leader Cunningham on promotion to Wing Commander, who was in turn succeeded by Flight Lieutenant Chisholm as OC ‘B’ Flight. 12

604’s trade at Coltishall comprised a steady stream of Luftwaffe bombers running-in from the Wash on their way to bomb the industrial Midlands and lay mines in the Humber Estuary and off the East Coast ports. The Germans had more or less given up the southerly approach to the Midlands and opted instead for the shorter and more direct approach from the east over the North Sea. The tactical situation was complicated by dozens of RAF bombers returning from the Continent to their bases in Lincolnshire, Yorkshire and East Anglia, accompanied by German intruders 13, mainly Ju 88Cs, attempting to spread mayhem and confusion over their airfields. The abundance of aircraft created problems for the GCI controllers at Orby, Lincs, and Neatishead, Norfolk, whose screens were cluttered with outgoing or incoming bombers, night-fighters and Luftwaffe intruders. When saturation occurred the controllers declared ‘large numbers of Big Friends’ in the vicinity and left it to the ROs to keep their pilots out of trouble. One factor in favour of operating from Coltishall was the topography. East

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12 Following his staff tour, Wing Commander Charles Appleton, CBE, DSO, DFC, returned to Bomber Command and was killed in action before the War’s end.

13 In September 1940 the Luftwaffe established Nachtjägerschwader 1 (NJG 1) equipped with Junkers Ju 88Cs and Dornier Do 17Z bombers, whose specific task was night-intruder operations over the bomber airfields of England.
Anglia was a flat landscape interspersed with inland waterways, The Broads, so ‘when the sea fog crept in there was nothing higher than a church tower to hit.’

The capability of the Ju 88 intruder was vividly demonstrated to Jimmy Rawnsley during one night in August when he and John Cunningham were waiting in the dispersal hut:

‘There was the normal sound of aircraft engines above; but suddenly it was interrupted by the roar of cannon fire overhead. We all rushed out, and we saw a Wellington with all its navigation lights on flying low across the airfield. And right behind it was a Junker 88, plainly visible in the moonlight. As we watched, sick with helplessness, another burst of tracer leapt in a tight bundle from the nose of the German intruder and raked our bomber, which was already going down in a shallow dive. Its red tail light sank behind the distant trees, and then a red glow lit the horizon as it crashed. Cascades of coloured stars flared up as the Verey cartridges went off, and there came back to us through the still woods the crackle of exploding ammunition. Our standing patrols were already after the killer, but they stood little chance of finding it with their AI (as the target would be lost in the ground returns) ….. It was obvious by then that one of the main tasks in this sector would be coping with the intruders.’

604’s first success at Coltishall occurred on the night of the 22/23rd, when Wing Commander Cunningham and Pilot Officer Rawnsley operating under the Neatishead GCI controller, codename ‘Seacut’, shot down an He 111H-5 of maritime attack unit, III./KG 40, that crashed into the sea off Wells-next-the-Sea, Norfolk, at 2205 hours with the loss of its all-NCO aircrew. The pair went after a second He 111, but this one proved more troublesome. Although damaged, its return fire succeeded in hitting the Beaufighter’s port engine, forcing Cunningham to break off the engagement and return to Coltishall on one ‘propeller.’

The remainder of the month at Middle Wallop and Coltishall was very quiet. On the first day of the new month, Wing Commander Cunningham

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14 C.F.Rawnsley & R.Wright, *op cit*, page 142.
15 Jimmy Rawnsley must be confused on this point. The red tail light should read ‘the red port navigation light.’

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and Pilot Officer Rawnsley, with the station commander, Group Captain R.B.Lees, on board for the ‘ride’, scored the detachment’s second victory when they dispatched a Ju 88C\textsuperscript{17} intruder at 2355 hours some thirty miles (48 km) off the East Coast. There were no survivors.

With their task completed and No.255 Squadron operational, despite the loss of their CO, Wing Commander J.S.Bartlett, DFC, and several aircraft in accidents, the 604 detachment was closed down on the 20\textsuperscript{th}, with all the aircraft and the ground convoy back at Middle Wallop by the evening. On their way back from Coltishall Wing Commander Cunningham and Pilot Officer Rawnsley were given the opportunity to inspect the new de Havilland Mosquito NF.II night-fighter at the manufacturer’s factory at Hatfield, Herts. Jimmy Rawnsley thought that:

‘compared with the Beaufighter it (the Mosquito) was very sleek and trim; but I noticed with some inward misgivings that the liquid-cooled Merlin engines called for a wide and vulnerable area of radiator in each centre-section.’ He was also not particularly impressed with the radar-fit. ‘To my dismay ….. I found that the Mosquito was being fitted, as standard equipment, with the new Mk.V, pilot-indicator, AI\textsuperscript{18} ….. I could not help wishing that all the effort that had gone into bringing this quite unnecessary modification into existence could have been put into a concentrated effort to develop a system for seeing really low down.’\textsuperscript{19}

Unbeknown to Jimmy Rawnsley, a considerable amount of work had been put into the development of a low-level AI radar by the scientists at TRE’s Worth Matravers site. In the latter part of 1940, TRE began the flight testing of the first centimetric radar (AI ‘S’) that was capable of effective low-level operation and with which 604 would be equipped in May 1942.

\textsuperscript{17} The details of this interception are not given in the ORB. However, Jimmy Rawnsley gives a fair account of the action, which involved the Ju 88 circling probably in search of returning RAF bombers. From this description it may be reasonable to conclude the Ju 88 was a C-model intruder of NJG 2.

\textsuperscript{18} AI Mk.V was a modified version of AI Mk.IV that provided a small CRT on the cockpit combing immediately in front of the pilot, the pilot’s indicator, on which was displayed steering information supplied by the radar operator. This development was undertaken in order to take out some anomalies from the operator’s ‘patter’ and enable the pilot to complete the last phase of the interception on his own. It was not liked by skilled crews, who thought it removed the operator from the interception ‘loop.’

\textsuperscript{19} C.F.Rawnsley & R.Wright, \textit{op cit}, page 151.
The remainder of September was very quiet in the Middle Wallop sector. Poor weather from the 20th onwards, compounded by few incursions by the Luftwaffe, reduced patrolling, which necessitated a greater reliance on practise interceptions (PIs) to maintain the aircrew’s and the GCI controller’s expertise. Consequently, PIs with Sopley and Exminster GCI stations and search-light co-operation sorties exercises with RAF Colerne, became the order of the day.

On the 25th, Flying Officer Geddes was posted to Station HQ at Middle Wallop in exchange for Flying Officer Staples, with Flight Lieutenant Lawton being posted to HQ No.10 Group. Flight Sergeant Letley and Flight Sergeant Thomas received notification they had been awarded the British Empire Medal (BEM), whilst Flight Lieutenant Gilfillan and Sopley’s Squadron Leader Brown were made Members of the British Empire (MBE).

Sometime late in September 1941, the ROs were instructed to put ‘up’ a new aircrew brevet that properly defined their trade as Observers (Radio). The badge comprised the standard non-pilot aircrew half-wing with the letters ‘RO’ in its centre. Why the letters were reversed is not known, but ‘RO’ became the standard term for an aircrew RO.20

On the night of the 6/7th October in very poor weather, the Luftwaffe mounted some twenty sorties over Devon and Cornwall. These were opposed by four aircraft from 604, two under the control of Sopley and the other two under Exminster GCI stations. No interceptions were made and all aircraft were recalled early because of gathering mist at their airfields. From the 8th, 604 was required to provide two aircraft on permanent standby at Middle Wallop to support Sopley GCI, plus two forward based at Exeter and two at Colerne to assist Exminster. This required the Squadron to position aircraft in the afternoon at Exeter and Colerne. The Colerne detachment was withdrawn on the 17th to Middle Wallop, from where the Squadron continued its support for Exminster.

Low-level enemy activity on the night of the 11/12th over the West and South-West districts, initiated a ‘scramble’ of the GCI standby aircraft, with Sergeant Reeves chasing a raider at 3,000 feet (900 metres) from Bath until he lost it over Dungeness. The following night all six of the Squadron’s aircraft were airborne on various co-operation exercises and PIs, when they were recalled to deal with a number of raiders in the North and Western districts. No interceptions were made, but Sergeant Reeves operating from Colerne, set something of a Squadron record by staying airborne for five and a quarter hours. On the night of the 20/21 Flight Lieutenant Hartley

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20 In line with the written account in the Diary/ORB, radar operators will henceforth be referred to as Observer (Radio), or RO.
and his operator, Sergeant Croysdill, pursued a Dornier (type not quoted, but most probably a Do 217E) from Bath to Ostend. By taking ‘evasive action’ the enemy aircraft proved difficult to hit, but Hartley managed a three second burst and saw strikes. A claim for one enemy aircraft damaged was submitted.

For light relief, several crews were given the opportunity on the 21st to strafe tanks and vehicles in a demonstration of the effects of cannon fire on motor transport and mechanised vehicles. Small numbers of enemy aircraft continued to operate in Middle Wallop and Exminster sectors for the remainder of the month. These raids, although not very productive from the *Luftwaffe’s* viewpoint, did serve to keep the air raid precautions (ARP) organisations on full alert, and waste considerable amounts of aircrew time in chasing around the countryside looking for targets. Several interceptions were mounted by Sopley, but frequently had to be abandoned when the raiders slipped away at high speed. On the night of the 22/23rd, Flight Lieutenant Selway and Flying Officer Jackson obtained a visual on a fast moving raider, which they were able to hit with a three second burst when over the French coast. The enemy aircraft was seen to explode, but not to crash, resulting in a claim for one Dornier probably destroyed. That evening, the 23rd, Squadron Leader Kerr crashed Beaufighter ‘K’ on landing at Staverton, from which he and Pilot Officer Thwaites emerged unhurt and then went on the next day to crash ‘C,’ again without injury to himself or his operator. During the night of the 26/27th, Flight Lieutenant Selway and Flying Officer Jackson claimed an enemy aircraft damaged in a pursuit over Plymouth.

On the morning of the 1st November, four representatives from 604 Squadron, Wing Commander Cunningham, Flight Lieutenant Selway, Flying Officer Jackson and Pilot Officer Rawnsley, were called to HQ Fighter Command at Bentley Priory, Middlesex. They attended a conference to discuss the means by which RO training could be improved by the adoption of a standard technique (patter) for communication between a pilot and his operator during an interception. On a visit to No.3 Radio School, Prestwick, Pilot Officer Rawnsley discovered that during training ROs were taught by instructors who had individual styles of ‘patter’, which served to confuse the students. Later when they joined their operational squadron they were forced to adopt the squadron’s technique, which served to confuse

21 The date of Pilot Officer Jackson’s promotion to Flying Officer is not stated in the 604 ORB/Diary.
them even further. The meeting was chaired by Sir Henry Tizard, the Ministry of Aircraft Production’s (MAP) representative on the Air Council, assisted by Mr Robert Watson-Watt, the Director of Communications Development at MAP. Fighter Command was represented by Air Commodore Elliot, the Senior Air Staff Officer (SASO) Night Operations, otherwise known by some in the night-fighter fraternity as the ‘Prince of Darkness’ and Wing Commander R.H.Hiscocks, late of the Fighter Interception Unit (FIU), and one of the RAF’s AI night-fighting pioneers. Flight Lieutenant Bob Braham, DFC*, and his operator, Sergeant ‘Sticks’ Gregory, DFM, represented No.29 Squadron, and Wing Commander D.G.Morris, DFC, and Sergeant A.V.Rix, No.406 (Canadian) Squadron. The remainder of the meeting was made up of staff from No.3 Radio School and the night-fighter OTUs.

The meeting did not get off to an auspicious start ‘and soon became a heated wrangle between the operators’ until rescued by Watson-Watt who recognised that patter might be divided into two parts: first, the instructions, which told the pilot what to do and where to steer, and second, indications that told him where to look in the sky to see his target. He concluded by saying that “instructions must always take precedence over indications and” ….. the RO’s “words must be carefully phrased so as to distinguish between the two.” This summation met with general approval, leaving the rest of the meeting to agree the exact phrasing of the instructions and indications.

‘It was far from perfect, but it (the meeting) served its purpose as it meant that an operator could be sure that the patter he learnt in his

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22 Sir Henry Tizard, GCB, KCB, CB, AFC, FRS, was the scientific advisor to the Air Ministry. Before the war he had defined the need for an airborne radar set for AI and ASV purposes and to him much of the credit for their development is due.
24 C.F.Rawnsley & R.Wright, op cit, page 160.
25 The Fighter Interception Unit was established at Tangmere on 18 April 1940 charged with the operational testing of AI radar and the development of night-fighter tactics. The then Squadron Leader Hiscocks was the Unit’s acting CO from April to May 1941. Ralph Hiscocks retired from the RAF as a Group Captain and post-War was Chairman of Lloyds of London.
26 Later Group Captain J.R.D.Braham, DSO**, DFC*, AFC, RCAF.
27 Later Wing Commander W.J.Gregory, DSO, DFC*, DFM.
29 C.F.Rawnsley & R.Wright, op cit, pages 160 & 161.
training would be understood when he reached a squadron, no matter how many pilots he might fly with."  

Success in the night sky returned on the clear, moonlit evening of the 1/2\textsuperscript{nd} November, when Flying Officer Crew and Sergeant Facey intercepted and shot down a Ju 88A-5 of the specialist test unit, \textit{Erprobungs/KG 30 (EGr/KG 30)}, that crashed into the sea off St Alban’s Head, Dorset, at 2200 hours. There were no survivors from the crew of five. Flying Officer Motion and Sergeant Uezzell chased a Dornier travelling north and damaged it before losing contact, whilst Flight Lieutenant Lee was forced to break of contact with another target due to AI failure. Flight Lieutenant Hartley was also put onto a raider, but his engine ‘blew-up’ following the application of full power, forcing a premature return to base on one engine.

The increasing strength of Bomber Command required the proper identification of targets not showing an IFF return. On the night of the 2/3\textsuperscript{rd} November Squadron Leader Chisholm\textsuperscript{31} operating under the direction of Sopley GCI and no doubt remembering his experiences in the previous May, was able to report his target as one of the Command’s Armstrong Whitworth Whitleys, which he let quietly pass on its way. A week later, on the 9/10\textsuperscript{th}, the Squadron put up two patrols under Sopley’s guidance. Whilst on the approach to Middle Wallop on a dark night with a strong south-easterly wind, Beaufighter T4638 flown by Flying Officer Staples struck Quarley Hill, 3½ miles (5.5 km) to the north-west of the airfield. Flying Officer Staples was killed, but his RO, Sergeant French, survived to be rescued from the fuselage with only slight head injuries. A visit to the crash site the following day confirmed the aircraft had struck one side of the hill and bounced over before coming to rest on the opposite side. ‘A sad end to a charming personality.’

The weather throughout the remainder of November remained poor with little flying activity. On the 18\textsuperscript{th}, two American officers, Commander Ofstie and Lieutenant Commander Stallerfield, US Navy, visited the Squadron, as did representatives from the Aviation Selection Board responsible for the recruitment of ROs, on the 27\textsuperscript{th} and 28\textsuperscript{th}. During the night of the 23/24\textsuperscript{th} the Squadron flew four patrols, from one of which Flight Lieutenant Motion’s RO (name unknown) gained a contact that resulted in a chase and a claim for one enemy aircraft damaged. The remainder of the month was taken up by visits to other units and playing host to employees of the Bristol

\textsuperscript{30} C.F.Rawnsley & R.Wright, \textit{op cit}, page 161.

\textsuperscript{31} Flight Lieutenant Chisholm was promoted to Acting Squadron Leader on taking command of ‘B’ Flight in August 1941.
Aeroplane Company on the 29th. The poor weather resulted in the flying hours for December 1941 being the lowest on record.

December 1941 opened with the Court Martial of a corporal and an aircraftsman on charges relating to ‘petrol offences’. Both were defended by the Intelligence Officer, Flying Officer Jones, and both were acquitted. The poor weather continued, however, this did not prevent Squadron Leader Chisholm from flying a Miles Magister training aircraft on the night of the 3/4th, which greatly displeased the AOC.

Sometime in late November/early December 1941, 604 received the first batch of Norwegian night-fighter crews trained in Britain: Lieutenants Per Buggé, Johan Rad, Leif Lovestad and Claus Bjorn, Royal Norwegian Air Force (RNorAF). Prior to the invasion of their country, Lieutenants Buggé and Rad were training as pilots in the RNorAF Reserve, whilst attending university as students of mining and electrical engineering. They joined the Norwegian Resistance in Trondheim and six months after the invasion escaped to Britain in a small fishing boat with eleven of their countrymen. Landing at Thurso in the very north of the Scottish mainland, the pair were allowed to complete their training in England before being posted to 604. Like Buggé and Rad, Claus Bjorn escaped to Britain via Sweden, Russia, Japan, America and then to Canada for observer training and eventually teaming at the OTU with Per Buggé as his RO. Leif Lovestad began his military career in the Norwegian Army, but transferred to the Air Force and qualified as an observer, flying against the Luftwaffe during the invasion. He too joined the Resistance, undertaking intelligence gathering operations (spying) against German military airfields and having the information sent to Britain by boat. In August 1941, Lovestad joined a party of thirty young Norwegians who escaped across the North Sea and landed at Scapa Flow. After training, he joined Rad as his regular operator. On joining the RAF all four Norwegians were given the rank of Pilot Officer in the RAFVR.

On the 5th the weather improved and generated ‘considerable GCI practise’ and other operational flying. On the night of the 8/9th, Pilot Officer Holme-Sumner undershot whilst landing, struck an embankment and severely ‘bent’ his Beaufighter. That same evening, Pilot Officer Buggé struck an object and removed the wing from the Magister he was flying. Both pilots escaped unhurt. Pilot Officer Holme-Sumner repeated his performance on the 11th, when approaching too fast he once again crashed.

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32 C.F.Rawnsley & R.Wright, op cit, pages 163 to 165.
33 Per Buggé completed a second tour on night-fighters with John Cunningham in 85 Squadron, before returning to Norway and a career in civil aviation, part of which was spent alongside John Cunningham testing the Comet airliner in 1948.
his Beaufighter, but escaped with no injuries. Worse was to follow. On Christmas Eve, Pilot Officer Rad took-off at 1130 hours in Beaufighter ‘T,’ R2126, but barely reached forty feet (12 metres) before his starboard engine cut-out. Rad recovered to make a wheels-up landing inside the airfield, crashing through the perimeter fence, across the main Andover to Salisbury Road and narrowly avoiding a bus, before coming to rest in a field. The aircraft immediately caught fire. With the help of his operator, Sergeant Melvin, Rad managed to escape through the rear, observer’s, hatch. Apart from being concussed and cut about the face, Rad was relatively unhurt, but nevertheless, spent the night in hospital. Sergeant Melvin escaped unhurt but shaken, which was probably cured by something from a bottle. Apart from the defective starboard engine, Beaufighter R2126 was ‘reduced to ashes.’

Due to a lack of visibility on the part of the Luftwaffe, GCI and searchlight co-operation sorties and PIs made up the remainder of the month. However, at 500, the flying hours were an improvement on the previous month.

The ORB summarises the year 1941 briefly by recalling four fatal crashes costing eight lives, thirty-eight other crashes that rendered aircraft ‘beyond the unit’s repair’, flying time totalling 5,806 hours (3,576 by day and 2,230 by night), or 153 flying hours per accident. On the credit side, fifty-six enemy aircraft were claimed as destroyed, fifty-two during the first seven months, and forty others as probably destroyed or damaged. Since June, offensive operations by the Luftwaffe in the Middle Wallop Sector had declined to virtually nil. Starlight GCI at Sopley under Squadron Leader Brown, was regarded as being responsible for much of the Squadron’s success in 1941 and his award of the MBE was well deserved. The year’s honours comprised one MBE, two DSOs, ten DFCs and one bar, eight DFM and one bar, three BEMs and four Mentioned in Dispatches. Other than operational flying, the Squadron had been responsible for training thirty-three crews who had been posted to other appointments throughout the year, twice the Command average. This training was also reflected in the standard of maintenance, for on only one occasion had an aircraft suffered engine failure on an operational flight. Jimmy Rawnsley found time to reflect on the Squadron’s standing at the end of 1941:

‘As 1941 drew to a close, the way ahead appeared to be unending. But although there was little enemy activity to occupy us we still

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34 One of the original batch of Beaufighters built by Bristols and delivered in September/October 1940.
found plenty to keep us busy, and the morale of such a collection of alert and individualistic characters as had now come together under John’s command could never be anything but of the highest.’

In the New Year, with more than adequate numbers of pilots and ROs, the Squadron was able to fly six patrols on the night programme and cover their training and practise requirements. On the 2nd, the port engine on Squadron Leader Kerr’s Blenheim ‘NG-X’ caught fire, necessitating a rapid ascent over Staverton, Gloucestershire, followed by a quick ‘bale out’ before the aircraft was completely destroyed by fire and burnt out. Squadron Leader Kerr escaped unhurt. The Squadron was represented at a clay pigeon shoot by Pilot Officers Thwaites and Foster at Colerne on the 9th. Unfortunately their shooting in the daylight proved ineffective and both were eliminated in the early rounds. Had the shooting occurred at night and had they had the opportunity of taking their ROs with them, they might have done better. Poor weather and severe frosts prevented any flying between the 14th and the 24th, however, it improved the following day sufficiently for two aircraft to be flown-off to patrol the Pembrokeshire coast in search of enemy minelayers. This operation was repeated on the 31st, again with no result. On the 27th, another of the Squadron’s stalwarts, Pilot Officer Jeremy Howard-Williams, and his RO, Sergeant Tony Nordberg, joined the Squadron fresh from No.54 OTU to begin a fruitful association with 604.

Sometime during January 1942, the post of Squadron Navigator Leader was established to keep a watching brief on the efficiency of the ROs, train the newcomers, coax the stubborn, encourage the diffident and chase the lazy. This was to be accomplished by ‘leadership from the top’ which required the Leader to maintain his proficiency above all others. Flight Lieutenant Rawnsley began by flying with each crew in turn to confirm, or otherwise, their interception methods and ‘patter’ during a PI. Although making some allowance for the nervous when working under his observation - he had after all been through the same anxieties himself - he never made excuses for poor operating. Whilst individual crews operating methods might vary, he was always on the look-out for ‘the same smooth co-operation between pilot and the operator, with quick, clear directions’ from the operator ‘and ready and exact responses’ on the part of the pilot. By these means the Navigator Leader was able to realistically assess the capabilities of the crews and analyse their strengths and weaknesses.

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On the 2nd February, Squadron Leader Chisholm was awarded a bar to his DFC and stood down as OC ‘B’ Flight as he was now ‘tour expired’. It was intended that he would undertake GCI controller training, but a few weeks later this was changed and he was posted to HQ No.81 Group as the staff officer responsible for night-fighter crew training. His place as OC ‘B’ Flight was taken by Squadron Leader McLannahan.

On the 4th February, the Squadron’s officers vacated their Mess on the airfield and moved to an old coaching inn near Winterslow, six miles down the Salisbury Road. The Pheasant Inn had recently been modernised with central heating and proper plumbing and was, according to Jimmy Rawnsley, ‘just the place for either quiet relaxation or a little gentle screeching, as we felt inclined.’ The Inn provided accommodation for all flying crews and was administered by the Adjutant acting as ‘landlord.’

Flying on the 7th was enlivened by Sergeant Fisher attempting to land his Beaufighter cross-wind. After several abortive attempts he was persuaded by another aircraft to land into wind. The 12th marked the successful escape of the German battle cruisers Scharnhorst and Gneisenau and the heavy cruiser, Prinz Eugen from their base at Brest, which may have coincided with a raid on Warmwell. On the night of the 13/14th, the Squadron was out in force. Two chases at 0130 hours proved abortive, whilst a third intercepted a Wellington that was in some trouble before it crashed into the sea to the south of Bournemouth. Throughout the night one of the Squadron’s Beaufighters maintained a presence over the downed crew, which enabled the rescue services to maintain an accurate fix on their location and affect a rescue the following morning.

Pilot Officer Rad suffered another ‘incident’ on the 21st, when he returned from a night-flying test with eighteen inches (0.45 metres) of his starboard wing-tip bent up through 90º. It later transpired that when descending through cloud on the return leg of his flight to the south of Gloucester, he apparently struck a barrage balloon cable, or another aircraft. Rad exited the cloudbase at 4,500 feet (1,370 metres) in a spin and out of control. Ordering his RO, Sergeant Melvin, and a trainee operator to bale out, Rad tried to regain control of the aircraft. In the ensuing aerobatic display the trainee’s parachute opened inside the aircraft and Sergeant Melvin was thrown about the fuselage and hurt. Pilot Officer Rad eventually succeeded in restoring order and landing the aircraft safely. The subsequent accident investigation confirmed the wing on Rad’s Beaufighter had failed due to excessive stress brought about by icing, which threw the aircraft into

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the spin. The pilot therefore showed great skill and determination in returning the aircraft to Middle Wallop in one piece, albeit bent.

On the 24th, Squadron Leader Hayley-Bell, also returning from a night-flying test, was unable to lower his undercarriage and was ordered to land wheels up. The subsequent landing was skillfully accomplished with no injuries to the crew and minimal damage to the aircraft.

The following afternoon, the 25th, HRH Prince Bernhardt of the Netherlands arrived at Middle Wallop in a Beechcraft, having flown from Ibsley, closely followed by the AOC-in-C in a Mentor and his escort, a Spitfire flown by Wing Commander Ian Gleed, DFC, who commanded the airfield’s day-fighter wing. HRH and the AOC-in-C toured the other two Squadrons and the Operations Room before arriving at the Pheasant for tea at 1700 hours, where most of the Squadron’s officers and crews were waiting. From the Pheasant the Prince was taken to the Station Cinema to view an AI instructional film and then to 604’s dispersal where a Beaufighter was inspected. The visitors departed after dinner in the Officer’s Mess.

The month concluded with ‘B’ Flight’s second social evening in the NAFFI on the evening of the 25th, followed by ‘A’ Flight’s on the 26th. Flying hours for the month were low once again, 265 by day and 175 by night, of which only twenty-three were operational.

At some date during early February 1942, Pilot Officer Howard-Williams made his first flight in a Beaufighter and recorded his impressions in his diary:

‘The cockpit is well laid out as the Blenheim’s was bad, and everything lies under the hand which has to use it. On take-off, the left hand opens the throttles (right throttle a little in advance of the left, to counteract swing) and merely has to move forward a few inches to raise the undercarriage lever and can then immediately return to the throttles to make sure they don’t creep back at this critical stage of a flight. Switches are thoughtfully arranged so that they are split into small groups; this means that the pilot can identify each switch at night by feel. The trim controls are easily reached by the right hand, and each one works in the natural direction of the control. Perhaps the biggest bonus of all is the excellent view both of outside and inside, …… an important aspect, particularly when a lot of instrument flying is done. …… By comparison ‘the Blenheim’s

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38 Later Wing Commander I.R.Gleed, DSO, DFC, killed in action over the North African coast on 16th April 1943.
instruments, apart from the standard blind-flying panel, are not so much grouped in the cockpit as thrown together haphazardly. But someone has studied the placing of the ancillary instruments and controls on the Beau, so that the engines dials are together and easily checked, minor gauges not so frequently required are a little out of the way but still visible when wanted and close by their appropriate controls when appropriate.

The Blenheim cockpit has a multitude of small windows separated by metal framework like a greenhouse. These panels have a disconcerting tendency at night to pick up reflections from the cockpit coming from outside the aircraft. The Beaufighter’s windshield, which suffered from a similar disadvantage in its earlier version, is now (February 1942) one large perspex moulding surrounding a bullet-proof centre portion. There are few metal members to block the view, and clear-vision panels at each side and overhead can be opened to give draught-free access to the outside. Cockpit lighting is good. The aircraft has a good turn of speed - more than 300 mph (483 km/hr) but is heavy and not particularly manoeuvrable, a quality it does not necessarily need for night fighting. Its worst point, from both the pilot’s and navigator’s angle, is the lack of heating. …… The heater can only produce a small volume of hot air close by the (pilot’s) right heel’, ….. whilst ‘the RO’s heater merely sends a dribble of lukewarm air to dissipate among the myriad cold draughts whistling down the fuselage. The only other drawback is a certain instability in the pitching plane which manifests itself as a tendency to tighten up in a turn, so that positive forward pressure has to be applied to the control column to maintain a steady turn.’

On the 1\textsuperscript{st} March, Sergeant Fisher accompanied by a trainee operator, Corporal Skeel, became lost and strayed into the Southampton balloon barrage. ‘After several adventures’ he was able to extract himself and identify Middle Wallop, where he made a very steep approach, bounced and landed in the ‘rough’ beyond the runway. Fortunately the crew were unharmed and the only damage was a broken tail-wheel. The weather at the beginning of March was poor and it was not until the 7\textsuperscript{th} that it improved sufficiently for the daylight flying programme to get underway, but operational flying was curtailed due to the soft state of the runway. On the evening of the 8/9\textsuperscript{th}, Flight Lieutenant Maxwell was scrambled to intercept

\footnote{Jeremy Howard-Williams, Night Intruder, (David & Charles, 1976), pages 27 & 28.}
an incoming raider from the Continent. Sometimes designated ‘X-Raids’, these plots were assessed as friendly and therefore great care needed to be taken if an accident was to be avoided. In this case it would appear an error of identity was made, as the ‘bogey’ swiftly turned around and headed back in the direction of France at high speed, when Flight Lieutenant Maxwell had made AI contact.

Over the next few nights the lack of any threat and the poor weather allowed the readiness state to be reduced to fifteen minutes, which enabled the stand by patrol to fall to sixty minutes and the crew to be able to stay at the Pheasant until required. On the 14th, Lord Trenchard visited the station and spoke to all the squadrons assembled in the ‘Flap Room’. Meanwhile Flight Lieutenant Crew in company with Flight Lieutenant Hartley, demonstrated ground strafing with the Beaufighter to a group of Army officers at Lyme Regis. In the afternoon the CO practiced low-flying over the sea to assess the suitability of the Beaufighter in the anti-shipping role.

The Squadron’s alert state was increased to eight aircraft from six on the 22nd, due to the possibility of increased enemy activity in the sector. The weather on the 23rd dawned clear and bright and the CO took the opportunity to fly his recently renovated Beaufighter ‘NG-R’ for a test flight resplendent in its new camouflage colours of green with black undersides.

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40 RAF slang for the crew/readiness room.
41 Flying Officer Crew was promoted to Flight Lieutenant on 3rd November 1941.
The remainder of the Squadron’s aircraft were to be similarly finished if the COs colours proved satisfactory. A sharp raid later in the day on Portland appeared to confirm the enemy’s increased aggressive stance. Although a number of patrols were flown, the Squadron was not called to readiness. The following day, Wing Commander Cunningham left for Cornwall for a much deserved spell of leave, his place as CO being taken by Squadron Leader Skinner, OC ‘A’ Flight, and a second Beaufighter II was collected from RAE Farnborough by Flight Lieutenant Selway, presumably for evaluation.

On the morning of the 25th, an unfortunate airman, Aircraftsman Delaney, inadvertently pressed the ‘tit’ on a Beaufighter and loosed-off thirty rounds, fortunately without damage, or injury to property, or personnel. On the night of the 26/27th, Flight Lieutenant Hoy accompanied by Pilot Officer Sharp, flew a searchlight co-operation sortie in a Lockheed Hudson maritime patrol aircraft. Two nights later, the 28/29th, on a similar patrol the Hudson’s undercarriage refused to lock-down and the aircraft was belly-landed on the airfield, obstructing the landing area. Later that night the Squadron celebrated the twelfth year of its existence, with a birthday party at the Pheasant.

The period from the end of the Night Blitz in May 1941 to the spring of 1942, witnessed a considerable reduction in enemy activity that was matched by a strengthening and a gradual modernisation of the night-fighter force and the ground radar network. Nevertheless, twenty enemy aircraft were claimed as destroyed during that period, but none since the beginning of September 1941. By 1942, the Squadron’s pre-war Auxiliary character had, like all other Auxiliary and Regular units, changed with the posting and loss of so many of its personnel. Its character now reflected the outlook of the RAFVR ‘hostilities only’ officers and airmen, who would see the Squadron through to the war’s end and then return to civilian life. This does not, however, mean the Squadron’s morale or efficiency was in any way reduced from that of its predecessors, as the next few months were to demonstrate.

42 The colours of Beaufighter NG-R were possibly experimental, however, in 1943 all Fighter Command night-fighters adopted a colour scheme of grey-green upper surfaces and grey undersurfaces, as, by experiment, these colours were found to be best suited to night and moonlight conditions. The Squadron’s Beaufighter VIFs were generally finished in this scheme.

43 RAF universal slang, as quoted in the ORB, for the gun-firing button on the control column. ‘Knobs and tits’ referred to any lever or switch in an aircraft’s cockpit and are not to be confused with a part/parts of the male/female anatomy.
The night air defences in April 1942 were at their strongest since the beginning of the war. Great strides had been made, not only in increasing the number of night-fighter squadrons, but also in the modernisation of their equipment. The obsolete Blenheim If had been removed from the operational inventory and transferred to the night OTUs. A programme to re-equip the single-engined Cat’s-Eyes squadrons with Beaufighters, mainly the Mk.II, had begun the previous summer, with only three Defiant squadrons awaiting their turn for the twin-engined fighter. No.157 Squadron based at Castle Camps, Cambridgeshire, had introduced the de Havilland Mosquito NF.II to Fighter Command the previous month, to operate alongside the similarly equipped No.151 Squadron at Wittering. The Mosquito represented a quantitative improvement in performance over the latest version of the Beaufighter, in particular, its ability to fly safely on one engine, whilst retaining essentially the same radar, AI Mk.IV and/or AI Mk.V. Throughout 1942, the Command saw a steady increase in the number of squadrons flying this superlative night and all-weather fighter. Only No.85 Squadron was left to soldier on with the obsolescent, twin-engined Douglas Havoc II until September, by which time Fighter Command was an all-radar equipped night-fighter force of twenty-two squadrons.

Whilst Fighter Command planned and implemented the night-fighter programme, the ground defences, particularly those of the GCI stations, were also improved. In the autumn of 1941, the scientists and engineers at TRE began the development of a new GCI, AMES Type 7, otherwise known as the ‘final GCI’, or the ‘Happidrome’. This enabled the PPI display to be shared between more than one controller and hence the ability to control greater numbers of fighters. It was designed to have improved range

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1 The Beaufighter VIf was capable of achieving 333 mph (535 km/hr) at 15,600 feet (4,755 metres), against the Mosquito II’s 380 mph (610 km/hr) at 13,000 feet (3,960 metres) and its ability to reach 15,000 feet (4,570 metres) in seven minutes, compared to the Beaufighter’s seven and three-quarter minutes. Source: Owen Thetford, *Aircraft of the Royal Air Force Since 1918*, (Putnam Books, 1962), pages 119 & 173.

2 AI Mk.V was a variant of AI Mk.IV, fitted with a pilot’s indicator on the cockpit combing.
at low angles of elevation and increased accuracy at high and low levels. Although delayed in production, the first Type 7 GCI was installed at Durrington and used operationally on the night of the 9/10th June 1942. By the beginning of 1943, a further three of these ‘fixed’ stations had been completed, with a further seventeen to follow by October. Development was also begun of the centimetric AMES Type 11 as a protection against the possibility of the enemy jamming the metric GCI network.

The development of AIS had evolved during the summer of 1941 to the point where the set could be installed in a production aircraft, the Beaufighter If. In September of that year, the Telecommunications Flying Unit (TFU) at Christchurch, as the SDF had been re-titled the previous month, installed the set in a Beaufighter with the scanner housed in a special Perspex radome designed by Bristols. Designated AI Mk.VII, the new set successfully passed its operational trials in November 1941, with production deliveries to four squadrons, including 604, beginning in March 1942. AI Mk.VII proved to be a very successful radar, demonstrating maximum ranges in the order of three miles (4.8 km), and minimum ranges of 400 - 500 feet (120 - 150 metres), combined with a satisfactory maintenance performance. AI Mk.VII was superceded by the improved AI Mk.VIII, which offered increased range and IFF and beacon facilities. 604’s Beaufighters were re-equipped with this radar early in 1943.

During the opening months of 1942 the much depleted resources of Luftflotte 3 contented themselves with daylight ‘hit-and-run’ raids by Bf 109 fighter-bombers (Jabo) and small-scale night attacks against coastal targets. These raids were difficult to intercept and incurred few losses to the Luftwaffe, but equally, inflicted few casualties and little damage to British industry. This situation was not, however, set to last. On the night of the 28/29th March, 234 aircraft of Bomber Command struck at the ancient town of Lubeck with considerable success. Approximately 190 acres of the old town were destroyed by fire, 30% of the built-up area, and some 320 people killed, making Lubeck the ‘heaviest death toll in a German raid so far in the war.’

3 Hitler was outraged at the scale of destruction and in a signal to the Luftwaffe High Command (Oberkommando der Luftwaffe- OKL) on the 14th April, ordered:

‘that the air war against England ..... be given a more aggressive stamp. Accordingly, when targets are being selected, preference is to be given to those where attacks are likely to have the greatest

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possible effect on civilian life. Besides raids on ports and industry, terror attacks of a retaliatory nature are to be carried out against towns other than London. Minelaying is to be scaled down in favour of these attacks.\(^4\)

Fortunately for Britain, *Luftflotte 3*’s composition in the spring of 1942 was largely one of defensive fighters, maritime patrol and minelaying aircraft. Only two dedicated long-range heavy bomber units existed in the order of battle, that of *III./KG 2* equipped with the Do 217E and *III./KG 30* with the Ju 88. To undertake Hitler’s directive, the strength of *Luftflotte 3* was augmented by the relocation of the fourth reserve and training *Gruppen* of the *Kampfgeschwader* to forward airfields, and the transfer of the anti-shipping and minelaying aircraft of *KG 40* and *KGr 106* to reinforce the bomber *Gruppen*. To increase the strength still further, two bomber *Gruppen* were withdrawn from Sicily and the Eastern Front. Training time was also reduced to release more aircrews and their instructors for operational flying, despite the detrimental effects on experience and morale.

The responsibility for target marking remained with *KGr 100*, now absorbed into a new unit, *KG 100*, as its first *Gruppe*, whose priorities were the small, less well defended towns of provincial England. The attacks were generally undertaken on moonlit nights, lasting some thirty minutes, and frequently involving double-sortie raids. Because of the weaker defences at the lower levels, bombing was often undertaken from relatively low altitudes, 10,000 feet (3,050 metres), and sometimes as low as 5,000 feet (1,525 metres), by the faster Ju 88 and Do 217s using canister incendiary bombs.\(^5\)

The opening raid of the new offensive, subsequently referred to as the ‘*Baedeker Raids*’\(^6\) by both sides, took place on the night of the 23/24\(^{th}\) April, when some forty aircraft drawn from *KG 2*, *KGr 106* and *I./KG 100*, ineffectually bombed the City of Exeter. Returning the following night in conditions of improved visibility, the bombers caused some material damage and killed seventy-three people. On the 25/26\(^{th}\), the *Luftwaffe* managed a ‘maximum effort’ raid against Bath that comprised very nearly

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4 Alfred Price [1], *op cit*, page 132.
5 The ABB 500 was a canister bomb that contained 140 1 kg (2.2 lb) incendiaries that were released at a pre-determined altitude by a barometric fuse. When released from a low altitude the bombs produced a highly concentrated shower of incendiaries that caused considerable fires. Source, Alfred Price, *The Blitz on Britain, 1939 - 1945*, page 134.
6 The *Baedeker* raids got their name from the pre-War *Baedeker* Guide to Britain, from which (as the story goes) the provincial targets were selected; ie Exeter, Bath, Norwich, Canterbury, Poole, etc.
all the available bomber resources of *Luftflotte 3*. By mobilising the fourth *Gruppen* and their instructor crews and flying double sorties, the enemy mounted two raids of half-an-hour’s duration, with the loss of four bombers. The bombers returned to Bath the following night to complete the destruction. The two raids on Bath, which severely damaged the city and caused the deaths of 380 people, set the standard for the remainder of the *Baedeker* Campaign.

At some point in the late winter or early spring of 1942, the radar operators’ title was changed from Observer (Radio), to Navigator (Radio), N/R, or simply ‘navigator’, which required the incumbents to complete a formal navigators course before putting up their new brevet.

1942

On the 1\textsuperscript{st} April the long-suffering Sergeant Fisher was finally declared fit for operational duties and placed on the crew list for night patrols. For an unknown reason, the Squadron received orders on the 2\textsuperscript{nd} to strengthen its ground defences to the extent of providing an officer and some fifty men at twenty minutes notice. The return of good weather on the same day, brought out the *Luftwaffe* in small numbers to indulge in coastal raiding and provide 604 with a few targets. That night, the 2/3\textsuperscript{rd}, Flight Lieutenant Crew and his N/R, Pilot Officer Facey, intercepted and destroyed an He 111H-6 of III./KG 40 that was participating in a raid on Weymouth. The enemy aircraft was flying extremely slowly, forcing Flight Lieutenant Crew to use considerable amounts of flap to prevent him overshooting the target. Opening fire at a range of 150 yards (137 metres) the Heinkel was struck in its starboard engine and crashed into the English Channel to the east of Portland, Dorset, with the loss of its four-man crew. Throughout the interception, Flight Lieutenant Crew was controlled from Sturminster GCI by Squadron Leader Craig. Squadron Leader Skinner (N/R unknown) operating under the control of one of 604’s former pilots, Flight Lieutenant Geddes, from Sopley, gained a contact and gave chase to a low-flying enemy aircraft exiting to the south-west. Obtaining a ‘visual’ at long range, Squadron Leader Skinner managed to hit the enemy, but was forced to break off the interception in the vicinity of the Channel Islands when the aircraft descended below 800 feet (244 metres) and was lost in the ground returns.

The afternoon of the 4\textsuperscript{th} saw the return of poor weather in the form of heavy cloud from 800 - 3,000 feet (244 - 915 metres), broken cloud above that and solid cloud over 19,000 feet (5790 metres). At 1620 hours, Wing Commander Cunningham and Pilot Officer Rawnsley took-off for a night flying test, but were shortly afterwards put onto an enemy aircraft that had
taken advantage of the bad weather to bomb Gloucester. The pair found the enemy and managed a short burst before the aircraft escaped into low cloud and Pilot Officer Rawsley’s AI set blew a valve and was rendered u/s. At about the same time, Flight Lieutenant Crew was given a contact on two targets and ‘got in bursts at both’, in the face of return fire which damaged Beaufighter ‘NG-H’.

On the 7th, four new aircrew reported to the Squadron for flying duties, Pilot Officers Lomas, Keele and Cowles and Sergeant Ward, followed the next day by an Army detachment, whose officers, Lieutenants Davies and Durnbridge, were entertained to a small party at the Pheasant. It is presumed this detachment took over the Squadron’s ground defence duties. Pilot Officer Van Zellar overshot on landing Beaufighter ‘NG-A,’ damaging the aircraft, but emerging with himself and his N/R intact. The following day, the 14th, Flight Lieutenant Selway ‘put up his half-ring’ on promotion to Squadron Leader, with the ORB commenting that from henceforth he was to be addressed as ‘Sir’!

The good weather returned on the 16th, with the enemy arriving in force during the early hours of the 17th and an estimated forty-five aircraft participated in general raiding over a wide area within the Middle Wallop Sector. Squadron Leader McLannahan and Pilot Officer Rad were diverted from PIs to intercept the raiders under Sopley’s control, but a near miss on the station put its radar out of action for the majority of the raid. Contacts were made by Squadron Leaders McLannahan and Selway and Pilot Officer Rad, but ‘energetic evasive action’ on the part of the enemy prevented any being destroyed. Squadron Leader McLannahan and Pilot Officer Rad were forced to break off their interceptions due to fuel shortages. Pilot Officer Rad in ‘NG-N’ diverted to Colerne, but crashed short of the airfield on his approach and burst into flames. The pilot was pulled from the wreckage by his passenger, Pilot Officer Lovestad, who was on attachment from Staverton, but they failed to save Sergeant Melvin who died in the aircraft. Rad and Lovestad were taken immediately to Salisbury Hospital, with the former reported to be in a ‘serious condition’. The ORB comments that ‘Sergeant Melvin is a great loss as he was an operator above the average.’

Another raid on the night of the 18/19th, during which a number of enemy aircraft raided the coast and penetrated inland, resulted in several contacts but no interceptions. This led to the opinion that the enemy was

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7 604 Squadron ORB/Diary, page 52.
The increased number of WAAF's on the station, and the need to provide them with permanent accommodation, required some of the Squadron’s airmen to give up one of their barrack blocks to provide the ladies with sleeping quarters. This move, enacted on the 21st April, affected 160 men who were moved to tented accommodation in an adjoining field, where they were required to live for one month at a time - a move that must have gone down like the proverbial lead balloon. Consequently it is doubtful that during the visit the following day by the Parliamentary Under-Secretary of State for Air, Lord Sherwood, and the Permanent Under-Secretary for Air, they were shown the airmen’s ‘new quarters’. They were, however, given a conducted tour of Sopley GCI and introduced to Squadron Leader Skinner’s ‘A’ Flight crews on standby in the Flap Room.

The night of the 23/24th April marked the opening of the Baedeker offensive against the provincial towns of the south-west within 604’s area of responsibility. At 2200 hours three aircraft were scrambled to intercept a large number of raiders travelling north-west towards Lyme Bay and Exeter. Eight contacts were made, of which one, that of Pilot Officer Tharp and Sergeant King, was converted into a ‘visual’. The enemy aircraft, a Do 217E-2 from II./KG 2, was dispatched by a short burst from Pilot Officer Tharp’s guns, to crash near Axminster, Devon, at 2335 hours. The crew of four, commanded by Oberleutnant Gumbart, parachuted to safety and were taken prisoner. The raid on Exeter was judged to be ‘light’ with only one stick of bombs falling within the city boundary. 604 was airborne the following night when the Luftwaffe returned to complete their destruction of the city. On this occasion the enemy’s approach was masked by mist and the target area being on the very fringe of Sopley’s cover. At 0100 hours four aircraft were scrambled to intercept a group of four enemy aircraft heading for Lyme Bay, Dorset, but fast and evasive flying by the enemy made interceptions difficult. The CO obtained a visual, but lost it on closing the target, whilst Flight Lieutenant Hoy managed a few bursts on an enemy aircraft without any apparent results. The same conditions pertained on the following night, the 25/26th, during a two-wave raid on the City of Bath. The night state had been raised to eight aircraft on standby, with a number of contacts and no interceptions, apart from Flight Lieutenant Crew who managed two short, but ineffective bursts on an unidentified target.

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8 It is known that the Do 217E’s of KG 2 and the He 111H-6s of KG 40 were not fitted with a tail-warning radar, so the increased ‘awareness’ of the enemy must be attributed to improved tactics and vigilance on the part of the crews, particularly the gunners.
The shortage of serviceable aircraft, due to the need to have them available for operational night patrols, interfered with the completion of the Squadron’s crew training programme. Of the twenty-eight pilots ‘on strength’ in late April 1942, twelve were under training and non-operational, a significant proportion. Hence each aircraft damaged or lost, was one aircraft less for training. This in turn increased the time it took to convert a trainee pilot to operational status. For example, on the 26th, Pilot Officer Lomas landed heavily on returning to Middle Wallop, severing the starboard undercarriage in the process and causing damage beyond the Squadron’s ability to repair. Result: yet another Beaufighter off the training schedule.

The second night of the ‘Bath Blitz’, the 26/27th, drew a single attack on the city, but once again the clear weather conditions and increased vigilance on the part of the enemy were the principal reasons for a lack of success. Flight Lieutenant Crew with Pilot Officer Duckett, claimed a ‘probable’ on an incoming raider near Portland, whilst Sergeant Atkinson with Sergeant Saunders, damaged a Do 217, and Pilot Officer Thwaits damaged an unidentified aircraft. Enemy strength on these raids was in the order of fifty aircraft per wave.

April 1942 was a record month as far as the monthly flying total was concerned: 424 hours by day, 301 hours by night, of which 160 were operational, making a grand total of 725 hours.

On the night of the 1/2nd May, Flight Lieutenant Hoy and Pilot Officer Howard-Williams were undertaking a PI, the latter in Beaufighter ‘NG-N’, when Howard-Williams’ starboard engine failed:

‘It is a fine, quiet night, as we (himself and Sergeant Nordberg) fly at 15,000 feet (4,570 metres) under Sopley control about twenty miles (32 km) south of the Isle of Wight ….. We are cruising at +3 lb of boost\(^\text{10}\) with 2,650 rpm to give William (Flight Lieutenant Hoy) the fast target he wants. ….. Suddenly I am awakened ….. by a roughness in the starboard engine. It continues for a few seconds and then loses all power. I glance quickly at the instruments. The rpm have gone off the clock and the oil pressure is zero. I throttle back the good engine to zero boost and set the rpm to 2,400. I then try to feather the starboard engine but nothing happens.’

After calling Sopley to report the situation ‘I try the feathering button again, exercise the throttle and watch my

\(^9\) This was a brand new aircraft with only thirty hours on the ‘clock.’

\(^{10}\) Boost is the increase in air pressure above standard atmospheric pressure (14.7-lbs/sq inch) in the engine supercharger to increase engine power. Therefore +3lbs indicates a pressure of 17.7-lbs/sq inch.
airspeed carefully.’ This drops’ gradually ‘from its original 250 mph (400 km/hr) to ….. 180 (290 km/hr) and then still lower ….. When it gets down to 145 mph (235 km/hr) I lower the nose slightly and start losing height, letting the speed build up to 150 mph (240 km/hr) again. We are obviously not going to make it.’

Whilst the pilot holds the aircraft, Sergeant Nordberg switches the IFF set to ‘distress’ and goes forward to release the pilot’s escape hatch. ‘We have practised this on dry land several times, much to the amusement of the rest of the squadron, aircrew and airmen alike. He taps me smartly on the shoulder and I look around to find that he has gone. I throttle back the port engine, collapse the seat and start to pull myself backwards out of it. The next thing I remember is falling gently, suspended beneath my parachute.’

Pilot Officer Howard-Williams and Sergeant Nordberg landed safely in the sea twelve miles (19 km) to the south-west of St Catherine’s Point. To provide guidance for the rescue services, Flight Lieutenant Hoy broadcast fixes and dropped flares to illuminate the scene. After two and a half hours in the sea, the pair were picked up by HM Trawler Arctic Pioneer and returned to dry land at Portsmouth.

On the night of the 3/4th May thirty enemy aircraft attacked Exeter, some of whom transited 604’s sector and caused two aircraft to be scrambled. Squadron Leader Skinner with Flight Sergeant Larcey, engaged an enemy aircraft over Portland which they were convinced was destroyed, however, No.307 (Polish) Squadron was operating in the same area and also claimed the aircraft, a Ju 88A-5 of IV./KG 30 that crashed at Topham Barracks, Exeter. Meanwhile Flight Lieutenant Crew with Pilot Officer Duckett intercepted an elderly Do 17Z-2 of KG 2’s IVth training Gruppe that crashed into the sea off Portland with the loss of all four crew members.

On the 3rd, a party of flying instructors visited Middle Wallop to be shown around the squadrons and discuss their operational methods. A second party on the 4th were similarly entertained, as was a United States

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11 The distress setting on the IFF set provided an enhance echo on the screens of GCI and adjacent AI sets, telling those people that an aircraft was in trouble.
12 Jeremy Howard Williams, op cit, pages 46 & 47.
13 As far as can be established this aircraft was credited to 307 Squadron, their second of the night.
14 The ORB claims this as a Do 217.
Army Air Force (USAAF) officer, Major Black, who was escorted by Squadron Leader Gilfillian\(^{15}\) for discussions on 604’s operational methods.

At some time during early May, a naval night-fighter crew joined the Squadron for a period of operational training on the Beaufighter. Captain L.A ‘Skeets’ Harris, DSC, Royal Marines, a Fleet Air Arm pilot, had flown Blackburn Skuas with No.803 Naval Air Squadron (NAS) in the raid that sank the German cruiser *Koenigsberg* off Bergen in April 1940. He later flew Fairey Fulmars and Gloster Gladiators with 805 NAS in the Western Desert and the island of Crete in 1941. Returning to Britain in October 1941, Harris undertook a period of radar training with TFU at Hurn during January 1942, where he was teamed with Lieutenant George Stavely, RNVR, as his observer\(^ {16}\) and radar operator. Here they flew Fulmars equipped with AI Mk.IV before posting to No.54 OTU to complete the standard RAF night-fighter course. As the first of a group of naval officers seconded to Fighter Command, they were posted to 604 Squadron to be taught the science of night-fighting by Wing Commander Cunningham and Flight Lieutenant Rawnsley.

‘A’ Flight was on standby for the night of the 4/5\(^ {th}\) May when the enemy struck at Cowes, Isle of Wight, in two waves. Flight Lieutenant Crew destroyed his eighth enemy aircraft - presumably in concert with Pilot Officer Duckett - a Do 217E, after what the ORB describes as a ‘classic battle’. Pilot Officer Foster and Sergeant Newton claimed a ‘damaged’ after a long chase to the south. Enemy activity subsided after the 5\(^ {th}\), which provided a welcome opportunity for uninterrupted pilot training. The following day, a trainee pilot, Pilot Officer Spencer, in a Beaufighter that had no R/T set installed (or serviceable), was unable to lower his undercarriage on the return to Middle Wallop. After getting a ‘green’ flare from the Flying Control Officer, he executed a good wheels-up landing ‘in a cloud of dust before a crowd of interested spectators’, that did little damage to the aircraft. Nevertheless, the accident was a further blow to the serviceability record and the flying hours, that was achieving twenty-seven hours per day. During the evening of the 9\(^ {th}\), the CAS, Air Chief Marshal Sir Charles Portal, and the AOC No.10 Group arrived at Middle Wallop for an informal visit to the squadrons.

The Squadron’s complement was increased on the 13\(^ {th}\) with the arrival of a party of WAAFs attached to the Servicing Echelon, as supply drivers for the vans that provided transport to and from the dispersals. This in turn

\(^{15}\) The date of Flight Lieutenant Gilfillian’s promotion to Squadron Leader is not known.

\(^{16}\) It should be noted that navigators and radar operators were referred to as ‘observer’ in the Royal Navy.
released airmen for driving the aircraft refuelling tankers. On the 16th, Squadron Leader McLannahan stood down as OC ‘B’ Flight having been posted to No.264 Squadron as a flight commander, with his place as OC being taken by Squadron Leader Selway.

Throughout the early part of 1942 the scientists at TRE had begun the testing of the centimetric AIS, with which Fighter Command’s night-fighter squadrons were scheduled to be re-equipped later in the year. On the 19th, Wing Commander Cunningham and Flight Lieutenant Rawnsley visited TFU at Hurn, to inspect one of the Beaufighters fitted with the production version of AIS, AI Mk.VII.

The Squadron celebrated the destruction of its sixty-fifth enemy aircraft on the afternoon of the 23rd May by Wing Commander Cunningham and Flight Lieutenant Rawnsley. Three aircraft were scrambled to intercept seven enemy aircraft heading in a north-westerly direction inland from Poole Bay, flying at 12,000 feet (3,660 metres) in cloud extending up to 20,000 feet (6,095 metres). All three of 604’s aircraft obtained contacts, but only the CO was able to hold an He 111 that dived hard to escape interception and crashed into the ground at Alvediston, near Shaftsbury, Dorset. The aircraft, an He 111H-6 of the pathfinder III./KG 100, was totally destroyed and its crew of five were killed. During the dive, the Beaufighter’s air speed indicator showed 340 mph (547 km/hr) when Wing Commander Cunningham broke off the pursuit. An investigation of the wreckage identified the pilot as Hauptmann Langar, the IIIrd Gruppe’s Kommandeur. This was the CO’s sixteenth victim. That night, during a raid on Poole by fifty-five enemy aircraft, Squadron Leader Skinner and Flight Sergeant Lacey dispatched a Ju 88A-4 from II./KG 77 that crashed into Studland Bay, off Swanage, at 0100 hours, with the loss of all four crew members.

From the 23rd, the Squadron was required to provide day-readiness owing to the recent bad weather and accompanying thick cloud, which the day-fighters had difficulty coping with, but was best suited to night-fighters flying in the ‘all-weather’ role. On the 25th, the Squadron received the first three of its AI Mk.VII equipped Beaufighter I’s, as Jimmy Rawnsley describes:

‘The first thing one noticed about the new aircraft was the absence of any external wire-cutter (dipole and unipole) aerials. Both the

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17 TFU moved from Christchurch to Hurn by November 1941.
18 The ORB describes this aircraft as an He 111, but contemporary records show it to be a Ju 88.
boooing (transmitting) and the harking (receiving) were now done within a new plastic nose (radome)’ fitted ‘to the Beaufighter, inside which a scanner shaped like a dish whirled around at high speed.\(^{19}\) In addition to the new equipment inside the aircraft we also discovered, to our unbounded relief, that the ammunition for the cannon was now stored in tanks\(^{20}\) spaced across the cat-walk. Although this made progress from back to front of the aircraft something of an obstacle race, it meant that we no longer had the task of reloading, and the slight added constriction of movement was well worth paying for.\(^{21}\)

Later that month the first three N/Rs, Flight Lieutenant Rawnsley, Pilot Officer Duckett and Sergeant ‘Chalky’ White, attended a conversion course at FIU, Ford, to acquaint themselves with the new radar. Figures for May 1942 showed a total of 615 flying hours, of which 216 were at night and there were no crashes. Sometime during the month, Squadron Leader Skinner, the long standing OC of ‘A’ Flight was posted to Boscombe Down on promotion to Wing Commander. His place as OC was taken by Flight Lieutenant Crew, who was promoted to Squadron Leader.

June began with a raid by a ‘fair force’ of enemy aircraft on Poole on the 3rd. Despite a number of aircraft being airborne in good time, the enemy’s tactics of arriving at altitude and then diving on the target before flying out at low-level and high speed, proved difficult to counter. That same day, with their training completed, Captain Harris and Lieutenant Stavely left 604 to report to Lee-on-Solent, Hants. At Lee-on-Solent Captain Harris assumed command of No.784 NAS, the Naval Night-Fighter School, tasked with training naval night-fighter crews destined for service on board aircraft carriers.\(^{22}\)

The arrival in some numbers of new Beaufighters equipped with AI Mk.VII sets from TFU’s workshops at Hurn, and the subsequent increase in Special Signals Section’s maintenance load, required the construction of an

\(^{19}\) The operation of the scanner for AI Mk.VII was relatively complex, however, a short wave dipole was inserted within a dish aerial that was spun at high speed, in a concentric way, to produce a cone of radio frequency energy.

\(^{20}\) Designed around the French Chatellerault recoil-operated feed, known in the RAF as the Mk.I Feed, the system was introduced from the 401st Beaufighter in September 1941.

\(^{21}\) C.F.Rawnsley & R.Wright, \textit{op cit}, page 192.

\(^{22}\) On completion of his tour with 784 NAS, Major Harris raised the second naval night-fighter squadron, No.746, in December 1942. Working closely with the RAF’s FIU, Harris made the first landing of a naval night-fighter on an aircraft carrier, HMS \textit{Indomitable}, on 18th May 1943. Major L.A.Harris, OBE, DSC, RM, remained active in naval flying until his retirement from the service in the 1960s.
extra workshop adjoining the Squadron’s hanger, to provide the additional servicing capacity. Lectures and demonstrations were also given to the N/Rs on the Mk.VII’s capability at low-levels, in order to speed up the introduction of the new equipment. On the 10th, a Wellington bomber from nearby Thruxton airfield, landed in error at Middle Wallop and promptly took-off when the crew realised their mistake. Instead of taking-off into wind, the pilot mistook his heading and became airborne at 140º to the runway, struck a Belman hanger in No.245 Squadron’s dispersal, overturned and caught fire, killing the rear-gunner. The CO was subsequently appointed the Investigating Officer for the enquiry.

On the night of the 13/14th, the Squadron suffered another embarrassing incident when Squadron Leader Crew and Pilot Officer Duckett flying an AI Mk.VII equipped aircraft, shot down another of the unit’s Beaufighters flown by Sergeant Atkinson and Flight Sergeant Sanders. The circumstances of the occurrence are not known other than the two sergeants baled out and landed in the New Forest near Lymington. Flight Sergeant Sanders was wounded in the leg, but was quickly found, whilst Sergeant Atkinson was forced to spend part of the night in the forest until rescued. It appears the two crews were working with separate GCI stations on Pls, when, by some means, an enemy aircraft blundered into their area and the interceptions became confused and real. Flight Sergeant Sanders was taken to hospital at Lymington where he was visited by the CO on the 16th and reported to be ‘well and cheerful’. However, in July he was evacuated to Wroughton RAF hospital by air. A Court of Enquiry to investigate the incident was convened at Station HQ the following day.

Throughout their period at Middle Wallop, the Squadron regularly flew searchlight co-operation exercises for the searchlight crews. These required the aircraft to fly at 1,000 feet (305 metres) until the ‘lights acquired their target and did their best to hold it, whilst the fighter did its best to escape’. Jeremy Howard-Williams records one of these exercises that took place on the evening of the 15th:

During the exercise ‘the inside of the cockpit is brilliantly lit by the combined effects of twenty searchlights and it is important for the pilot to keep his head well down with his eyes on his instruments, for he will be temporarily blinded if he looks outside. We make four runs and then I decide that I will really shake them off, so I dive and twist until they do, in fact, lose us and the lights go out. That teaches them. I have been half watching outside the cockpit to see how the lights are getting on and now I look inside again. Christ! The altimeter shows only 200 feet (60 metres) and the airfield is about
that high above datum. I pull the nose up sharply and start climbing, muttering something to Tony (Sergeant Nordberg). “Yes I know” he says quietly. “I just saw a Nissen hut go by level with us”. No wonder the lights went out ….. I am chastened at my overconfidence and realise that we had a narrow escape from Sir Isaac’ (the effects of gravity).²³

On the night of the 16/17th Flight Lieutenant Gonsalves took an AI Mk.VII equipped Beaufighter out over Lyme Bay in the hope of intercepting enemy minelayers, but was hampered by running outside the R/T coverage at such low-levels. The CO had earlier tried low-level hunting to the east of the Isle of Wight, again with no success. Six nights later, on the 21/22nd, the enemy struck at Southampton with a force of some fifty bombers, one of which, an He 111, provided Pilot Officer Foster and Flight Sergeant Newton with a target which they promptly dispatched into the sea to the south of Ventor, Isle of Wight.

During the latter part of June, the Squadron began to suffer from ‘interference’ on the 1½ metre band which effected the AI Mk.IV sets. Experts from HQ Fighter Command visited the Squadron on the 24th to discuss reports that the source of the interference was rooted in the Boulogne region of northern France. The following day it was confirmed that the interference was indeed active jamming by the enemy of the coastal CHL radar network, which, since AI Mk.IV operated on the same wavelength, was effecting the Squadron’s Mk.IV sets, but not the shorter waves of AI Mk.VII.²⁴

On the 6th July, Wing Commander Cunningham stood down as 604’s CO in place of Wing Commander Wood, AFC, who assumed command on the 11th. Wing Commander Cunningham was posted to a staff job at HQ No.81 Group, Fighter Command’s training group, with direct responsibility for managing the night-fighter OTUs. Jimmy Rawnsley was also ‘time-expired’ and he was to have been posted to No.62 OTU at Usworth, but John Cunningham ‘pulled strings’ to have him posted to No.81 Group to work alongside him in the night-fighter training organisation. On the evening of the 7th, the officers and former members of the Squadron said goodbye to their CO and Navigator Leader at a farewell party held at the Pheasant, attended by many present and former members of 604. Speeches were made by the Station Commander, Group Captain Harvey, the previous

²³ Jeremy Howard Williams, *op cit*, pages 55 to 57.
²⁴ The centimetric AI Mk.VII operated on a wavelength of 10 cms that was well outside the 1½ metre band and was thus immune to its interference/jamming.
CO, Group Captain Appleton and the new boss, Wing Commander Wood, with replies by John Cunningham and Jimmy Rawnsley.

‘We said our goodbyes to our ground crews who had served us so very well. The Mess gave us a farewell dinner at the Pheasant, and we drank the last of the champagne we had brought back behind our gun turrets when we had escorted Neville Chamberlain and some members of the Cabinet back from Paris in April, 1940. When it was all over John and I walked outside together for a breath of fresh air before turning in. A Beaufighter droned by overhead on its way out to Bournemouth and the old beat. We listened in silence to the sweet music of its Hercules engines as it died away on the soft night air. “Well ….. that’s it,” John said quietly. “There’ll never be another three years quite like it”.

We had had a good innings together: three years of preparation, and three years of war. In that time we had seen the whole fabric of night defence built up. It had been three years of hard work and good fun, of long dreary nights of boredom, of nights of frustration and nights of triumph, nights of fear and of tragedy, and nights of sweet content under the glory of the stars. It had been three years of happy companionship in a worthwhile [sic] job.’

When Wing Commander Cunningham and Flight Lieutenant Rawnsley departed for the ‘dreaded rest’ at No.81 Group, Avening, amidst the foothills of the Cotswolds, only Squadron Leader John Selway, OC ‘B’ Flight, remained as the surviving pre-War AAF officer.

By July, the Baedeker Raids had subsided, due in part to the heavy losses incurred and the long, light summer evenings. High level enemy activity diminished accordingly, but the aircraft of KG 40 persisted in their mine laying operations along the coast and these difficult targets continued to engage the Squadron’s attention. Owing to reports of low-level attacks against shipping in the Land’s End Sector, the Squadron was ordered to provide a detachment of two Beaufighters to operate from Predannack, Cornwall. The first detachment departed from Middle Wallop on the 15th. On the night of the 29/30th, Flight Lieutenant Hoy and Pilot Officer Dalton of the Predannack Detachment, intercepted an He 111H-6 of III./KG 53 some forty miles (65 km) to the south of Land’s End, and shot it into the sea at 0013 hours. The crew of five were all killed. This action brought great credit on Pilot Officer Dalton who followed the Heinkel by eye when his AI

25 C.F.Rawnsley & R.Wright, op cit, pages 195 & 196.
set failed and continued to give his pilot steering instructions to affect the interception. Pilot Officer Anthony, the Squadron’s Signals Officer, was also on board as a passenger.

Raiding in the North-West increased during July, and on the night of the 30/31st Flying Officers Rad and Lovestad took-off to intercept two ‘bandits’ returning from a raid in that area. They failed to find their quarry, but another 604 crew, comprising Pilot Officers Keele and Cowley, succeeded in intercepting and destroying a returning He 111H-6 from IV./KG 55 flying at 19,000 feet (5,790 metres). The aircraft broke up in the air and crashed in farmland at Preston, near Weymouth, Dorset, at 0030 hours. Two crew members escaped by parachute to become PoWs, and three were killed. Not content with one enemy aircraft, this relatively inexperienced crew went after a Ju 88A-4 minelayer of Kustenfliegergruppe 106 (KfGr 106) and shot it into the sea off St Alban’s Head at 0104 hours, with the loss of the crew of four. The ORB records these combats as a ‘fine performance’ as they increased the Squadron’s night tally to seventy enemy aircraft destroyed.

That same night Sergeant Atkinson approached to land at 0345 hours after a three hour patrol, but misjudged his approach and collapsed the undercarriage of “NG-Q”, one of the Squadron’s veteran Beaufighters with a total of 601 flying hours to its credit. This accident caused considerable damage that necessitated the aircraft’s return to the manufacturer for repair.

Flying hours for July 1942 totalled 745, of which 350 hours were flown at night.

August opened on a sad note with the death of Pilot Officer Spencer. On the night of the 4/5th, Spencer and his N/R, Sergeant Pottage, were guided to a target by Sopley GCI and obtained a visual on an enemy aircraft, following which both aircraft exchanged fire without conclusive results. Pilot Officer Spencer was then directed towards another target which he shot down in flames into the sea. He requested a fix and a return vector to Hurn, as he was running out of fuel and unable to reach base. A delay in floodlighting Hurn airfield occurred, whereupon Spencer ordered Sergeant Pottage to bale out, after which he too intended to leave the aircraft. By the time Pottage had parachuted to safety the Beaufighter’s engines had died and Spencer failed to exit the aircraft before it crashed in flames at Branksome Park, between Poole and Bournemouth. Sergeant Pottage landed some 350 yards (320 metres) from the wreckage. The ORB records that ‘Pilot Officer Stephen Spencer will be deeply missed’ by the Squadron. At the funeral service on the 11th the CO represented the Squadron.

That same day, the Squadron was advised it was to move to No.10 Group’s armament practise camp at Warmwell on the 12th, when it was to be released from operations until the 23rd. The move to Warmwell was
completed, with both air and ground parties having arrived by midday. Poor weather and the need to provide support to the Combined Operations Allied raid on Dieppe, produced high levels of enemy activity in the area and required the Squadron to maintain six aircraft on day readiness. The camp turned out to be a ‘complete washout’ due to the poor weather, when on four out of the ten days, flying proved impossible. As scheduled, the Squadron returned to Middle Wallop on the 23rd, with ‘A’ Flight resuming readiness at 2025 hours that evening. The weather for the remainder of the month consisted of heavy rain, accompanied by thunderstorms, which severely restricted flying. On the 25th, the CO entertained Mr Sults Berger, a journalist for the New York Times, who was shown around the Squadron and its aircraft. Continuing the American theme, a flight of P-38F Lockheed Lightnings of the USAAF gave an impressive exhibition of aircraft handling over the airfield at midday on the 25th. Due to the poor weather the monthly flying hours for August were considerably reduced: 510 hours in total, of which 163 by night.

At the beginning of September some attention was being given by the CO to the interception of aircraft that comprised the so-called mine-laying ‘milk train’ operating off the south coast ‘at odd hours’ of the day and night. The CO undertook the first of these anti-milk train runs on the 2nd, but failed to make any impression on the enemy. A second attempt was made by Squadron Leader Crew on the 5th with orders ‘to destroy this aircraft’, but like his CO, he also failed to affect an interception. Squadron Leader Selway tried on the 6th, however, this time the enemy failed to put in an appearance, but rather cheekily, a lone, low-flying aircraft dropped propaganda pamphlets over the Middle Wallop Sector. The Squadron was ordered to provide day-readiness aircraft at 1600 hours each day from the 25th. This order was queried by the Squadron as the weather conditions on the day provided visibility out to forty miles (64 km), well within the norm for day-fighters. They were also ordered to re-establish the Predannack detachment with two AI Mk.VII Beaufighters to counter enemy raids on Falmouth. On the 26th the CO and Squadron Leader Crew flew to Warmwell to give a fire power demonstration of ‘what a Beaufighter’s cannon could do to ground targets’. Bad weather on the 27th did not prevent Wing Commander Cunningham arriving at Middle Wallop to collect his old ‘NG-R’ for his personal use at No.81 Group. Operating in the all-weather role, Pilot Officer Foster was sent off at 0830 hours on the 29th in pursuit of a raider in the Yeovil area. Although he obtained a contact, it proved to be a false echo which forced him to break off the interception and return to base. Poor Sergeant Fisher bent another Beaufighter on returning to land at Middle Wallop that evening, removing one undercarriage leg and badly damaging
the aircraft. Flying hours for the month were an improvement on July: 678 in total and a significant increase to 358 by night.

The 2\textsuperscript{nd} October was a day of experiments for the Squadron. Squadron Leader Snowball from the Aeroplane & Armament Experimental Establishment (A&AEE), Boscombe Down, flew a Beaufighter to test the deviation of the compass during gun firing. It was originally planned to fire 100 rounds from each gun in north, south, east and westerly directions, but this was subsequently cut to fifty rounds after firing in the north and south quadrants provided sufficient data for A&AEE’s purposes. The second experiment, flown by Squadron Leader Selway, was set-up to establish whether AI Mk.VII could be used to detect surface targets, in this case a motor torpedo boat (MTB). The test proved successful.\textsuperscript{26} The final experiment concerned an examination on behalf of MAP, to assess the relative merits of matt and smooth black night-fighter camouflage. The tests were carried out at 10,000 feet over Shaftsbury, but mist and friendly bombers ‘messed up the test’.

Enemy activity throughout October declined sufficiently for the Predannack detachment to be recalled and for the officers to hold a party on the 10\textsuperscript{th} at the Pheasant for a large number of guests, including many old members. Squadron Leader Crew returned to his ground-strafing role, when he was asked to shoot-up a series of prepared bridges in Imber Village\textsuperscript{27} at the Army’s behest. Unfortunately, the test failed to achieve its objective, as the Beaufighter’s four 20mm cannon failed to make much impression on steel girder bridges! Poor weather and brief appearances of the enemy provided little in the way of flying opportunities, and when they did, two aircraft were damaged in landing accidents: ‘NG-B’ on the 17\textsuperscript{th} and ‘NG-O’ on the 27\textsuperscript{th}. The poor weather and low enemy activity continued into November. Not withstanding, the Predannack detachment was reinstated and appeared to ‘hog’ the majority of the small amounts of action during the month. Pilot Officer Gossland of the detachment suffered another potential undercarriage problem - it was he who bent ‘NG-B’ on the 17\textsuperscript{th} - but to the great relief of the CO, managed, by dint of good airmanship, to land the aircraft safely. The Squadron received two VIP visits during the month: the Under Secretary of State for Air, Captain Balfour, on the 20\textsuperscript{th}, and the new

\textsuperscript{26} It should be noted that Coastal Command Beaufighter TF.Xs were later fitted with an ASV version of AI Mk.VIII (the series production version of AI.VII) for anti-shipping and navigation use.

\textsuperscript{27} Imber Village on Salisbury Plain was taken over by the Army during the war as an exercise area and the villagers removed. It was intended to return Imber to the villagers at the end of the war, but this did not happen and to this day it is retained for infantry training.
AOC, Air Vice Marshal Dickinson, on the 24th, who called to advise the Squadron they were to leave Middle Wallop and move to Predannack.

On the 2nd December, Flying Officer Lovestad was presented with the Norwegian War Cross by King Haakon’s representative, Admiral Risen, Royal Norwegian Navy, for his gallant rescue of Flying Officer Rad on the 17th April. The award was witnessed by Group Captain Dore, the Squadron’s first CO, Colonel Motsfelt and by all officers and aircrew, after which they repaired to the Pheasant for lunch.

On the evening of the 4th, the Squadron held an all-ranks farewell party in the NAFFI prior to the advance party under Flying Officer Anthony, departing the following morning by train to Predannack. 604 finally stood down from night operations on the evening of the 5th December, in good time for a ‘final’ farewell party in the Pheasant that was attended by distinguished present and former members of the Squadron and friends from Middle Wallop. According to the ORB this party was rated ‘most enjoyable’. The main party of five officers and 123 other ranks departed Middle Wallop for Grateley Station at 1930 hours in the evening of the 6th, and travelled directly to Helston by train, arriving there at 0630 hours the following morning, where they were met and taken to Predannack for breakfast. By 0900 hours, the ground staff were organised and ready to receive the aircraft, seventeen of which had arrived by 1215 hours, minus the Squadron’s Magister which had to land at Exeter to refuel. Before departing Middle Wallop, the Squadron gave its final fly-over of the station in sections of three in line-astern, then breaking and heading for Predannack in low cloud and, as they arrived, continuous rain. The aircraft party and the rear party arrived by train at 2030 hours on the 8th, thus completing 604’s move to Predannack after nearly two and a half years at Middle Wallop.

The 8th was spent in dispersing the various departments to their locations on the airfield, arranging quarters and undertaking a ‘very necessary’ clean-up of the site. Predannack was an incomplete huddled encampment when 604 arrived, well dispersed as befitted a coastal airfield, and very different in character to the ordered life at Middle Wallop. The forty-four officers were accommodated in a mess in the Pollurian Hotel, in nearby Mullion, and the NCO’s and airmen in huts on the airfield.

The first ‘incident’ at Predannack occurred the following day, when Pilot Officer Humphrey had an engine failure shortly after take-off, but managed a climbing circuit on one engine before landing the aircraft safely on the runway. ‘A fine performance by a new pilot’. In the afternoon the same pilot was involved in the sea rescue of a Wellington’s crew that came

28 Later MRAF Sir William Dickson, CAS 1953 to 1955.
down off the west coast. On Christmas Eve, Flight Lieutenant Joll was sent off to help find an aircraft down in the sea. He had great difficulty in getting airborne because of bad weather, cloud at 200 feet (61 metres), and inadvertently flew through Falmouth’s balloon barrage before conducting his search and landing safely at the Coastal Command airfield at St Eval. On Christmas Day, Flight Lieutenant Gonsalves provided the escort for the air-sea rescue (ASR) launch sent to pickup the crew. The conduct of the two pilots and their crews drew congratulations from the sector.

Statistics for the year showed that sixteen aircraft were damaged beyond repair by the Squadron, costing the lives of one pilot and one navigator. On the credit side, eleven enemy aircraft were claimed as destroyed, with two probably destroyed and a further eight damaged, and thirty-three crews were trained before posting to other night-fighter squadrons. In terms of decorations, the ‘gong’ count was much reduced over 1941: a Bar to the DSO for Squadron Leader Cunningham, awarded shortly after he left the Squadron, and Bars to the DFC for Squadron Leaders Chisholm and Crew and the Norwegian War Cross to Flying Officer Lovestad. Two NCOs were Mentioned in Dispatches, as was the Engineering Officer, Flight Lieutenant Dalton.

One 604’s long term members, Squadron Leader Edward Crew left the Squadron during October to become the first OC of the Radio Development Flight.29 His place as OC ‘A’ Flight was taken by Flight Lieutenant Gonsalves on promotion to Squadron Leader.30

1943

With the continued decline in Luftwaffe night operations and 604 being stationed in a relatively quiet location, combined with the sometimes poor weather encountered in the south-western tip of the Country, the Squadron descended into a routine life of training flights, ASR patrols and escorts. On the 11th January, Sergeant Hadlow and Sergeant Fawcett were lost when their aircraft dived into the ground outside the airfield perimeter, killing both men instantly. The cause of the accident is not known. A new unit, No.248 Squadron, a Coastal Command squadron equipped with the Beaufighter VIc, arrived at Predannack on the 18th to share the airfield with

29 The Radio Development Flight was formed at Drem in December 1942 with Defiants and Beaufighters to undertake the trials of radio and radar counter-measurers equipment. It was redesignated No.1692 (Radio Development) Flight in July 1943.
30 The exact date of Flight Lieutenant Gonsalves promotion to OC ‘A’ Flight is not recorded in the ORB, however, it must have been shortly after Squadron Leader Crew left to command the Radio Development Flight in December 1942.
604. Beginning on the 24\textsuperscript{th} the Squadron was ordered to exchange its AI Mk.VII equipped Beaufighter Ifs for No.29 Squadron’s machines fitted with AI Mk.IV - a step backwards no doubt brought about by the need of the better radar for No.11 Group units.

On the 13\textsuperscript{th}, February came news of an impending move to Ford, Hampshire, for three weeks attachment to No.11 Group, whilst No.141 Squadron, commanded by Wing Commander Bob Braham, DSO, DFC, took over 604’s slot at Predannack. No.141 Squadron arrived on the 17\textsuperscript{th} and moved into Squadron HQ and the airmen’s quarters in the afternoon, allowing 604’s main party of five officers and 130 airmen to leave Helston Station by special train at 2200 hours. ‘B’ Flight remained behind to fulfil the local readiness state.

In anticipation of a return to raiding in the London area, No.11 Group required the Squadron to provide eleven crews for night patrols. Perhaps because they were aware of 604’s return, the enemy stayed rooted to their airfields that night, but on the 7/8\textsuperscript{th} March they overcame their shyness and began flare and bomb dropping over the south of England to provide targets for the waiting fighters. Three of 604’s aircraft were airborne and two made contact with the enemy to open the Squadron’s 1943 scorebook. Wing Commander Wood intercepted an enemy aircraft to the south-west of the Isle of Wight, which blew up after a short burst from his guns before falling into the sea. Flight Lieutenant Hoy intercepted a second enemy aircraft to the south of Beachy Head and likewise shot it into the sea in flames.

At the end of March, 604 was to be tasked with a new set of operations, \textit{Ranger} patrols over Occupied Europe. The concept was not wholly new, No.23 Squadron had been flying \textit{Intruder} patrols with radar-less Mosquito NF.IIs (Mosquito II [Special]) from the previous June. An \textit{Intruder} sortie was flown against known areas of enemy activity, whilst \textit{Rangers} were ‘free-lance’ penetration flights made in complete radio silence, with the objective of finding targets of opportunity in the enemy’s ‘back-yard’. \textit{Day Rangers} were the responsibility of the Mosquito squadrons. These were flown when sufficient cloud cover was available to provide a temporary haven should \textit{Luftwaffe} fighters be encountered, whilst Beaufighters, fitted with the obsolescent, but still effective, AI Mk.IV radar, were permitted to fly \textit{Night Rangers} in any weather conditions. AI Mk.IV could be risked over the European mainland because by 1943, the Germans would learn little
from its technology should an aircraft be lost. To fulfil the commitment, Beaufighter squadrons were required to have three aircraft available for Night Ranger operations each night. Rangers were usually flown from coastal airfields, with No.10 Group concentrating on western and southern France, No.11 on eastern France, Belgium and southern Germany and No.12 on Holland and northern Germany. Poor visibility curtailed the first Night Ranger by the Squadron, planned for the night of the 24/25th March. However, three weeks later, fine weather on the 15/16th April enabled Flight Lieutenant Trimoney and Flight Sergeant le Conte to undertake the first uneventful Ranger patrol in the vicinity of Creil, France.

The following night, 604 lost its CO, when Wing Commander Wood and his navigator, Flying Officer Larcey, failed to return from a patrol in the vicinity of Beachy Head, where they were sent to investigate an enemy aircraft. Nothing further was heard and it was concluded the aircraft and its crew had crashed into the sea to the south of Beachy Head. Flying Officers Philips and Smith flew the Squadron’s second Ranger patrol over enemy territory the same night and claimed the first engagement with the enemy by shooting-up a train. On the night of the 18/19th, two Norwegians, Lieutenant Kristiansen and Captain Smith, flew a Ranger to Beauvais, damaging their aircraft after striking the sea off the French coast, but returning safely.

On the 19th, the Squadron was warned of a move to Scorton, Yorkshire, with effect from the 24th. Preparations began immediately, with equipment loading beginning on the 21st and Ranger operations cancelled the next day. Orders were received to ferry the Squadron’s Beaufighters to Ford and travel to Scorton where they would take over No.29 Squadron’s AI Mk.VII equipped Beaufighter VIFs, when the latter moved to Bradwell Bay to convert to the Mosquito XII. Equipment loading on a special train began on the 23rd during torrential rain, with all being satisfactorily completed by 2030 hours when the rail party comprising 209 airmen and sixteen officers departed for Scorton, via London. The rail party arrived at Scorton at 0900

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31 By early 1943, Fighter Command’s night-fighter squadrons had begun the transition to the centimetric AI Mks.VII & VIII, whilst the Luftwaffe’s latest AI radar, the FuG 202 Lichtenstein BC and its replacement, FuG 220 Lichtenstein SN-2, both employed technology and frequencies similar to those of AI Mk.IV; 490 MHz and 37.5 to 118 MHz respectively - Martin Streetly, *Confound & Destroy*, (Macdonald & Janes, 1978), pages 179 - 180 & e-mail from Jack Meadows dated 15 September 2004.


33 Flight Sergeant Edgar le Conte was one of original batch of airmen who join FIU at Tangmere in April 1940 and trained as a radar operator. He was commissioned in June 1943 from Warrant Officer and served with 604 until posted to No.108 Squadron, Malta, at the end of the year. He retired from the RAF in 1975 as a Wing Commander with the OBE.
hours on the 24th April and were settled into their new quarters by midday. ‘A’ Flight took immediate possession of their ‘new’ Beaufighters and flew their first patrol that evening against suspected enemy aircraft in the Humber Estuary. Later in the day, Wing Commander Michael Constable Maxwell arrived to assume command of the Squadron. ‘Mike’ Maxwell was an old 604 hand, having previously served in 604 from October 1941 as a Flight Lieutenant and then from March 1942 as a Squadron Leader and a flight commander at Nos.54 and 60 OTUs. In December 1942, he and his N/R, John Quinton, were posted to No.264 Squadron at Colerne, where Maxwell again commanded a flight.

By the time they had moved to Scorton in April 1943, 604 had been in existence for thirteen years and ‘at war’ for three and a half years. In that time the Squadron had established itself as one of Fighter Command’s best night-fighter squadrons and one of its highest, if not, the highest scorers, with a tally in excess of seventy enemy aircraft to its credit. Throughout the Blitz and the Baedeker raids that followed it, the Squadron had flown the original variant of the Beaufighter and was now set to enter a new period with improved equipment and an unknown CO.
CHAPTER SEVEN

*Scorton & OVERLORD, May 1943 - August 1944*

With the German Armed Forces heavily committed to holding the Red Army on the Eastern Front, following the defeat of the 6th Army at Stalingrad and General Feldmarschall Rommel’s *Afrika Corps* in North Africa in 1942/43, the Allies went over to the offensive in all theatres of the European War. In May 1943 detailed planning began for the invasion of Sicily that would take place two months later, and the TRIDENT Conference in Washington on the 12th fixed the date for the invasion of Europe, Operation OVERLORD, for 1st 1944. The Allies ‘Combined Bomber Offensive’, agreed at the Casablanca Conference in January 1943, provided the long term basis for co-operation between the USAAF and RAF Bomber Command. Its aim was ‘to bring about the progressive destruction of the German military, industrial and economic system and the undermining of the morale of the German people’.¹ To this end, the US 8th and 9th Air Forces and RAF Bomber Command continued their day and night campaigns against Germany’s industry and civilian population, which culminated in the so-called ‘Big Week’ of intensive bombing in February 1944.

The demands of the Eastern and Mediterranean Fronts, and the need to reinforce the air defence of the Reich, forced the realignment of the German aircraft industry towards the production of fighters, to the detriment of bombers and other aircraft. This shift did not, however, prevent the industry producing new and improved bombers for the Luftwaffe. During the late winter and spring of 1943, *Luftflotte 3* possessed some sixty Do 217s in KG 2 and a similar number of Ju 88s in KG 6. The E-models of the Dornier bomber were being replaced with the latest and more powerful K- and M-models with BMW 801 radial and DB 603A in-line engines respectively. A more streamlined cockpit, revised defensive armament and other improvements, raised the maximum speed by 20 mph (32 km/hr). The A-4 versions of the Ju 88 in KG 6 were also supplanted by the improved A-14 model, which offered increased protection for the crew, balloon-cable cutters as standard, and other minor refinements. Although basically sound aircraft, the Dornier and Junkers bombers of *Luftflotte 3* suffered considerable losses to the superior quality and depth of the UK’s night air defences.

¹ Quoted in Michael Armitage, *op cit*, page 171.
To counteract Hitler’s extreme disenchantment with the Luftwaffe’s performance over Britain, the OKL appointed Oberst Dietrich Peltz, as the Angriffsstuehrer England (Attack Leader England) to reorganise, plan and direct bomber operations over England. Although realising that Hitler’s objective of ‘total victory’ was no longer possible in the face of Allied materiel superiority, Peltz set about the task of strengthening the bomber arm for renewed operations in 1944. He reintroduced a dedicated pathfinder unit, I./KG 66, to lead the main bomber force, and trained them on the latest radio and radar navigation systems fitted in the Do 217. He also took charge of the fighter-bomber flights (Jabo) of the fighter arm, equipped with the Focke Wulf Fw 190, and formed them into specialist Schnellkampfgeschwader (Fast Bomber Group - SKG) for daylight attacks along the South Coast and night attacks against London.

The build-up for OVERLORD, and the invasion of Continental Europe the following year brought about the creation in June 1943 of the 2nd Tactical Air Force (2TAF) under the command of Air Marshal Arthur Conningham. By the time its organisation was completed, 2TAF had absorbed Army Co-operation Command, Fighter Command and Bomber Command’s No.2 Group that contained the new Air Force’s light-bombers. It also returned Fighter Command to its old pre-War title of the Air Defence of Great Britain. Within a few weeks, the old formations ceased to exist and new groups were created to provide support to the armies that would eventually make up the British and Commonwealth 21st Army Group. ADGB retained Fighter Command’s group structure and, until the end of the year, the disposition of its squadrons.

By June 1943 Mosquitoes comprised half the night-fighter strength of ADGB, including two squadrons that were equipped with the new Mk.XII version with centimetric radar. The Beaufighter force were primarily mounted on the Mk.VIf with AI Mk.VII or VIII radar. The fighter assets were supported by two Douglas Boston III intruder squadrons for operations over the airfields of France, Belgium and Holland. Together with over 2,000 radar-directed heavy AA guns, 1,450 40mm Bofors guns and many light

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2 Peltz was a regular Luftwaffe officer with considerable operational and staff experience. He commanded bomber and dive-bomber units in Poland, took part in the Battle of Britain and the Night Blitz, before taking up bomber appointments in North Africa and Italy. In 1942 Major Peltz he was appointed to a staff post in Luftwaffe bomber operations and then to his post as Angriffsstuehrer England. He was promoted to Generalmajor at the age of twenty-nine in 1943.

3 To fulfil the fighter-bomber role, Focke Wulf designed a variant of the Fw 190A, the A-4/U8 capable of carrying a 550-lb (250 kg) bomb and two 66 gallon (300 litre) fuel tanks.

4 Nos.85 & 256 Squadrons at West Malling and Ford respectively.
The GCI Network in the North-East from November 1941. 604 Squadron’s location at Scorton, Yorkshire, brought it under the control of the stations running from Seaton Moor in the north, to as far south as Neatishead in Norfolk (Ian White & Judith Last).

weapons, they provided a comprehensive defence, particularly in No.11 Group’s area defending London. By comparison, No.12 Group’s sector in which 604 Squadron operated, was relatively quiet. Here the enemy’s primary targets were the coastal towns of the East Coast, the Humber Estuary and its ports, and further north, the industrial centres of Newcastle and Sunderland. They also mounted intruder patrols over Bomber Command’s airfields in Lincolnshire and Yorkshire. To counter these operations, No.12 Group established fighter patrols over the North Sea, directed by a number of East Coast GCI stations (see above). In some cases when the stations were out of range, interception was by standing patrols that employed traditional techniques for navigation. In these circumstances, where an aircraft might be operating 150 - 200 miles (240 - 320 km) from the coast, the ability of the radar operator to effectively perform his role as a navigator, was essential to the crew’s survival and their safe return.
The Squadron’s new equipment, the Beaufighter Mk.IVf, was an improved version of the Mk.I with Hercules VI, or XVI engines of 1,670-hp and Al Mk.VII in a ‘thimble’ radome. The aircraft retained the Mk.I’s armament of four 20mm cannon and six 0.303 inch (7.69 mm) machine-guns. Maximum speed was improved with respect to the Mk.I, 333 mph (536 km/hr) at 15,600 feet, up from 319 mph (513 km/hr), whilst service ceiling and range were broadly similar: 29,000 feet (8,840 metres) and 1,500 miles (2,415 km) respectively. Another factor in the Squadron’s favour was its aircraft were relatively new, having been issued to No.29 Squadron the previous March.

On the 3rd May, Wing Commander Maxwell was notified of the award of the DFC for his services with No.264 Squadron, who naturally forwarded their congratulations. The Squadron lost the first of its new aircraft on the 6th, when the all-Norwegian crew of Flying Officers Ree and Aagaard suffered engine failure over the North Sea on their return from a PI. This problem was compounded shortly after by the failure of the other engine on the approach to the airfield. Being too low to bale-out, the crew stayed with the aircraft until it crashed into a chicken farm located in open land a mile (1.6 km) to the north-east of the ‘field, where the aircraft broke-up on impact and immediately caught fire’. Although badly shaken, Flying Officer Ree managed to drag his operator clear of the wreck - shades of Flying Officer Lovestad the previous year. Result, two aircrew saved, one Beaufighter destroyed and an unknown number of chickens fried. It was later presumed the accident was caused by fuel starvation, due to the crew’s failure to switch-over to the outer (wing) tanks.

Poor weather and heavy snowfalls restricted flying for the next few days, nevertheless, on the night of the 16/17th, five Beaufighters were scrambled in response to a raid by six enemy aircraft in the vicinity of Sunderland. Flying Officer Cowles gained a contact on one enemy aircraft and steered his pilot, Flying Officer Keele, to an interception some thirty-five miles (56 km) to the east of Sunderland. The enemy aircraft, a Do 217K-1 of II./KG 2, was struck by a four second burst and crashed into the sea at 0215 hours with the loss of all on board, the ‘kill’ being confirmed by Flight Lieutenant Hoy. Another crew airborne that night, Flying Officer Hamilton and his navigator, Flying Officer Coates, failed to return after confirming contact with the enemy. It was later concluded they had been hit by enemy fire and lost.
Wing Commander Mike Maxwell took command of 604 in April 1943 and remained as CO until July 1944, when he was succeeded by Wing Commander Hughes (Imperial War Museum, Neg No.CH14100).

The Do 217K shot down by Flying Officers Keele and Cowles was the first victory for the Squadron in its new location, the first with the Beaufighter VIf and one of the first of the K-models destroyed by Fighter Command. On the 16th, Squadron Leader Gonsalves stood-down as OC ‘A’ Flight to take up a post at HQ Fighter Command. His place as OC being taken by Flight Lieutenant Hoy on promotion to Squadron Leader.

In June 604 were joined at Scorton by the 417th Night Fighter Squadron, USAAF, with whom they were to train and exchange night-fighting methods. In August 1943, the 417th was transferred to the Mediterranean Theatre, where it operated from airfields in Algeria, Corsica and France. On the night of the 13/14th, Flying Officers Wills and Ledeboer intercepted and shot-down an unknown enemy aircraft. Wing Commander Maxwell on a freelance sortie that same night was investigating a contact, which appeared to be a Wellington, when Flying Officer Wills, ‘ barged-in’ and shot it down, claiming a Heinkel 177 destroyed, whilst narrowly avoiding a collision with his CO.

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5 At the War’s end the 417th received a small number of Northrop P-61B Black Widows while operating from Giebelstadt, in Germany. The Squadron disbanded on 9th November 1946, when it was renamed the 5th Fighter Squadron (All-Weather) - Warren E. Thompson, Northrop P-61 Black Widow, page 95.

6 Contemporary records make no claims for an He 177 destroyed that evening, indeed the He 177’s main operational role in the West was that of a maritime reconnaissance bomber with KG 40 based in south-west France, which did not begin operations until November.
On the 11th July, the Squadron was officially transferred from No.10 to No.12 Group, where it was required to provide six aircraft on stand-by each night. This small availability number eased 604’s manning problems as they were now down to just eighteen crews during the month.

July 1943 was a very fruitful month for an understrength 604. On the night of the 13/14th, Warrant Officers Ray and Waller despatched a Do 217 in the south of the sector over the Humber Estuary. Flight Lieutenant Keele and his navigator, Flying Officer Cowles, operating under GCI control on the 25/26th, intercepted and destroyed a Do 217M-1 of I./KG 2, which crashed into the sea fifteen miles (24 km) to the east of Spurn Head at 0032 hours. There were no survivors. A few minutes later they were put onto a second Dornier, a Do 217K-1 of Stab/KG 2, which they shot down in flames alongside its comrade. Two crew-members from this aircraft escaped by parachute and were subsequently rescued to become PoWs. Squadron Leader Hoy with Warrant Officer le Conte had a long and hard battle with another Do 217 which they eventually destroyed. The CO chased yet another and claimed it damaged. Overall, it was estimated the enemy threw some twenty aircraft into this raid - a very small number when compared to Bomber Command’s performance over Germany.

On the night of the 26/27th, two aircraft were airborne on patrol under the command of Patrington GCI to intercept the regular weather reconnaissance aircraft that hovered some 80 to 120 miles (128 - 193 km) to the east of Whitby, Yorks, taking their metrological readings. Red One, Squadron Leader Hoy and Warrant Officer le Conte, and Red Two, Warrant Officers Ray and Waller, were guided by Goldsborough GCI towards a Ju 88, which they sighted at 0600 hours. Squadron Leader Hoy dived into the attack from astern and saw cannon strikes in the vicinity of the ‘88’s cabin after his second burst. Debris from the strike entered the Beaufighter’s cockpit and struck le Conte, whereupon Hoy broke off the engagement to access the damage to his navigator. Red Two took over and chased the enemy aircraft through the sea mist with their AI and after several bursts

1943. It therefore seems probable that Wills and Ledeboer shot down a Wellington by mistake.

7 Warrant Officer Ronald Ray flew with No.56 Squadron as an NCO pilot during the Battle of Britain, during which he was wounded. He joined 604 in 1943 and was released from the RAF as a Pilot Officer in 1946.
8 Warrant Officer George Waller trained as a radar operator with No.29 Squadron before joining 604 in 1943. He was commissioned in June 1943 and awarded the DFC in October 1944, finally retiring from the RAF as a Flight Lieutenant in 1950.
shot it into the sea. Squadron Leader Hoy was later commended for the planning and execution of this action.

The weather in August was particularly bad with cloud on some days reaching 23,000 feet (7,000 metres). On the night of the 17/18th, Flight Sergeants Wilkinson and Catchpole were ordered to intercept an enemy aircraft over the North Sea, which they duly attacked and shot down. They were then vectored onto a second aircraft which they attacked at long range, seeing it ‘glowing red’ and gradually dropping out of the sky. This they claimed as a probable. Returning to base, Wilkinson lost control of the aircraft on the approach and crashed at the end of the runway. He was badly injured and was taken to Northallerton Hospital. Another aircraft flown by Flying Officer Lomas, and an unknown navigator, attacked two enemy aircraft, damaging the first and causing the second to explode in the air. Short of fuel Lomas was directed towards Church Fenton, near York, where the airfield staff assisted his arrival by firing rockets and Very lights. With the weather closing-in Lomas eventually made a safe landing. It was estimated that twenty enemy aircraft participated in this raid. On the 18th, the hospital confirmed that Flight Sergeant Wilkinson was suffering from a fracture at the base of the skull and a deep cut in his neck, but had a fair chance of recovery.

Flying Officer Howard-Williams thought the guards at Scorton were ‘half asleep’ and decided to test their efficiency by infiltrating the airfield in civilian clothes and ‘stealing’ an aircraft. This was undoubtedly a foolish act on Howard-Williams part, since the guards were fully armed and he could easily have met an ignominious end:

‘I wait until dark, put on civilian clothes, take my revolver and drive to within half a mile of the aerodrome perimeter. Then, making my way on foot, I approach the Beaufighters of ‘B’ Flight (which is not flying tonight) standing idle in their blast-proof dispersal bays. An airman with a rifle is strolling quite unconcernedly along the airfield boundary, silhouetted against the afterglow, and it is a simple matter to wait until he is past and then crawl under the wire. At one point he stops and looks round, unslinging his rifle. I suddenly realise that nobody could blame him if he took a pot shot at me, so I freeze, belly to the ground and my heart thumping in my throat’. At this juncture any normal person would have, should have, backed-off,

9 It is possible that Flight Sergeants Wilkinson and Catchpole destroyed a Do 217E-4 of II./KG 2, which was attacked by a night-fighter off the Lincolnshire coast and shot down.
10 14/15th August 1943.
but not Flying Officer Howard-Williams. ‘After a minute which lasts for an hour he moves on and I reach the nearest Beau. I remove the chocks, climb in, prime the engines and push the starter buttons. The propellers turn but the engines won’t catch, so I get out again quickly ..... and seek out M for Mother (Beaufighter ’NG-M’) my own. As expected she fires on both engines first time and I taxi out. A short turn round the perimeter track and then I return to dispersal’ and ‘call up flying control and tell them an attempt has been made to steal an aircraft. I switch off, chock the wheels, retreat the way I have come and leave the airfield in uproar behind me.’

Fortunately for all concerned, Flying Officer Howard-Williams was tour expired later in the month and posted to FIU at Ford, where incidentally, the CO’s brother, Wing Commander Gerald Maxwell, MC, DFC, AFC, was the station commander. Pilot Officer Nordberg was also tour expired and posted to the Navigator (Radio) Leaders School.

At dawn on the 19th, two aircraft were scrambled to intercept an enemy weather reconnaissance (weather recce) aircraft but no sightings were obtained. However, bearing in mind they would be outside GCI range, Group extended the search-line for these types of patrols to 180 miles (290 km) from the East Coast. On the 22nd, the CO with Flight Lieutenant Quinton as his navigator (Red One) and Flight Lieutenant Sturman with Flight Sergeant Weston (Red Two), successfully intercepted the enemy’s weather recce aircraft some 150 miles (240 km) off the coast. The enemy attempted no evasive action and was hit first by Red One and seen to catch fire and then by Red Two, after which it crashed into the sea with no survivors. Wing Commander Maxwell was subsequently awarded the credit.

On the 23rd, Flying Officers Keele and Cowles received the Squadron’s congratulations for the award of the DFC, which was a difficult decoration to obtain in 1943, due to the lack of enemy opposition and opportunities for combat. Later that day, the CO was recalled in some haste from GCI practise to make arrangements for patrols in the area of the previous day’s weather-recce incident. Information had been received that indicated one of the enemy crew was an ‘important person’ and it was expected this would lead to extensive search activity in the area. 604 was to begin continuous

11 Jeremy Howard-Williams, *op cit*, pages 76 & 77.
12 Flight Lieutenant John Quinton survived the war and remained in the post-War RAF. He was killed after giving up his parachute to an Air Cadet, when the Wellington in which they were flying got into difficulties. He was subsequently awarded a posthumous George Cross for his great gallantry.
patrolling in conjunction with No.409 (Canadian) Squadron, at Acklington, Yorks, with immediate effect. The first patrols returned without making contact, however, the following day a second patrol reported the presence of a large fishing fleet and a vapour trail, some 120 miles (195 km) to the east of Whitby. A third patrol was scrambled comprising Flight Lieutenant Wood and Flying Officer Elliot and Warrant Officer Ray with Pilot Officer Waller, who encountered a Ju 88 in the area. Flight Lieutenant Wood chased the enemy and opened fire, but his gun-sight failed, leaving Warrant Officer Ray to complete the action and damage the enemy aircraft. It was then noticed that three other enemy aircraft were operating in the vicinity, one of which Flight Lieutenant Wood headed off. As they were now operating at a long-range from the coast and one aircraft was suffering from a defective gun-sight, the patrol was broken off and both aircraft returned to Scorton. Assurances were later given that the fishing fleet was friendly and the original intelligence was ‘duff’ (inaccurate).

On the 3rd September, film crews from Movietone News arrived at Scorton to film scenes of a Beaufighter starting up, taxiing, and returning in the morning light, to complete a picture entitled They Fly at Night. In order to provide the right amount of drama for this undoubted ‘epic’, Squadron Leader Joll and the crews of ‘B’ Flight were mis-employed for half an hour, giving star performances for the camera. ‘NG-T’ was used for the ground shots. That evening, the readiness state was raised from eight crews to ten, owing to an expected increase in enemy activity in the sector. With just fifteen operational crews, some of whom were on leave or on courses, the Squadron faced the possibility of each having to fly operations on consecutive nights - they usually flew two on and two off - with a consequent increase in maintenance problems. The readiness state was restored to eight on the 20th when No.68 Squadron at Coltishall began sharing the Patrington patrols with 604.

Throughout most of the month the weather was poor and little flying was possible, however, on the night of the 21/22nd things improved. Two aircraft on searchlight co-operation flights in concert with Seaton Moor, Goldsborough and Patrington GCI’s, were diverted to intercept minelayers in the Humber Estuary. Two crews were ‘vectored hither and thither’ at various heights and in various directions, all to no avail, since no contacts were gained. One of the pilots, Flying Officer Lomas, was kept airborne for four and a quarter hours searching for the enemy with no result. The following night the Squadron’s luck changed. Squadron Leader Joll with Flying Officer Thomas as his navigator, gained a contact, which they converted to a visual on a Do 217 that was flying straight and level and was subsequently destroyed. Having spent four hours on patrol, Squadron
Leader Joll was forced to land at Catfoss to refuel, before returning to Scorton. On the 26th, it was announced that Squadron Leader Hoy had been awarded the DFC for his recent actions with the Squadron.

Throughout the latter part of September, the enemy’s activity appeared to be concentrated well to the south of 604’s sector, with intruder operations against Bomber Command aircraft returning to their bases in Lincolnshire. Trade being slow, the Squadron was ordered to provide a pair of Beaufighters for ‘special duties’ detachment to Peterhead, on the coast to the north-east of Aberdeen. On the 28th, the first pair of selected crews, Flight Lieutenant Wood with Flight Lieutenant Ellis and Flying Officer Lomas with Flying Officer Fleet, departed for Peterhead at 1430 hours in ‘NG-G’ and ‘NG-M,’ alongside a maintenance team in the Squadron’s Oxford. Five additional maintenance personnel travelled by train.

On the 1st October, 604’s Sector Operations (Sector Ops) was relocated to Kenton, near Newcastle, due to the closure of the Catterick centre. Their call-sign was also changed from ‘Razor’ to ‘Natty’ on the same day. On the nights of 2/3rd and 3/4th, the enemy was active laying mines in the Humber Estuary, which in turn generated a number of fruitless patrols and the interception of friendly bombers. On the 6th, Squadron Leader Hoy stood down as OC ‘A’ Flight on posting to a staff appointment at HQ Fighter Command, his place being taken by Flight Lieutenant Furse on promotion to Squadron Leader. A fatal accident in the afternoon of the 6th claimed the lives of Flying Officer Beechgaard, Flying Officer Jefferies and Lieutenant K.R.Hipkin, RA. Flying Officer Beechgaard’s Beaufighter, ‘NG-R,’ V8557, was seen to spin from 2,000 feet (610 metres) and crash in open land to the south of Catterick airfield, where it exploded on impact and burnt out. It was thought that Beechgaard, a naturalised Swede, was making a turn when he entered a stall from which he failed to recover. He and Pilot Officer Jefferies had been flying together since January. Lieutenant Hipkin had been ‘lent’ to 604 by the 53rd Searchlight Regiment as its Searchlight Liaison Officer. A sad day for all concerned.

On the 18th, Mr Oates of the Admiralty Research Laboratory visited the Squadron for a demonstration of an infra-red (IR) detector13 that was fitted to one of 604’s Beaufighters and receive instructions in its use. It is presumed this work was being undertaken in co-operation with FIU’s CO, Wing Commander Chisholm, since he and Wing Commander Hiscocks held a meeting at Scorton on the 25th September to discuss IR equipment.14 That

13 Unlike radar, IR detection does not require an active transmitter, since it relies on the heat radiated by an object, in this case the heat in an aircraft engine’s exhaust manifold, which will glow dull red when the engine is running.

14 604 Squadron Diary/ORB, page 74.
evening, Mr Oates was taken aloft by Flight Lieutenant Schofield to test the device, only to have the Beaufighter’s top hatch blow out and they had to land in order to fix it. On the second attempt, they suffered engine failure and were forced to return. On the third attempt, the aircraft, flown, by Pilot Officer Ray, suffered AI failure. Not a good day for the Admiralty and Mr Oates.

Just before midnight on the night of 20/21st two aircraft were scrambled to intercept enemy aircraft that were detected inside the returning bomber stream then passing over Hull. A number of interceptions were made, but AA fire and the enemy’s apparent use of Window prevented any combats. In reality, Window jamming should not have affected the Squadron’s Beaufighters, as their centimetric AI radars operated on a different wavelength. However, since the 1½ metre GCI radars were within its bandwidth, it is more likely these had difficulty in guiding the night-fighters close enough for their AI’s to detect a target.

A number of personnel changes took place in late October and early November. Flying Officer Cowles, one of the Squadron’s N/Rs, was posted on the 25th to undertake pilot training. Flight Lieutenant Wood departed on the 26th to the Air Ministry, whilst Squadron Leader Joll was ‘warned-off’ for a posting in the near future. Further departures included Flight Lieutenants Currie and O’Neill-Dunne who returned to No.54 OTU at Charter Hall on the 14th at the end of a short attachment to 604. Flight Lieutenant Hooper arrived at Scorton on the 9th from No.54 OTU to join 604 for flying duties. Finally, on the 22nd, Flight Lieutenant Jack Meadows from No.130 (Spitfire) Squadron at Catterick arrived courtesy of the CO. It appears that Flight Lieutenant Meadows, who had spent the early part of his career instructing in Canada, had arranged with Wing Commander Maxwell through the ‘old boy network’ that he could join 604 without having to go through the usual OTU course. Unfortunately the external powers intervened and he was forced to spend a nominal ten days at No.63 OTU, Honiley, before joining the Squadron as a ‘fully qualified’ night-fighter pilot. It was usual that a pilot and navigator would arrive on a squadron as a pair, having teamed-up at the OTU, however, in Flight Lieutenant Meadow’s case he had come directly from a Spitfire unit and was subsequently allocated an experienced operator, Flying Officer John Mumford, to introduce him to the black art of night-fighting.

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15 *Window* was the British codeword for the strips of tinfoil used to swamp radar systems with thousands of ‘returns’ that masked the aircraft concerned. Today the common term is ‘chaff’ and in Germany it was code worded *Duppel*.

16 Later Wing Commander J.P.Meadows, DFC, AFC, AE**.
Extremely bad weather at Scorton reduced flying to the barest minimum. At Peterhead on the 30th November, Flight Lieutenant Schofield and his operator, Sergeant Bloor, suffered undercarriage failure and had to land on the grass. The same evening, the starboard engine on Flight Lieutenant Maitland-Thompson’s aircraft seized on take-off, but he recovered and returned to land on one engine. This incident reduced the serviceability of the Peterhead detachment to zero. Fortunately on the 1st December, the detachment was stood down and the aircraft and ground crews returned to Scorton.

With the exception of the daily weather-recce aircraft, enemy activity in December 1943 was minimal. However, on the 9th, Pilot Officer Ray with Pilot Officer Waller, succeeded in intercepting the weather ‘milk-run,’ but suffered gun failure and filed no claim. On the 21st, the Squadron’s aircrew numbers were bolstered with the arrival of two new crews: Flight Lieutenant Wynn and his N/R, Pilot Officer Wigley, and Flight Sergeant Walters with Sergeant Fairclough. The continued bad weather ensured 604 had a good Christmas: football with the sergeants taking on the other ranks, followed by an entertainment in the Sergeants’ Mess. Liaison visits to a pit, a coke factory and a shipyard, filled in the time until the New Year. The poor weather had given increased opportunities for sport and the ORB notes a significant improvement in the Squadron’s physical fitness by the month’s end.

In December 1943 LAC Keith Pearson reported for duty with 604 as a flight-mechanic (engines) straight from basic training in Arbroath and trade training in Blackpool. On joining 604 he quickly realised that flight mechanics were regarded as being fairly low down the RAF’s non-commissioned ‘pecking order’ and consequently their efforts appeared not to be greatly appreciated by those in authority (officers and NCOs):

‘My initiation into the hard facts of a mechanic’s life soon came after joining 604 ..... In choosing my “trade” I had been unaware that mechanics - both engines and airframe (riggers) - were deemed as dogsbodies amongst ground-crews. Other trade groups, such as instrument artificers, wireless or radar mechanics, were assumed to work more with their brains! They therefore enjoyed exclusion from general fire and picket duties; had better rates of pay and took no responsibility for looking after the aircraft. It fell to the mechanics continuously to refuel the machines, cover them up in harsh weather and marshal them to and fro at all times of day or night. This involved’ the ‘start-up of engines after seeing the crew safely aboard, then removing wheel chocks and signalling the pilot to proceed.’
There were many hazards to endure. ‘Refuelling with high-octane petrol on slippery mainplanes or having to cover the machines in high winds were not the most pleasant of duties.’ Starting the aircraft was not without its dangers. This required the plugging-in of the ‘trolley-acc’\textsuperscript{17} to ‘the aircraft and then removing’ it ‘after start-up. It was not unknown for a pilot to be over-anxious to get airborne and forget to get the “clear” signal from the mechanic, with dire consequences. On at least one occasion I was almost killed as the aircraft took-off across the grass in a “scramble” with the trolley-acc still attached.’ Unable to remove ‘the plug and with the trolley-acc trundling along, I finally had to jump clear as it tore through the tail-plane and caused much damage.

Another danger was having to dive under the fuselage in removing the two wheel chocks, with the pilot revving up the engines ready for take-off. Much of the work was done at night in pitch darkness; sometime a pilot would get the “clear” signal by flashlight from the mechanic and then lose his way, straying off the perimeter track’ in the process. ‘This happened quite frequently and on one occasion the pilot panicked and inadvertently hit the gun-button, spraying us with a burst of 20mm cannon shells. On another occasion the pilot strayed and hit a static defence machine-gun post. The propellers hit the ammunition and showered unfired bullets all over the place.’\textsuperscript{18}

\textbf{1944}

On the night of the 21/22\textsuperscript{nd} January, \textit{Generalmajor} Peltz launched Operation \textit{STEINBOCK}\textsuperscript{19} against London, when a force of 227 bombers, guided by pathfinder Ju 88s and 188s, and protected by \textit{Duppel}, took off at 1930 hours to bomb the Capital. Over a period of two months, the \textit{Luftwaffe} had carefully assembled a force of some 500 bombers and fighter-bombers drawn from units as far afield as Italy and deployed them to airfields in France, Belgium and Holland.\textsuperscript{20} The careful husbanding of this force, explains the lack of enemy operations in the North-East of England and the reduced opportunities for trade for 604 during the last months of 1943.

\textsuperscript{17} The trolley-accumulator, a two-wheeled ‘cart’ containing a number of batteries for engine starting.
\textsuperscript{18} Keith Pearson, \textit{An Erk’s Eye View}, (2004).
\textsuperscript{19} Known by Londoners as the ‘Baby Blitz’ that lasted from January to May 1944.
\textsuperscript{20} Alfred Price [4], \textit{Operation Steinbock, The ‘Baby Blitz’ of 1944}, (Aeroplane Monthly, September 2002), pages 74 to 78.
At some point between December 1943 and January 1944, 604 was transferred from ADGB to 2TAF to begin its transition from air defence to tactical field operations. Once in France, the night-fighter squadrons were destined to operate from temporary air-strips provided by the Army or specialist RAF construction units, which they would be required to defend in the face of an enemy attack. Planning envisaged, that in order to make the squadrons operational as quickly as possible, their aircraft would be ferried to the new location in France, alongside a small detachment of servicing personnel flown in by transport aircraft, usually RAF or USAAF Dakotas. The bulk of the groundcrews and heavy equipment travelled by sea. To fulfill these objectives all RAF ground staffs were required to be fully conversant with living over extended periods under canvas and trained in airfield defence.

To ease administration and increase servicing flexibility, it was accepted that whilst squadrons might move on, their groundcrews would remain behind to service the replacement units. To this end, the groundcrews were gathered together in Servicing Echelons and allocated numbers associated with their original squadrons. Hence, 604’s groundcrews were numbered as No.2604 Servicing Echelon. Despite what those in higher authority thought, 604 Squadron regarded 2604 Servicing Echelon as remaining an integral part of the Squadron and there were few times when they were separated. With their transfer to 2TAF, 604 Squadron came under the nominal command of No.85 (Base) Group, 2TAF, but more formally, it was not until May 1944 that No.85 (Fighter) Group, 2TAF, took control of the Squadron by placing it in their No.147 Wing.

Patrolling was resumed on the 3rd January when the weather improved and continued to the 11th when it deteriorated once again. On the 10th, the Squadron flew a Bulls Eye exercise, where Beaufighters from the Squadron were pitted against Bomber Command aircraft in mock combat, to provide realistic training for the bombers and interception opportunities for the night-fighters. That night six aircraft from 604 ‘claimed’ fifteen ‘destroyed’ and two ‘damaged’. It is not known how many fighters the bombers ‘shot down’.

The poor weather provided an opportunity for eight members of the Squadron to undertake an ‘Escape and Evasion’ exercise in the countryside outside the airfield. The eight were taken in a covered van from Scorton and dropped at various intervals, before making their way back to the airfield undetected. All returned safely (shades of Jeremy Howard-Williams), particularly Flight Lieutenant Surman who arrived in state at the airfield gates, courtesy of some unfortunate serviceman whose vehicle he stole from nearby Croft airfield.
During February, the Squadron began its conversion from the Beaufighter to the de Havilland Mosquito NF Mk.XII and XIII. The Mosquito NF.XII was the first mark of this famous fighter to be equipped with the centimetric AI Mk.VIII. Powered by two Rolls-Royce Merlin 21 or 23 engines of 1,230-hp, the Mosquito NF.XII was a conversion of the earlier NF.II that saw the nose with its four 0.303 inch (7.69 mm) machine-guns replaced by a thimble radome to carry the parabolic ‘scanner’ of AI Mk.VIII. The primary armament was four 20mm Hispano cannon, with a magazine that held sixty rounds per gun. The Mk.XIII was essentially the same aircraft, built from scratch on de Havilland’s Hatfield production lines, incorporating the strengthened wing of the Mk.VI fighter-bomber, with provision for wing mounted drop tanks. Both aircraft had broadly the same performance; a maximum speed at 13,800 feet (4,205 metres) of 380 mph (610 km/hr), an operational ceiling of 28,800 feet (8,535 metres) and a range of 1,260 miles (2,030 km).

Jack Meadows flew the Beaufighter VIf before converting to the Mosquito XIII and gives this appreciation of both aircraft:-

‘As I remembered sixty years later the cockpit (of the Beaufighter VI) was overall the best I have ever used. Access was easy, up the ladder through the belly behind the seat. The back folded down and if in the rush of a scramble the ground crew failed to lock it back properly upright, the take off, when acceleration made it fall back again, could be interesting. There was plenty of room, good vision all round except astern, the controls all easily visible and at hand. Whilst lacking the Spitfire’s light manouevrability (Jack’s previous aircraft) it was nonetheless easy to throw around, not too heavy on the controls and easily able to cope with the manoeuvres of an enemy bomber. On endless practice interceptions, I never had any difficulty passing the time when on patrol, or felt incapable of doing anything I wanted. That the R/O was a disembodied voice from the rear was no problem to one unaccustomed to team work in the air. There was all that convenient space between us for passengers, observers and luggage (the 20mm cannon were now belt fed, taking up less space and removing from the R/O the chore of fitting new magazines). And I knew bailing out, if necessary, would, with the seat collapsed and through the hatch in the floor behind, be easier than in any other aircraft I flew. The only problem was that our Beau’s were old and those sleeve-valve Hercules engines were worn. On three occasions, way out somewhere over the North Sea on patrol, I had a serious lack of oil pressure, or something else enough
to make me return on one engine. But that was no problem, even landing. Yes, the Beau VI was a great aircraft, always remembered with affection.‘\textsuperscript{21}

By comparison:

‘Access (to the Mosquito XIII) was difficult, up a long flimsy ladder through a small door in the side of the nose. With side-by-side seating, the pilot had to go first, which ‘slightly slowed up a scramble. Immediately obvious was the cramped cockpit space, despite the R/O’s seat being set back six inches (\textit{15cm}) to allow more elbow room. And whilst most instruments, knobs and “tits” were conveniently placed and visible, the fuel cocks were behind the pilot’s armour-plated seat back. Some pilots let the R/O work them, I always did it myself, feeling behind my back. Visibility forward and around was good, particularly up ahead where it was needed for a night-fighter. It was better astern than in the Beau, but the engines blocked more of the side down view. Night vision was also impaired by the exhaust glow from the shrouds and the wings. Flying was a pleasure. It had the fighter “joystick”, Beau’s had “bomber spectacles”, and felt almost like a Spitfire again. Aerobatics were discouraged as they upset the AI, but were sometimes secretly indulged in. It was so easy to fly, so tireless’ - ‘it was almost the perfect aircraft. And that 60 mph (\textit{97 km/hr}) more top speed meant we knew we could cope with anything - even day-fighters. It was less draughty than the Beau and had efficient heating. The thimble nose over the scanner slightly reduced forward vision when taxiing. The lack of the six 0.303’s (\textit{7.69mm}) never concerned us - four 20mm cannon were quite enough. Compared to the Beaufighter’s feeling of great strength there was originally a slight feeling of frailty, but the wooden monocoque construction would prove to be stronger than any metal aircraft. Inspite of the proven reliability of the Merlin, I had three occasions when engine problems forced me to return from overhead the \textit{Normandy} beachhead on one - but that did not cause the least concern, so good was the single engine performance.’ In conclusion, the Mosquito was a joy to fly and to operate, a really efficient killing weapon, and one of the world’s great aircraft, which produced even more affection than the Beau.‘\textsuperscript{22}

\textsuperscript{21} Jack Meadows [1], in an e-mail to the author dated 29 March 2004.
\textsuperscript{22} Jack Meadows [1], \textit{op cit.}
The first Mosquitoes, Mk.XIIIIs, arrived on the 20th, and conversion proceeded quickly. By the 29th, nine crews were converted to the new fighter, and the remainder of the Squadron by April, when the last Beaufighters were flown out for disposal. 604’s first success in the Mosquito was claimed by a crew on detachment to Castle Camps, near Cambridge. On the night of the 21/22nd March, Flight Lieutenant John Surman and his navigator, Flight Sergeant C.E. Weston, flying a Mosquito NF.XIII intercepted a Ju 88A-4 of II./KG 54, which eventually crashed into the sea off the Isle of Sheppey, Kent, killing three of the crew of four. This was 604’s first victory since 21/22nd September 1943.

To prepare the Squadron for tactical living, officers and airmen were issued with suitable clothing and equipment. Officers:

‘were issued with “Camp Kits, Officers, for the use of.” A large lined canvas bedroll formed into a sleeping bag. It rolled up to hold blankets, a canvas-and-wood folding bed, ditto chair, ditto washbasin and bath, groundsheets and various personal extras, all held together by heavy leather straps and a handle … With added kitbags and suitcases, the personal luggage carried around was considerable and hardly appropriate for fast moving warfare. The airmen carried much less with them and lived more comfortably.’

The open air life would not have bothered one officer, Captain S.B. Hart, RA, who joined as the Squadron’s new Searchlight Officer, who being a soldier was used to roughing it a bit. However, the toughening-up exercise was not to everyone’s liking, Keith Pearson again:

‘As if our life was not hard enough, some remote big-wig decided in late March 1944 that we needed toughening-up for the impending invasion. In the middle of a searing cold spell, our cosy warm huts were locked up and we were marched down the road in a blizzard to a tented camp adjoining the River Swale. We managed to scrounge some hay from a friendly farmer but otherwise everything was harsh

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De Havilland Mosquito NF.XIIIs were issued to 604 Squadron during February 1944 for conversion training, prior to the re-equipment of the Squadron with the Mosquito NF.XIII. The aircraft carried the same AI Mk.VIII radar as the Beaufighter, which was housed in the thimble nose radome (Imperial War Museum, Neg No.MH4588).

De Havilland Mosquito NF.XIII’s were issued to the Squadron in April 1944 and remained 604’s mount until the end of the war. This photograph shows a Mk.XIII with the ‘bull-nose’ radome that was fitted to late production models to house the scanner for the AI Mk.VIII radar (604 Squadron Archive).

and rudimentary. All our clothing and gear was frozen and morale was pretty low.\textsuperscript{24}

\textsuperscript{24} Keith Pearson, \textit{op cit}, page 2.
With little in the way of enemy activity in the North of England, Fighter Command was persuaded to establish a six-aircraft detachment, to operate alongside the Typhoons of No.486 (New Zealand) Squadron and Mosquito XIIIIs of No.410 (Canadian) Squadron, at Castle Camps, Cambs. However, as Jack Meadows recalls:

‘the sitting night-fighter tenants wanted to keep all the fun for themselves and we (604) received little share of the available GCI time, particularly when “trade” was about. There were two raids during my week there. One kept south of London. The second, 150 aircraft, came nearer, but on both occasions we were relegated to searchlight control. Two 604 Squadron crews were nonetheless successful. John (Mumford) and I had eight “Gauntlets” (directional signals from flashing searchlights), but in a frustrating 2½ hours we never picked up a workable AI radar contact.’

April opened with a series of Bulls Eyes exercises, before orders arrived on the 2nd for the Squadron to go ‘tactical’ and move permanently into tented accommodation to prepare them for life in the field.

When stationed on a regular airfield the squadrons came under the authority of the station commander for pay and rations, discipline, administration and other Air Force support functions. However, when deployed in the field on temporary airfields as part of 2TAF, squadrons were provided with an airfield commander as part of an Airfield HQ. As 604 was destined to serve with 2TAF, the Squadron was allocated an HQ Leader, in the person of Wing Commander Chalmers Watson, whilst it was still at Scorton. Wing Commander Watson, an ex-603 (City of Edinburgh) Auxiliary, required his new charges to toughen-up by living in the field and taking regular exercise (physical training - PT). Unfortunately, from the Squadron’s viewpoint, the new Wing Commander had become excessively imbued with the Regular RAF spirit and was not wholly appreciated by those on night-flying duty. He was however, ‘persuaded that PT for all ranks at 0600 hours was not compatible with night-fighter air and ground crews on their way to bed after the night’s work.’

The Squadron’s strength began to increase as the postings reflected. On the 2nd April, Flying Officers J.S.Smith and R.Smyth (pilots) and Roberts

25 Jack Meadows [1], op cit.
26 The diary sheets for March 1944 are missing from the record.
27 Jack Meadows [3], op cit.
and H.F. Smith (N/Rs) arrived fresh from their courses at No.54 OTU, Chaterhall. Flight Lieutenant Sandeman and his navigator, Flying Officer Miller, returned from a detachment to Exeter on the 14th. Other arrivals were Flying Officer Ward from No.51 OTU, Cranfield, and Flying Officer Taylor and Pilot Officer Ayton from No.151 Squadron, Predannack, on the 19th.

On the 23rd, the Squadron began its move to Church Fenton, Yorkshire, with the aircraft of ‘B’ Flight flying to the new base, whilst ‘A’ Flight remained behind to maintain the readiness state. The following day, the main party left Scorton, arrived at Church Fenton before nightfall and made ‘B’ Flight ready for operations, whilst ‘A’ Flight was scrambled at Scorton to attend to a number of enemy intruders. The Squadron’s personnel strength was further increased with the arrival of Flight Lieutenant Foster, DFC, and Flying Officer Newman, DFC, from No.51 OTU, Flying Officer Thomas (navigator) from Cranfield and Captain Kristiansen from North Weald. Church Fenton was a transitory posting, it being confirmed on the 28th that 604 was destined to move to Hurn, near Bournemouth; a fact already known to most of the Squadron. On the 30th, four aircraft flew south to Hurn to participate in a special Bulls Eye exercise to practise defending the embarkation ports on whom the Army would depend for its supplies. A further six aircraft flew to Hurn the following day, the 1st May, and the remainder of the Squadron on the 2nd.

By the 13th, the Squadron was firmly ensconced at Hurn as part of No.147 Wing and ready for operations. The following night, the 14/15th, eight aircraft were scrambled to intercept a number of enemy aircraft operating in the Squadron’s old hunting grounds off the south coast. After a running fight, Flight Lieutenant Surman destroyed a Do 217 at a point between the Isle of Wight and Portland Bill. The enemy aircraft crashed into the sea and there were no survivors. Later in the evening the CO and Flight Lieutenant Quinton, were scrambled to intercept a group of enemy aircraft approaching the Isle of Wight. Flight Lieutenant Quinton gained a contact on an enemy aircraft, which the CO identified as a Ju 88 before shooting it into the sea to the south of the Island at 0025 hours. Again there were no survivors. Flying Officer MacDonald intercepted and damaged another Ju 88. With trade returning, 604 was back in business!

The remainder of May was spent patrolling over the south coast and the Channel. However, on the night of the 27/28th, Flying Officer Miller and Warrant Officer Catchpole alleviated the boredom by engaging a German ‘E’ or ‘R’ boat, from which they were told to desist by their controller when they were going round for a second pass. On the night of the 28/29th Flight Lieutenant Harris and Sergeant Hopkinson took-off to search for enemy aircraft to the north-east of the Cherbourg Peninsular. After identifying a
target as friendly and disengaging, they were promptly hit by fire from another aircraft. Flight Lieutenant Harris baled out and was rescued by a naval launch, but Sergeant Hopkinson was found to be dead when he was picked up. Although Sergeant Hopkinson had only been with the 604 for six months, he was rated as a good navigator, whom the Squadron was very sorry to lose. On the 30th, the adjutant, Flight Lieutenant Clennell, prepared to handover to Flying Officer Webb after very nearly three years service with the Squadron.

On the morning of the 6th June, Allied forces came ashore at five beaches to the west of the River Orne along the Normandy coast. With complete surprise and an air umbrella of strategic and tactical air forces amounting to some 8,500 aircraft, the Allies achieved total air supremacy from the outset. It was the responsibility of the night-fighter arm within No.85 Group of 2TAF to protect the beaches and the Mulberry Harbours in France and the embarkation ports along the south coast of England during the hours of darkness, or in poor weather. For this, 2TAF had six squadrons of Mosquito night-fighters based in the south of England and two USAAF P-61B squadrons. These were controlled from a number of coastal GCI stations whose range enabled them to ‘see’ across the English Channel, but not the Normandy coast.

To ensure radar cover, the Royal Navy provided three Fighter Direction Tenders (FDT), converted from tank landing ships and fitted with a 1½ metre Type 15 GCI on the forecastle, a 50cm Type 11 early warning (EW) radar amidships and an AI radar beacon aft, in addition to R/T communications sets and D/F equipment. The radars were manned by standard RAF operating and maintenance teams. It was intended that two of these ships would provide EW and GCI coverage over the assault beaches, one each in the US and British sectors, and a third would be located in mid-Channel for convoy protection. It was hoped that by D-Day plus two (D+2), shore-based GCIs would take over the EW role, leaving the FDTs with the AI responsibility. In the event, the complete changeover did not occur until D+6, by which time one ship had been lost. The FDTs were in turn...

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28 It is not known who fired on Flight Lieutenant Harris’ aircraft.
30 Two prefabricated harbours were deployed to provide temporary ports until proper harbours were taken by the Allied land forces.
31 No.29 (West Malling and later Hunsdon), No.264 (Hartford Bridge and later Hunsdon), No.409 (West Malling and later Hunsdon), No.410 (Hunsdon), No.488 (Zeals) and No.604 (Hurn).
32 The 422nd & 425th Night Fighter Squadrons.
33 HM FDTs 13, 216 & 217. FDT 216 was sunk by a mine, or a torpedo.
supported by various radars on HM ships, particularly those on the smaller vessels that could work close-in-shore. One authoritative account, however, concludes that ‘through no fault of the RAF teams, the FDTs failed to make any appreciable difference to the main threat to the naval forces - mining - owing to the inability of the RAF equipment to see low flying aircraft.’

The mine threat subsequently increased the ships’ vulnerability and reduced their performance and effectiveness in the fighter direction role.

The Squadron had nine aircraft on defensive patrol on the night of the 7/8th that had difficulty staying in contact with the FDT. However, the following evening with ten aircraft airborne over the beaches, the Squadron claimed its first victory over European soil when Flight Lieutenant Hooper and Flying Officer Hubbard destroyed a Bf 110 to the north-east of Laval. After that the victories came thick and fast. With ten aircraft aloft on the night of the 12/13th, Flying Officer Miller and Warrant Officer Catchpole intercepted an He 177 ten miles (16 km) to the north of Cherbourg at 0215 hours and shot it down. Later that same night, Flight Lieutenant Hooper and Flying Officer Hubbard, patrolling twenty miles (32 km) to the north-east of Cherbourg, intercepted and destroyed a Ju 88 at 0430 hours. On the 13/14th, Flight Lieutenant Ellis and Flying Officer Williams destroyed another He 177 seventeen miles (27 km) to the north-east of Harfleur and on the 14/15th, Flying Officer Wood and Flight Lieutenant Elliott had combats with two Fw 190s, one in the Carentan area which they destroyed and a second to the north of the beachhead which they claimed as a probable.

By the 11th June, the Allied beachheads had been secured and joined together as one cohesive front, prior to an attempt to break out into the French countryside. On the 26th, US forces captured the port of Cherbourg, but were held at Saint Lo, as were the British and Canadians at Caen, by stubborn German resistance. Meanwhile, whilst the land battle ground to a halt, the air battle continued unabated. On the night of the 20/21st, June Captain Kristiansen became embroiled in a fight between a Ju 88 and a Mosquito of No.125 Squadron and had the nose of his aircraft slightly damaged by empty shell cases ejected from the other Mosquito. The following night, Flight Lieutenant Sandeman and Flying Officer Coates claimed a Ju 88 shot down thirty-five miles (56 km), south-south-east of Ventnor, Isle-of-Wight, with a second being dispatched by Flying Officers Smith and Roberts, during a combat to the north-west of Le Havre on the night of the 23/24th. The remaining nights of the month were quiet, with the exception of the 29/30th, when Flying Officer Cross collided with a

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Mosquito XIII of No.410 (Canadian) Squadron while taxiing, damaging the starboard aileron and severing the main spar at the wing tip.

On the night of the 2/3\textsuperscript{rd} July, the Squadron put up four patrols, during which two crews claimed an enemy aircraft destroyed. Flying Officer Miller and Warrant Officer Catchpole caught a Ju 88 fifteen miles (24 km) off Le Havre and shot it down and the CO with Flight Lieutenant Quinton had another combat with a Ju 88 claiming a ‘probable,’ but having it later upgraded to ‘destroyed.’ The following evening (3/4\textsuperscript{th}) Squadron Leader Furse and Flight Lieutenant Downs brought down another ‘88 fifteen miles (24 km) to the north of Le Havre. The all-Warrant Officer crew of Messer’s ‘Dinty’ Moore and Hogg claimed their first enemy aircraft destroyed with the Squadron on the night of the 5/6\textsuperscript{th}, when they shot down an Me 410 to the west-south-west of Caen. It is reported that on returning to Hurn the navigator ‘was so overjoyed that he whipped off his helmet and kissed’ the pilot.

On the 7\textsuperscript{th}, the Squadron learned they were to lose their CO, Wing Commander Maxwell, who was standing down after fourteen months in command of 604. His replacement would be Wing Commander Desmond Hughes, DFC**. For his swansong on the night of the 8/9\textsuperscript{th} July, Wing Commander Maxwell and Flight Lieutenant Quinton took their Mosquito on its final patrol with 604, claiming a Ju 88 destroyed, the Squadron’s 100\textsuperscript{th} enemy aircraft shot down with the use of AI,\textsuperscript{35} and a Do 217 damaged. The following day, Wing Commander Hughes assumed command and the former CO departed with the Squadron’s best wishes for his posting to HQ No.85 Group at Uxbridge.

The new CO came from the night-fighter world, beginning his career with No.264 Squadron in June 1940 flying Defiant night-fighters from Duxford, Cambs. Flying with his regular gunner, Sergeant Fred Gash, Hughes claimed five enemy aircraft destroyed during the Night Blitz and was awarded the DFC. In January 1942, Squadron Leader Hughes was posted to No.125 Squadron at Colerne, as a flight commander, where he teamed-up with Pilot Office ‘Laurie’ Dixon. During his time with 125 Squadron Hughes claimed a further two enemy aircraft before being posted to No.600 Squadron, where further success in North Africa brought him and Dixon ten more enemy aircraft destroyed, and the award of two bars to his DFC. Returning to the UK at the end of 1943, Hughes went to HQ Fighter

\textsuperscript{35} This does not tally with the number of enemy aircraft destroyed as described in the ORB/Diary. If the Diary is correct, a number of claims were not recorded.
Command on a staff posting and then on promotion to Wing Commander to HQ No.85 Group, 2TAF, in February 1944, before joining 604 in July.  

The usual routine of night patrols continued until the 13th, when the Squadron’s aircraft moved to Colerne, near Chippenham, Wilts. That night, the Squadron had seven aircraft on patrol, but poor weather forced five to land at their old station at Hurn. This situation was to be repeated on the night of the 16/17th, when the Channel was fog-bound and all five aircraft on patrol had to land at Hurn. During a patrol on the night of the 14/15th, Flight Lieutenant Surman was fired on by heavy AA in the Carentan Corridor, which got his range at 15,000 feet (4,570 metres). On the 17/18th, a pair new to 604, Flight Lieutenant Hayhurst and Warrant Officer Gosling, destroyed a fast and hard weaving Ju 88, which they believed was a night-fighter, near Contences. This was their first kill as a team.

On the 24th July, five aircraft flew out in formation at 1400 hours to France to operate from Maupertus (Airfield A.15) on the Cherbourg Peninsular, where they were later joined by a sixth. Equipment, spares and kit were carried in two Douglas C-47 Dakotas, along with the Squadron’s Searchlight Officer, Captain Hart, RA, and his ‘assistant’, Sergeant Aspen. They all went with the Squadron’s best wishes for good luck with their hunting as the first Allied night-fighter squadron to operate from French soil. The groundcrews to support the detachment went by sea, as Keith Pearson describes in some detail:

‘When the real embarkation took place many of us were disinclined to believe it (there had been several false starts) and many refused to get out of their beds. Furthermore, few of us had any (sea-sickness) pills left and this led to much discomfort later ….. It soon became clear that our embarkation’ from the New Zealand cargo/passenger ship the SS Manorwai ‘would be difficult and hazardous. A long green canvas chute was slung down the side of the ship and the idea was for each of us to get into the chute opening and then slide down about 50 feet (15 metres) hopefully to land on one of the steel pontoons being manoeuvred alongside by American “SeeBees.”

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36 Kenneth Wynn, Men of the Battle of Britain (CCB Associates, 1999), pages 249 & 250.
37 The Luftwaffe’s night-fighter arm operated substantial numbers of Ju 88s in the night-fighter role. No unit in Luftflotte 3 was equipped with the night-fighter version, but in the adjoining Luftflotte Reich, several Gruppen were so equipped. It is not therefore beyond the realms of possibility that one of these was operating over northern France.
38 Airfields operated by the USAAF carried an ‘A’ designation, whilst those run by the RAF had ‘B’ designations.
39 US Navy Construction Brigades - CBs.
The water was anything but calm and the pontoons kept veering away. There was thus a strong possibility that in descending one could easily miss the pontoon and land in the sea ...... we each had a large kitbag; a Sten gun and 200 rounds of ammunition - to carry all at once. A queue formed up to the chute and a burly American sergeant started grabbing individuals and pushing them down ...... one after the other at only slight intervals. In front of me was a Texan infantryman bristling with weapons and, in particular, a large Bowie knife at his waist, only partially sheathed. As he started down the chute, the knife point caught in the canvas and we heard a ripping noise as he tumbled down. Near the bottom the rip became so large that he fell through the last ten feet (3 metres) or so and was lucky only to be injured and not drowned ...... Being the next in line I shrank back from the chute. “OK fellas” bellowed the sergeant “everyone over the side!” When looking over the side; it filled us with dread when we realised we had to clamber down a “Jacobs Ladder” ...... slung down the ship’s side. Both hands had to be used so all our possessions had to be slung around our bodies and shoulders whilst climbing down.\(^{40}\)

LAC Pearson and his party eventually made it onto OMAHA Beach, where, near the edge of a small escarpment, they assembled in a field to take stock of their situation and eat some of their K-rations:

“A junior engineering officer with our party was fortunate to have a small Primus stove on which he placed a tin of beans. He forgot to pierce the tin, however, and to our amusement the tin exploded and the officer leapt back covered in beans shouting “stretcher-bearer, I’m hit!”\(^{41}\)

Sheltering under a group of heavy lorries for the night the party made their way to the town of St Mere Eglise (the site of the famous parachute jump by the men of the US Airborne Forces) and thence to the adjoining

\(^{40}\) Keith Pearson, *op cit*, pages 3 & 4.  
\(^{41}\) *Ibid*, page 5.
village of Picauville. The airfield was typical of tactical landing grounds to be found across Europe in the coming months. Built by the American engineers, the runway and taxiways comprised interlocking pierced steel planking (PSP) laid over roofing felt, with tented accommodation in a nearby orchard. The signs of war were all around. The fields on either side of the runway approach were littered with heaps of German Teller, anti-personnel mines. Shaped like dinner plates, these mines were much feared by American and British Forces, and great care was required when handling them. 604’s task was to provide night air defence over the American sector and furnish the USAAF with the night-fighter expertise they had not yet fully acquired.⁴²

The remainder of the Squadron maintained their usual patrols from Colerne until the following day, when everyone ‘upped sticks’ to move to Zeals, to the east of Wincanton. On this occasion, the Maintenance Echelon, under the command of the Engineering Officer, Flight Lieutenant Harpum, was left behind prior to their move to Hartford Bridge. There they were to complete their final preparations, the issue of small-arms and rations and the water-proofing of vehicles, before moving to France. This was Flight Lieutenant Harpum’s thirty-fourth move with the Squadron - so he must have been quite good at it by July 1944! The Squadron’s Radar Section moved to Zeals by road, as did the Intelligence Section under ‘the Spy’,

Pilot Officer Hewitt, with Sergeant Abbs and LAC Powell, the MO, Flight Lieutenant ‘Doc’ Leggat, the adjutant, Flying Officer Webb, and the Orderly Room staff. On arrival, it was discovered that no tentage had been made available for the Squadron, so they were ‘forced’ to endure in the station’s permanent buildings and sleep in the old airmen’s dining hall. ‘A’ Flight were allocated space in No.410 Squadron’s dispersal and ‘B’ Flight in No.488’s. Flight Lieutenant Parry and Sergeant Wall flew to France to join the Maupertus detachment.

On the second night operating from Zeals, the 26/27th, Flying Officers Truscott and Haworth destroyed a Ju 88 in the vicinity of Granville. However, 604’s location at Zeals was short lived, as the Squadron received orders to move back to Colerne on the 28th, together with the personnel of No.149 Wing, who made all the necessary movement arrangements. At Colerne, the Squadron was allocated field quarters on No.5 Site and messed alongside No.149 Wing. Flight Lieutenant Cross and Warrant Officer Smith did not move to Colerne, being directed to Maupertus to join the detachment. That night, Flight Lieutenant Meadows and his radar operator, Flying Officer McIlvenny, claimed a Ju 88 shot down between Lisieux and Bernay. This was Flight Lieutenant Meadow’s first victory and the third for Flying Officer McIlvenny, as Jack describes:

‘On patrol with “Mac” McIlvenny as RO, we were put onto a bogey over the beaches, got a visual, identified as a Ju 88 and let fly, registering many hits. It went down fast: despite full throttle I never came near enough to fire again. It hit the ground and blew up well inland, south-east of Bernay. Concentrating on the chase in the dark, I only then realised we were down, dangerously, to only 400 feet (120 metres) above sea level.’

Another ‘first time kill’ was claimed on the following night, when Squadron Leader Maitland-Thompson, recently promoted to take command of ‘B’ Flight in place of Squadron Leader Sandy Carmichael who was time expired and due a rest tour, and Warrant Officer Pash dispatched yet another Ju 88 thirty miles (48 km) to the south of Cherbourg.

The smooth operation of the Squadron in the field was heavily dependant on the skill and morale of its Servicing Echelon, later re-titled No.2604 Servicing Echelon. It was organised into two Flights, ‘A’ and ‘B’ and an engineering section that handled the heavy equipment necessary for engine, or mainplane replacements. The Servicing Echelon was commanded

43 Jack Meadows [3], *op cit.*
by 604’s Engineering Officer, Flight Lieutenant ‘Joe’ Harpum, otherwise known as ‘Joe Harpum’s Travelling Circus’, whose legend adorned the its vehicles. The flights and the Engineering Section were each administered by a flight sergeant, who was in turn supported by a sergeant responsible for the day-to-day servicing tasks. The nucleus of each flight was made up of regular NCO’s, with a smattering of pre-War Auxiliary corporals and airmen. It was the corporals, Regular and Auxiliary, who carried the brunt of the workload, and the stress and the majority of the nervous breakdowns, that invariably followed. Despite the majority of the Squadron being RAFVR, the Auxiliary Spirit was not far below the surface, with the Servicing Echelon displaying ‘an air of irreverence and indiscipline’ reminiscent of the pre-War ‘weekend warriors’.

This spirit of irreverence and indiscipline very nearly caused a major incident in officer/other ranks relations. As has already been described, the groundcrews at Maupertus were accommodated in tents, whilst the officers and aircrews ‘lodged’ in a nearby chateau. Rations for the groundcrews were generously supplemented by the American Army, whose national delicacies extended to southern fried chicken, hamburgers, hotdogs and sweet tinned fruit desserts. Although novel at first, and very much appreciated, the airmen longed for the traditional English fair of boiled beef and carrots, stew and real potatoes and not the dehydrated ‘Smash’ substitute they were forced to eat. Each evening, before the night’s flying programme commenced, the groundcrew’s supper was prepared and cooked by RAF cooks at a field kitchen. Imagine their delight one evening, when the groundcrews were told that no one would receive their meal until each had peeled at least five potatoes, for which ‘tin baths of water, peelers and a heap of potatoes were provided’. This in the expectation that they would be served proper boiled potatoes the following day. Keith Pearson continues the story:

‘Imagine our surprise the next evening to find the hated “Smash” still on offer and yet the order still stood that five potatoes had to be peeled! This caused a sudden surge of anger and the first airman in the queue enquired of the cookhouse sergeant: “What happened to the spuds we peeled last night?” The shattering reply was that the proper potatoes were not for us, but for the officers!’

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44 Keith Pearson, op cit, pages 10 & 11.
The sergeant’s response infuriated a group of men that were already low on morale due to their ‘atrocious living conditions, unfamiliar food, living in mud, and having to be on duty all night with little or no ability to sleep during the day’. They became hell-bent on raising some form of protest. Led by a very much aggrieved corporal, a group of thirty men returned to their tents, collected their Sten-guns and ammunition and marched off to the Chateau to confront the officers:

‘It was generally assumed that their (the officer’s) accommodation offered greater comfort than ours and this was much resented. Even more so when it was realised that the beer and whisky rations amply provided by the Americans for everyone on a’ regular ‘basis, were not being properly allocated ….. We had no ill feeling towards our own Squadron officers who were mostly preoccupied with flying duties and probably had not realised what was going on. Our gripe was with the so-called “penguins”, ie, the flightless officer types of No.142 Wing (2TAF) to which’ the Servicing Echelon ‘was attached for administration.’46 47

By the time the men reached the gates to the Chateau, the enormity of what they were about to undertake had finally sunk home. Increasingly apprehensive of what might follow, and aware that they were about to embark on what might be interpreted as ‘mutiny in the face of the enemy’, for which field punishment might well apply, the group faltered:

‘Suddenly, we became aware of a motor-cyclist coming along the drive from the Chateau and it turned out to be one of our own pilot officers. We had no idea whether word had reached the HQ of our insurrection, or whether he had appeared fortuitously. Anyway, he bravely faced the crowd and listened to our complaints. We (and I think he) were unsure with what authority he was speaking, but he promised that all our complaints would be promptly looked into and that the’ potato peeling ‘nonsense would cease ….. It was with some relief that we turned around and raced back to get our evening meal without hindrance.’48

46 It should be noted that whilst 604 Squadron formed part of No.147 Wing in July 1944, 2604 Servicing Echelon (6604 Servicing Echelon from August 1944) reported to No.142 Wing. Both wings in turn were components of No.85 Group, 2TAF.
47 Keith Pearson, op cit, page 7.
The unknown pilot officer was as good as his word. There was a noticeable all round improvement in conditions, with the arrival of bottled beer and more food, followed two days later by an RAF Pay Detachment to give the men their overdue pay. Fresh supplies of boots, uniforms, trousers, overalls, shirts and underwear, were allocated to replace those ‘lost in the field on active service’. Things returned to normal immediately thereafter, however, a few weeks later a Forces newspaper carried a report that:

‘Several officers of No.142 Wing of the RAF had been cashiered and dismissed from the service for various offences, including the misuse of Transport Command aircraft from the UK in bringing over Black Market supplies of ladies nylons, cigarettes, bicycle tyres, etc, instead of aircraft spares and essential supplies.’

On the night of the 1/2\textsuperscript{nd} August, Flight Lieutenant Ellis and Flying Officer Williams claimed their second victory with a Ju 88 shot down to the south-east of Caen. The following evening the Squadron lost two of its aircrew, Flight Lieutenant Perry and Flying Officer Wall were killed when their Mosquito struck trees on the edge of the runway at Maupertus. These were 604’s first aircrew casualties for some time and very nearly involved several of the groundcrew detachment, as Keith Pearson records:

‘On the sunny afternoon of 2\textsuperscript{nd} August 1944, a Mosquito was just turning at a low height to land. My fellow rigger and I were in an open tent precariously sited at the approach end of the runway and were sitting about six feet apart awaiting the approaching plane. Suddenly a wing tip brushed the trees and immediately the plane disintegrated. The next thing we knew was when one of the large landing wheels bounced right through the middle of our tent and we had to jump for our lives with debris showering everywhere.’

On the 3\textsuperscript{rd}, a number of commissions were announced for three of the Squadron’s NCOs: Warrant Officers Weston and Catchpole and Flight Sergeant Bloor were promoted to Pilot Officer and became members of the Officers Mess, whilst Flight Lieutenant Friendship, DFM, was posted to the Central Gunnery School, at Catfoss on promotion to Squadron Leader. Flight Lieutenant Drummond reported to the Squadron for flying duties, and

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\textsuperscript{49} Keith Pearson, \textit{op cit}, page 8.
\textsuperscript{50} \textit{Ibid}, page 9.
was joined later in the month by his N/R, Flight Lieutenant Gillies, DFC*. That evening, Flight Lieutenant Foster and Flying Officer Newton operating with the Maupertus detachment, destroyed a Do 217 eight miles (13 km) to the south of Granville. On the night of 4/5\textsuperscript{th}, operating from Maupertus, Flying Officer McIlvenny, with Flight Lieutenant Hadden as his pilot, operating from Maupertus, destroyed their fourth and fifth enemy aircraft respectively, when they shot down a Ju 88 and a Ju 188 in the vicinity of Rennes.

On the 5\textsuperscript{th} August, the Squadron began its move to the American run airfield at Picauville (Airfield A.8), further down the Cherbourg Peninsular, where they would be joined by the Maupertus detachment to provide night air defence over the American sector. By the evening of the 6\textsuperscript{th}, the move was completed and 604 Squadron was established at Picauville as the first Allied night-fighter squadron to operate from European soil.
The crucial offensive by the American 1st Army under General Bradley at Avranches on the 25th July 1944, and an attack by the Canadian 1st Army towards Falaise, threatened the German Army Group under Generalfeldmarshall von Kluge with encirclement. It also provided the opportunity for the armoured elements of General George S. Patton’s 3rd Army to break out and advance into Brittany. With the enemy contained by the British and Canadian Armies and their Air Force’s fighter-bombers, Patton was free to swing round to the west, overrun Brittany and turn the enemy’s flank. Leaving one Corps to clear the Brittany ports, Patton turned the remainder of the 3rd Army eastwards, crossing the Seine on the 26th and capturing large numbers of German troops in the process. On the 24th, Paris surrendered. Whilst the Americans sped eastwards, the combined British and Canadian Armies under General Montgomery moved north to liberate the coastal ports that were vital to the Allies support chain. Covering 250 miles (400 km) in one week alone, Montgomery captured Brussels on the 3rd September and Antwerp the following day. However, due in part to a stiff German resistance and a lack of supplies, particularly petrol, the Allied momentum faltered and came to a halt in mid-September with the British and Canadians in northern Belgium and the Americans at Metz in the east.

The speed of the advance raised a number of support issues for the RAF in relation to airfield construction and ground defence. In order to stay as close to the advancing armies as was possible in the days following the capture of Brussels, the airfield construction units of the Royal Engineers and the RAF were required to build seventeen new airfields, reconstruct a further thirty-seven and protect them with forty-six squadrons of the RAF Regiment.1 This commitment caused major logistical and support problems, since the supplies to maintain the RAF in the field had to be brought overland by lorries from Normandy. The Port of Antwerp was key to the resolution of the supply problem. There was little prospect, however, of it being opened until German resistance on the island of Walcheren, in the estuary of the River Scheldt, was ended and the seventy-five mile (120 km) sea approaches cleared of mines and obstructions.

The Luftwaffe in June 1944 was better placed equipment-wise than it had been for some time. Luftflotte 3’s strength in June 1944 had improved

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1 Nineteen AA units, twenty-one rifle squadrons and six of armoured cars.
since the severe losses incurred during Operation STEINBOCK, but its equipment was deficient, particularly in single-engined fighters, to oppose the Allied landings and defend the Reich. Nevertheless, the OKL had assembled twenty-two Gruppen of bombers (He 111, He 177, Ju 88, Ju 188, Do 217 and Me 410s), two of ground attack (Fw 190), six of day-fighters (Bf 109 and Fw 190) and six of night-fighters (Bf 110, Ju 88 and Do 217). However, the Allies’ overwhelming superiority in fighters and fighter-bombers and their operations against the enemy’s airfields, radar stations, transport and supply network prior to D-Day, prevented the commanders of Luftflotte 3 from deploying their bomber force against the beaches during daylight hours. Likewise, their night bombing resources were frittered away in penny packets. Consequently, the German bomber Gruppen had little impact on the battle and failed to impede the Allies progress throughout the remainder of the campaign.

1944

The night of the 6/7th August 1944 marked the beginning of 604’s operations as a complete squadron from French soil, with four crews being engaged in combat and three enemy aircraft claimed as destroyed. Wing Commander Hughes and Flight Lieutenant Dixon claimed their first enemy aircraft with the Squadron, when they shot down a Ju 88 in the vicinity of Avranches. Flight Lieutenant Surman and Pilot Officer Weston claimed three: two Do 217s and a Bf 110, and Flying Officer MacDonald and Flight Sergeant Brand another Ju 88. Sadly the aircraft flown by Flight Lieutenant Hooper and Flying Officer Hubbard failed to return following an engagement with a Bf 110. It was thought they were hit by Flak and both officers were reported ‘missing.’ Flying Officer MacDonald’s aircraft was also hit by Flak and its guns damaged. The following day Flight Lieutenant Surman and Pilot Officer Weston flew an air-sea rescue patrol in an effort to locate Flight Lieutenant Hooper and Flying Officer Hubbard, but to no avail.

2 Armitage quotes the Luftwaffe as losing in excess of 1,000 pilots during this period - Michael Armitage, op cit, page 174.
3 Alfred Price [2], op cit, pages 113 to 116.
4 An abbreviation of the German Fliegerabwehrkanone, meaning anti-aircraft gun.
5 Flight Lieutenant Hooper and Flying Officer Hubbard’s Mosquito crashed near the village of Quettreville-Sur-Sienne. On the 7th August 2004 a memorial to the two officers was unveiled in the presence of the Mayor, civic dignitaries, representatives of the 604 Squadron Association and Flight Lieutenant Hooper’s nephew.
The night of the 7/8\textsuperscript{th} was similar to that of the 6/7\textsuperscript{th}. Three crews engaged the enemy, with Flying Officers J.Smith and Roberts scoring a double by destroying two Do 217s, and Flying Officer MacDonald and Flight Lieutenant Elliot claiming a Ju 88 to the east of Nantes. Flight Lieutenant Cross and Warrant Officer H.Smith shot down a Ju 88 east of Falaise, followed by another in the Conde area. A total of ten enemy aircraft destroyed on two consecutive nights earned the Squadron a congratulatory signal from the AOC.

604’s success could not have been achieved without the good work and dedication of No.15082 Mobile GCI station that covered No.21 Sector in which the Squadron operated. GCI controlling around the Normandy beachhead and surrounding countryside was difficult, as one of 15082’s controllers, A.J.May,\textsuperscript{6} describes:

‘We could see the whole of the peninsular and way out across the sea to the east from where we assumed that any night attack would come. We took note of the daytime traffic, which showed up beautifully (the radar mechanics had done a good job in setting the station up), but this was not our responsibility. The more independent day fighters took care of that. We had no means of identifying aircraft over here prior to intercepting them. Every blip was a Hun unless we could prove differently. We had no system as in England of the CH chain and sectors ops to refer to’ instead ‘we would have to investigate every blip and we might find a German – we hoped so. We were still mystified by the absence of the German Air Force ….. The might of the Luftwaffe seemed to have declined, was busy elsewhere, or was short of petrol. We had two night-fighters call us up during the evening of our first night (date not known), at different times. They came from Hurn, near Bournemouth, and stayed about an hour each. They belonged to 604 Squadron. We investigated quite a few aircraft, but they all turned out to be friendly ….. The Luftwaffe did show up at night in ones and twos, but they were very elusive and I think that too many’ made it ‘home because we had to investigate everything showing on the tubes, owing to having no prior knowledge of our own aircraft movements. We did have our nights when we were successful and our night fighters didn’t all go back to England empty handed (as on

\textsuperscript{6}A.J.May, Memoirs of A.J.May, RAF GCI Controller (RAF Museum). Mr May’s account does not give his rank, nor first name.
the 6/7th and 7/8th July 1944). Our problem was always which to choose ..... and sometimes we made the right choice.’

On the 8th, a new radar operator, Warrant Officer Henstock, DFM, joined the Squadron to fly with Flight Lieutenant Wynn. Later that evening, with seven aircraft flying defensive patrols, 604 claimed another victory when Flying Officers Wood and Leafe destroyed a Do 217. On the following night, the 9/10th, Flight Lieutenant Harris and Flying Officer Philips intercepted a pair of Fw 190s, but were unable to close to gun range because of their superior speed.

The Squadron was to suffer an accident on the night of the 11/12th which resulted in the loss of life and injuries to aircrew. Shortly after landing from a combat with a Do 217, a 604 Mosquito flown by Flight Lieutenant Miller and his operator, Pilot Officer Catchpole, collided with a Mosquito of No.264 Squadron, killing its navigator and injuring Pilot Officer Catchpole. The crash was witnessed by the groundcrews:

‘We were told later that one of our Mosquitoes had been coming in to land having been damaged and unable to make radio contact. It was crewed by Flight Lieutenant Miller, DFC, and Pilot Officer Catchpole and they were praying that the airfield would detect their approach and put on the lights. To their relief the lights came on and all seemed well. Unknown to them, however, a No.264 Squadron aircraft was already in contact and landing just ahead of them ..... and we watched in horror as the two planes locked together and cartwheeled down the runway. They caught fire and set the full length of the runway ablaze ..... Both aircraft blocked the runway and three other planes had to be diverted’ to other airfields in the vicinity.

Pilot Officer Catchpole was subsequently hospitalised and posted as ‘sick/non-effective’ to the Personnel Holding Unit (PHU) at Morecombe, Lancs, on the 24th.

The early part of the month saw a number of changes within the Squadron. On the 10th, Warrant Officers Hogg and Moore completed their first tour and were posted to Nos.54 and 62 OTUs respectively for a rest. Flight Lieutenant Kerr-Sheppard joined the Squadron on the 18th to fly with

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7 A.J.May, op cit, page 2.
8 Keith Pearson, op cit, pages 9 & 10.
Flight Lieutenant Meadows, who had been without a permanent navigator for some time, followed by Pilot Officer Friss (N/R) on the 24th.

On the 16th, the Squadron’s groundcrew in No.2604 Servicing Echelon, were re-numbered No.6604 Servicing Echelon.

August was set to end with another accident when on the night of the 26/27th, an aircraft crewed by Flight Lieutenant Sandeman and Flying Officer ‘Doc’ Coates obtained a visual on a Ju 88 flying at an altitude of 10,000 feet (3,050 metres) to the north of Paris. Flight Lieutenant Sandeman’s fire destroyed the Junker’s bomber in a large explosion and a shower of debris, parts of which struck the Mosquito and caused a catastrophic failure somewhere in the aircraft:

Philip Sandeman, who ‘found himself sitting in his seat in mid air, was able simply to undo the seat harness, jettison the seat and then pull the rip cord of his permanently attached, seat-type parachute and descend safely. Poor “Doc” Coates, however, was wearing the observer’s type parachute harness where the chute was kept separate on the cockpit wall to be hooked on. This was a simple and quick job when needed. It would be reasonable to presume that, when the cockpit broke up, away with it went his parachute, leaving the poor man helpless in mid-air with no “brolly” and a long fall to his death’.  

Sandeman landed safely in the vicinity of Corbeil and was subsequently returned to the Squadron.

September 1944 opened with heavy rain and much flooding on the 1st, which undermined the runway by tearing the surface, and reducing the Squadron to night scrambles only. This state continued for the first three days and caused Wing HQ to commune with higher authority for a better airfield. On the 3rd, a number of aircrew left the Squadron after becoming tour expired. Flight Lieutenant Surman, Flying Officers Day, De W.Wigley and Wallis and Pilot Officer Weston were all posted to HQ ADGB for other duties. It was noted in the ORB that Flying Officer Wallis had completed five years of operational flying. The following day, the 4th, four aircraft were dispatched to Colombs (B.6) to reinforce 264 Squadron on the Cherbourg Patrol, returning on the 5th to an airfield that was barely ‘fit to fly,’ owing to ‘yawning craters’ in the runway and taxiways. Flying was abandoned for the next three days. On the 9th, 604 Squadron left Picauville for a new airfield at Carpiquet (B.17), a few miles to the west of Caen.

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9 Jack Meadows [2], in an e-mail to the author dated 17 April 2004.
remaining within No.21 Sector and its responsibility for providing the Cherbourg Patrols.

Carpiquet was a large airfield previously held by a force of German paratroops, who, well supplied with ammunition, defended their charge tenaciously. When 6604 Servicing Echelon arrived, the enemy had been cleared, but ‘the area was littered with blown-up tanks and, much shrapnel, with the hangers having ‘countless shell holes and looked like lace curtains hanging forlornly.’ All the buildings were badly damaged and devoid of roofs, with many of their interiors ‘profusely decorated with humorous cartoons and drawings done by their former German occupants.’ Carpiquet’s size and the availability of a permanent runway and sizeable grassed areas provided a base for both RAF and USAAF operations and an emergency landing ground for British and American aircraft unable to make it home with battle damage. Large numbers of ‘Liberators, Lancasters, Flying Fortresses and various fighters attempted tricky landings, often with no undercarriages’ and ‘injured or dead crew-members’ on board. ‘Fires were frequent and the airfield was littered with wrecked aircraft.’

The groundcrews were housed in tented accommodation strung around the perimeter track, where they were passed daily by long files of German PoWs waiting to be flown to the UK. Despite the possibility that the buildings were booby-trapped, the opportunity was taken to pillage several of them for basins (complete with taps) that were then set-up outside the tents for washing - a luxury unknown at Picauville. With the reduction in enemy activity there were opportunities for ‘liberty runs’ in Honfleur, as Keith Pearson recalls:

‘Years after the War ..... I was reminded by one of our corporals that I had played the piano in a brothel’ in Honfleur ‘to which my reply was that I thought it was a bistro (at least until the ladies appeared!). The chance to have French food was welcomed and we were happy to be enjoying normal food at camp. It seems that some were able to get as far as Paris on their liberty passes’ with one airman apparently buying ‘a ticket in the French National Lottery and’ winning ‘many thousands of francs. His dilemma was what to do with them ..... so he set about purchasing very expensive items of jewellery, fur coats and other valuables,’ which, by devious means, he succeeded in getting back to England.

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11 Ibid, page 11.
On the 17th September, the British 30th Corps in conjunction with the 1st Parachute Division, the Polish Parachute Brigade and the US 82nd and 101st Airborne Divisions, launched Operation MARKET GARDEN. The objective of the operation was the seizure of the strategic bridges at Arnhem, Nijmegen and Eindhoven on behalf of the British 2nd Army, and the opening a path to the North German Plain before the onset of winter. The courageous attempts to re-supply the airborne troops, and the ultimate failure of the operation, ended any hopes of an Allied victory over Germany by the end of 1944 and condemned the Anglo-American forces (and 604) to another year’s fighting on the Continent.

The ‘pushing back’ of the Luftwaffe beyond France and the Belgium border and the effective defence provided by Allied day and night-fighters, marked a considerable reduction in enemy opposition in the Cherbourg area. To alleviate the boredom, Flight Lieutenant Miller, whilst engaged on air-to-sea firing practise on the 20th, encountered a pair of armed trawlers off the island of Jersey, which, despite a spirited defence by the German sailors, he succeeded in shooting-up and scoring several hits amidships.

Having been in the Normandy Theatre of operations for a relatively short period, the Squadron was warned-off for a return to Predannack later in the month. Due in part to the bad weather, and to give the ground staff time to prepare for the move, the Squadron was stood down from operations on the 23rd and began packing their bags for their return to ‘Blighty’ and ADGB’s No.10 Group. A rear detachment remained at Carpiquet to recover the Echelon’s heavy equipment and transport it to the Normandy beach, where it was loaded onto an American Landing Craft (Tank) (LCT) to begin the return journey to Predannack.

Flight Lieutenant Meadows and his navigator, Flight Lieutenant Kerr-Sheppard, were destined not to return with the Squadron, being posted instead to No.219 Squadron at Hunsdon, where Flight Lieutenant Meadows was to take command of a flight on promotion to Squadron Leader. Flight Lieutenant Sandeman became tour expired on the 18th and was posted to 2TAF’s Air Movements Section on rest, followed by Flying Officer Friss, who was also posted out of the Squadron. On the 22nd, Warrant Officer Gosling was awarded the DFC. On the 24th, the Squadron, minus a rear guard party which remained at Carpiquet, departed for Predannack, where all members were granted leave by the month’s end.

On the 9th October, the Squadron returned from leave, when a number of decorations were announced; a bar to Flight Lieutenant Miller’s DFC, for ‘meritorious service,’ and DFCs for Flight Lieutenant Surman, Pilot Officer Weston and Pilot Officer Catchpole and a new crew comprising Flying
Officers Irvine, pilot, and Nicholas, N/R, joined the fold. Bad weather rendered night flying impossible for the majority of the month, apart from an uneventful daylight air-sea-rescue patrol on the 19th. The spare time created by the bad weather was put to good use on the 20th, when the aircrews staged a ‘Squadron Revue,’ in the station theatre, which took just nine days to plan and produce. On the 24th ‘B’ Flight’s OC, Squadron Leader Maitland-Thompson, was declared time expired and posted for instructional duties to No.54 OTU at Charterhall, his place as OC being taken by Flight Lieutenant Drummond on promotion to Squadron Leader.

The poor weather continued into November, with very little flying taking place until the 9th, when three crews were detached to Ford, Hants, to fly defensive patrols for No.24 Sector. On the 2nd, promotions to Flight Lieutenant were announced for Flying Officers Howarth and Thomas. During the month, the Squadron’s strength was gradually increased by the addition of new aircrews: Flight Lieutenant Welford and his navigator Flying Officer Dowling, arrived on the 9th from 54 OTU, followed two days later by another OTU crew, Flight Lieutenant Winton, pilot, and Flying Officer Flood, N/R. Finally, Flight Lieutenant Savage, pilot, and Flight Sergeant Warner, N/R, arrived on the 12th. The Ford detachment was increased the same day when six crews flew to the Hampshire airfield to replace the original three.

On the 14th, the CO flew to Amiens to visit No.85 Group’s HQ, where it was confirmed the Squadron and 6604 Servicing Echelon were to move to Hunsdon on the 17th, and transfer back to 85 Group the same day. The advance party was scheduled to leave Predannack on the 16th. However, the arrangements were changed that day, when a signal was received from HQ No.10 Group, to the effect that the move was postponed and later cancelled.

On the 20th, Flight Lieutenant Miller and his navigator, Flight Lieutenant Elliott, were posted to the Fighter Interception Development Squadron13 at Ford, after completing thirteen eventful months with the Squadron. The same day, the MO, Flight Lieutenant Leggat, was also posted on detachment to RAF Portreath. On the 24th, two long term members, Flight Lieutenant Haddon and Flying Officer McIlvenny, were awarded the DFC. Flying Officer Newton, DFC, and his navigator, Warrant Officer Rose, joined the Squadron on the 26th.

New instructions for the Squadron and 6604 Servicing Echelon to prepare for a move to Odiham, Hants, an 11 Group station, were received on

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13 The Fighter Interception Development Squadron was a diluted version of the Fighter Interception Unit that operated as a part of the Central Fighter Establishment from the autumn of 1944.
the 1st December, but, as before, these were immediately postponed because of accommodation problems at Odiham. The effective date was then amended to the 5th, but this did not prevent Squadron Leader Furse and Captain Hart, RA, the SLO, from taking a look at Odiham on the 2nd. On the 4th, the detachment crews at Ford flew directly to Odiham, to be replaced by further crews from Predannack to maintain the operational state at Ford. The main party departed by road at 0800 hours on the 5th, with all aircraft preceding them, and arrived safely at Odiham the following day. The same day, Squadron Leader Drummond, who had been with the Squadron for just four months, was posted on promotion to Wing Commander, to command No.600 Squadron at Cesenatico, Italy, with Flight Lieutenant Hayhurst taking command of ‘B’ Flight on promotion to Squadron Leader.

On the 8th, Wing Commander Hughes learned that three of his senior pilots, Flight Lieutenants Wynn, Foster and Haddon, were to be posted to the Middle East in the near future, this at a time when the Squadron’s aircrews numbered just seventeen, of whom five would shortly become tour expired. The CO’s request to HQ No.11 Group that the postings be cancelled was accepted on the 11th. The aircrew situation was alleviated with the arrival of Flight Lieutenant Leppard (pilot) from TFU, Defford, and Flight Lieutenant Houghton (N/R), Warrant Officer Stephen (pilot) and Flight Lieutenant Bradshaw (N/R) from 96 Squadron which was in the process of disbanding at Odiham. The Squadron, however, lost Flight Lieutenant Harris, pilot, who was posted to CFS, Upavon, on the completion of his tour.

No.11 Group’s Night Operations Staff, requested that 604 provide two aircraft over Brussels at sunset on the night of the 23/24th. They were obviously expecting trouble, and the Squadron excelled itself by putting seven aircraft over the Continent on behalf of No.25 Sector, including the two over Brussels. The following night seven patrols were airborne, with Flight Lieutenant Foster and his navigator, Flight Lieutenant Newton, engaging an He 219 night-fighter and claiming it as a probable. Engine failure forced Foster to land the aircraft at Brussels/Melsbrock. Further patrols in support of No.25 Sector were flown for the remainder of the month.

On the 29th, the Squadron and its Servicing Echelon were ordered to return to the Continent and be operational from Lille/Vendeville (B.51), close to the Franco-Belgian border, by the 31st, New Year’s Eve. Before their departure, Captain Kristiansen, another of 604’s Norwegian pilots, operating for the last time from Odiham, claimed a Ju 88 destroyed on a patrol over the Allied lines. On the afternoon of the 31st, ‘A’ Flight flew to Lille/Vendeville, supported by seven Dakota loads carrying the advanced
party and their essential equipment. That evening, seven defensive patrols were flown, during which Flight Lieutenant Cross and his operator, Flying Officer Beaumont, destroyed one, later upgraded to two, Ju 87 Stuka ground-attack aircraft. ‘B’ Flight landed at Lille/Vendeville during New Year’s Day 1945, with all aircraft being based in France by the end of the day. Whilst at Lille/Vendeville, 604 came under the authority of No.148 Wing, a component of 2TAF’s No.85 Group, alongside the Wing’s other Mosquito squadron, No.264, commanded by Wing Commander E.S.Smith, AFC.

By the end of the old year, the Allied armies had successfully beaten off Germany’s last co-ordinated attempt in December 1944 to split the Anglo-American forces in the Ardennes, The Battle of the Bulge, and defeat them by driving towards Antwerp to cut off their over-extended supply lines. By the end of November, the Scheldt Estuary had been cleared by British and Canadian soldiers, and the Port of Antwerp restored to ease the supply situation and enable General Montgomery to press on through Holland towards the Rhine. General Patton’s US 3rd Army had driven through Lorraine and advanced on Metz, whilst the US 1st and 9th Armies had re-established the front through the Ardennes against stubborn German resistance. Further to the south, the Franco-American troops of the 6th Army Group under US General Jacob Devers, had taken Strasbourg and established a bridgehead on the west bank of the Rhine. By the time of 604’s arrival at Lille/Vendeville, the front was many hundreds of miles to the east and the south, and the only ‘hunting’ there was to be had was over German territory. The Squadron’s task, in conjunction with 264 Squadron, was two-fold; to retain air superiority by night and in bad weather over Allied territory in France, Belgium and Holland, and conduct night intruder operations over Western Germany. For this they operated in 85 Group’s No.25 Sector, and came under the control of various mobile GCI stations strung along the Belgian coast and further inland.

1945

On the first evening of the New Year, the Squadron had three aircraft airborne over the Allied lines. One flown by Squadron Leader Furse and Flight Lieutenant Downes claimed an He 219 shot down near Munchen Gladbach at 2057 hours, and a second, crewed by Flight Lieutenants Foster and Newton, had three combats and claimed the destruction of three Ju 88s at 2019, 2040 and 2109 hours. This ‘good night’s work’ earned Flight
Lieutenants Foster and Newton a bar to their DFCs.\footnote{Flight Lieutenant Foster, nine destroyed, one probable and one damaged and Flight Lieutenant Newton, ten destroyed, one probable and one damaged.} Bad weather on the 2\textsuperscript{nd} caused Captain Kristiansen and Flight Lieutenant Thomas a few problems landing at Lille/Vendeville and may well have accounted for the deaths of Flying Officers J.Smith and Dowling, whose aircraft crashed at Wattiguies-Nord, some ten miles (16 km) from the airfield, on its way over from Odiham.

On the evening of the 4/5\textsuperscript{th}, the Squadron had three aircraft on patrol, with one crewed by Flying Officers Nicholas and Irvine claiming a Ju 88 over the German lines to the west of Horstmar. On the 5\textsuperscript{th}, the main party of 6604 Servicing Echelon arrived at Lille/Vendeville with their equipment, completing the Squadron’s complement and making it self sufficient once more. That afternoon, the Squadron was subjected to its first attack, when a lone Bf 109 shot-up the airfield whilst the aircraft were being refuelled. Fortunately, no one was hurt. The weather was described as ‘atrocious’ and the temperatures at ‘the lowest imaginable,’ where:

‘those mechanics who had to work on the aircraft standing in the open were given special Navy-style rum rations to stave off the cold’ and ‘the French houses nearby were covered in sheets of ice, with icicles hanging from the roof gutters right down to the ground ….. We were billeted in some abandoned German wooden huts in the small town of Lesquin next to the airfield,’ whose bunks had ‘straw-filled palliases’ that ‘were far from comfortable and keeping warm was not easy. Our crew-rooms on the airfield were better - with a large egg-shaped stove inside, stoked up until nearly white hot!’\footnote{Keith Pearson, \textit{An Erk’s Eye View}; page 15.}

Two promotions were announced on the 5\textsuperscript{th}, with Pilot Officers Vigar and Bloor being raised to Flying Officer with immediate effect. Six aircraft were on patrol in the evening, but the enemy failed to put in an appearance. Snow descended on Lille/Vendeville on the 7\textsuperscript{th}, shutting down the airfield and preventing any flying for the next seven days. Conditions were also bad for the civilian population, who, short of food and fuel in what was in reality a battle zone, frequently had little alternative but to resort to stealing to keep body and soul together. Therefore, ‘lorry journeys into Lille for rations always had an armed airman in the back’ to prevent theft.\footnote{\textit{Ibid}, page 15.}
On the 14th, the weather cleared sufficiently for three aircraft to get airborne and for the CO and Flight Lieutenant Dixon to claim a Ju 88 destroyed to the south of Rotterdam.

Further snow and the soft ground at Lille/Vendeville from the middle of the month onwards, conspired to impede flying operations and make life difficult all round. On the night of the 17/18th, Flight Lieutenant Cross slightly overshot the runway and became bogged down in the soft ground beyond. Meanwhile one of 409’s aircraft had crashed at the runway’s end, forcing the returning patrols to be diverted to Manston. On the 18th, Squadron Leader Hayhurst and Warrant Officer Gosling were diverted to Brussels due to bad weather over Lille/Vendeville, whilst Flight Lieutenant Cross, suffering from undercarriage trouble, overshot the runway once again, following a second approach. On this occasion he was judged to have been at fault.

By the 21st, conditions had improved, with five defensive patrols being flown to cover the Scheldt Estuary, the West Ruhr and Nijmegen areas early in the evening, with no action being recorded, other than a good landing by Flight Lieutenant Truscott returning to the airfield with engine trouble. A further four patrols were mounted to cover the Scheldt, Breda, Nijmegen and Roermond areas, with Flying Officer Beaumont claiming an enemy aircraft.17 After the 22nd the weather deteriorated with plenty of snow, very low temperatures and little flying. On the night of the 29/30th, the Squadron provided three aircraft for a dusk patrol over the front line, and another to cover the Scheldt from 0155 hours. Further patrols were flown during the early hours of the morning, concluding with three patrols at dawn.

A number of crews became tour expired by the end of January and were posted out. Flying Officers Beaumont and Bloor proceeded to No.9 Personnel Despatch Centre (PDC) on the 21st, followed by Flight Lieutenant Schofield to No.4 Film Production Unit (FPU)18 after an uneventful tour. 604’s Supernumerary Radar Officer, Flying Officer John Stocker, departed to pastures new on the 29th, when a posting to No.488 Squadron, a New Zealand fighter unit based at Amiens, was announced. He had been with 604 for nine months. On the same day 6604 Servicing Echelon gained a new Flight Sergeant (Discipline), namely, Flight Sergeant McClure.

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17 The ORB/Diary hints that Flying Officer Beaumont destroyed something, but is not specific.
18 No.4 PFU was formed in April 1944 to record the invasion of Northern Europe from the RAF’s perspective. The results of its filming was later incorporated into two significant films, The True Glory (1945) and The Air Plan (1945). Source: e-mail from Al & Eileen Hanley-Brown dated 1st October 2004.
The weather improved at the beginning of February, enabling the usual defensive and offensive patrols to be flown. With a complete absence of enemy opposition, there were few opportunities for interceptions, recourse having to be made to chasing friendly aircraft to maintain proficiency. On the 7\textsuperscript{th}, two new crews fresh from No.54 OTU arrived to replace the tour expired personnel: Flight Lieutenant Knowles (pilot) and Flying Officer Page (N/R) and Flying Officer Cattenach (pilot) and Sergeant Morgan (N/R). The AOC No.85 Group, Air Vice Marshal Steele, visited the airfield on the 9\textsuperscript{th} to make himself acquainted with the Squadron’s officers, particularly the new ones, and interview four warrant officers for commissioning. Two days later, orders were received for the promotion of Warrant Officers Gosling, Smith and Baird to Pilot Officer.

On the 10\textsuperscript{th}, orders were received from Group requiring the Squadron to provide three aircraft to be on patrol by 1920 hours, and a further three from 0225 hours. This figure remained in being until the 20\textsuperscript{th}, when the times were shifted forward, but the aircraft numbers remained the same. On the evening of the 13\textsuperscript{th}, two of 604’s aircraft effectively closed Lille/Vendeville. The trouble began when the aircraft crewed by Flying Officers Nicholas and Irvine suffered brake failure whilst taxying to take-off and became bogged down in soft ground. The problem was compounded by Flight Lieutenant Haddon and Flying Officer McIlvenny, whose aircraft burst a tyre, and thereafter blocked the perimeter track and closed the airfield. On the night of the 14/15\textsuperscript{th}, the Squadron flew its statutory three patrols, during which the enemy in the form of a Ju 88, put in an appearance and was detected by Flight Lieutenant Cross’ navigator, Flying Officer Roberts. Closing to visual range, Cross pressed the gun button, but nothing happened. By the time he had realised his mistake (failure to switch the gun master switch to ON, or press the cannon firing trigger correctly),\textsuperscript{19} or recognised a failure in the gun firing circuits, the Junkers had disappeared and the opportunity was lost. For the remainder of the month there were few, if any, opportunities for combat with the enemy.

On the 17\textsuperscript{th}, Flying Officer Williams completed his first tour as a navigator and was posted home, with a recommendation that he join one of the OTUs as an instructor. The following day, Flight Lieutenant Massey completed his tour, and was likewise recommended as an OTU instructor pilot on posting to the PDC, Uxbridge, after eighteen months with the Squadron. Finally, Squadron Leader Hayhurst, OC ‘B’ Flight, departed on the 21\textsuperscript{st} to TFU, Defford, as a flight commander. Replacements in the form

\textsuperscript{19} Pilot’s Notes for Mosquito Marks F.II, NF.XII, NF.XIII & NF.XVII, AP 2019B & G, 2\textsuperscript{nd} Edition (Air Ministry, 1944).
of Flight Lieutenant Hilken, DFC, pilot, and Flight Lieutenant R.J.Gillies, DFC*, N/R, arrived on the 23rd to form a new crew. Good news was received on the 17th, with the announcement of the award of the DSO to Wing Commander Hughes.

The opportunity for aircrew leave in the UK was enhanced on the 22nd February, with the commencement of a Dakota service, courtesy of Transport Command, every fifth day from Northolt to Lille/Vendeville, returning the same day. The UK end of the service changed to Gatwick on the 14th April. An opportunity for the Squadron to indulge in a sporting event occurred on the 25th, when the Squadron played a French team at football at Marchennes and beat them three goals to nil.

On the 1st March, the Squadron managed once more to block the airfield when Flight Lieutenant Winton and Flying Officer Flood’s Mosquito became bogged down in soft ground whilst taxying. By way of compensation, Squadron Leader Furse and Flight Lieutenant Downes gained a visual on a Ju 88 at 1,500 feet (460 metres), fifteen miles (24 km) to the west of Dusseldorf, but lost contact when diving after it. This was the first enemy aircraft seen for some time and perhaps provided an indication that they had decided to return to the fray - an illusion that was quickly shattered with the failure of the Luftwaffe to put in further appearances. The flying programme was amended by Group on the 3rd, to provide for two patrols per night in the Scheldt area and four over the front line, a change in emphasis that reflected the lack of enemy opposition in the Allies rear lines. A number of administrative and posting changes took effect on the 5th. Flight Lieutenant Wynn was granted Squadron Leader rank to take command of ‘B’ Flight with immediate effect, and two crews comprising Flying Officer MacDonald and his navigator, Pilot Officer Baird, and Flying Officers Ellis and Williams, were declared tour expired and posted out of the Squadron. Their replacements were Flight Lieutenant Crone, DFC, pilot, and Flight Lieutenant Colebrooke, DFC, N/R, an intruder crew from TFU. Two old 604 hands, Pilot Officers Moore and Hogg, returned for a second tour fresh from instructing at 54 OTU.

Over the next few days, the Squadron provided patrols over the Scheldt Estuary, the front line, Cologne, Dusseldorf and Nijmegen, all of which proved uneventful until the night of the 12/13th. Flight Lieutenant Welford and his navigator, Flying Officer Philips, were diverted to Dunkirk whilst patrolling the Scheldt and gained a contact, which Philips converted to a visual, but lost before the aircraft could be positively identified. Contact was regained and closed to a visual on a Ju 88. Flight Lieutenant Welford opened fire with a long burst when the range was reduced to 200 yards (183 metres). Strikes were observed and the enemy aircraft was seen to wobble
before diving vertically towards the sea. A claim for one Ju 88 probably destroyed, was submitted to Group.

Patrolling continued with no opportunities to engage an enemy that had literally disappeared from view. On the 20\textsuperscript{th}, five patrols were flown in support of a Catalina that had come down in the Scheldt Estuary and whose crew required assistance. Squadron Leader Wynn and Pilot Officer Henstock patrolling in the vicinity of Nijmegen identified a V-1 (Doodlebug) flying bomb, code-named ‘DIVER,’ and were given permission to chase it. Unfortunately the target’s estimated speed of 450 mph (720 km/hr) soon outstripped the Mosquito and the chase was abandoned. The search for the Catalina crew was completed on the 22\textsuperscript{nd}, when Flying Officer Vigar with Flying Officer Palfrey operating the radar, on patrol over the Scheldt Estuary were instructed to investigate a life-raft, which they duly found and confirmed the presence of two bodies. They then ‘orbited’ the raft until an ASR launch appeared on the scene to recover the unfortunate crew.

In a programme to investigate the effects of smoking on night vision, the Air Ministry established a Mobile Ophthalmic Unit to test the aircrew’s eyesight. This arrived at Lille/Vendeville on the 24\textsuperscript{th}, with all aircrew being tested. The results were not made public, but a preliminary assessment showed that moderately light smokers attained the highest marks.

On the night of the 24/25\textsuperscript{th}, Flight Lieutenants Leppard and Houghton claimed a Bf 109 destroyed in the Haltern area, followed two nights later by Flying Officers Wood and Leafe’s destruction of a Ju 88 - the Squadron’s last confirmed enemy aircraft shot down in World War Two. On the 29\textsuperscript{th}, the officers threw a party on behalf of the Servicing Echelon, that had been postponed since the previous summer, to celebrate the Squadron’s 100\textsuperscript{th} enemy aircraft destroyed at night. This took the form of a dance in the University Hall, Lille, with refreshments and a free bar in the Louis Pasteur Library for all ranks, and presumably no flying the following day. Out of politeness, the local police chief was ‘consulted and promised the attendance of fifty local girls, personally vetted by’ himself. ‘It is to be regretted that the party got wildly out of hand ….. and the Library was left very much the worse for wear.’\textsuperscript{20}

As in previous months, the Squadron’s gradual haemorrhaging of experienced aircrews continued unabated. On the 20\textsuperscript{th}, Flying Officer Ruddiman and his navigator, Flight Sergeant Dale, were declared tour expired and posted to 85 Group’s Communications Squadron for (relaxed) flying duties. On the 26\textsuperscript{th}, Squadron Leader Furse was ‘warned-off’ for a

\textsuperscript{20} Keith Pearson, \textit{op cit}, page 15.
posting to No.12 Group as Squadron Leader Night Operations, following an interview with the AOC. In their place, the Squadron welcomed two first tour crews from 54 OTU: Flight Lieutenant Murrell and his navigator Sergeant Dove, and Flight Sergeant Cornhill with Sergeant Shield.

Whilst the usual patrols were flown, all hope of seeing the enemy at night had gone by the beginning of April. Nevertheless, the crews remained just as keen to fly and get to grips with the enemy. One crew, that of Pilot Officers Moore and Hogg, experienced some excitement between the 6th and the 8th when they were themselves intercepted by what they described as a ‘jet job,’ and which, by some means, they managed to avoid. This incident is not confirmed. However, it is known that one Staffel,\(^{21}\) the 10th, of Nachtjagdgeschwader 11 was equipped during April 1945 with nine examples of the two-seat night-fighter version of the Me 262, the Me 262B-1a/U1, for the defence of the Reich.\(^{22}\)

Between the 2nd and the 5th April, 604 shared their dispersal at Lille/Vendeville with a flight from No.219 Squadron, to ease the load whilst the remainder of 219 moved from their base at Amiens/Glisy (B.48) to Gilze/Rijen (B.77) in Holland. At this juncture, 219 was temporarily commanded by ex-604 pilot Squadron Leader Jack Meadows, who was replaced as CO later in the month by another ex-604 member, Wing Commander Maitland-Thompson.

Sometime at the beginning of the month, the Squadron was invited to attend a special day in Steenwerck, a small town on the Belgian border, whose residents wished to show their appreciation for their liberation. After a group photograph on the steps of the town hall, Squadron members were taken by local families to be wined and dined in the most liberal fashion, following which, in the afternoon, a football match was arranged between the Squadron and the locals. Keith Pearson describes this as ‘a hectic affair which resulted in at least one broken leg’ being ‘suffered by a local player.’\(^{23}\)

On the 9th, the long standing OC ‘A’ Flight, Squadron Leader Furse, departed to England for his posting to HQ No.12 Group. His navigator, Flight Lieutenant Downes, left the following day, accompanied by Flight Lieutenants Truscott and Howarth, who were also tour expired and returned to the UK. A new pilot, Flying Officer Wood, arrived on the 11th to crew with Flying Officer Roberts (N/R) who was then without a pilot. Flying

\(^{21}\) A Staffel was the lowest grade of flying formation in the Luftwaffe. It usually comprised nine aircraft and was therefore broadly comparable to an RAF flight.

\(^{22}\) William Green, Warplanes of the Third Reich, (MacDonald & Co, 1970), page 633.

\(^{23}\) Keith Pearson, \textit{op cit}, page 16.
Ground crews with Mosquito XIII at the Squadron’s disbandment in April 1945. This photograph was probably taken at Lille/Vendeville before the crews were dispersed to other units (604 Squadron Archive).

Officer Wood barely had time to stow his kit, before it was announced that 604 was to disband. On the morning of the 12th a signal was received from HQ No.85 Group:

‘Signal No.0.951 dated 12th April 1945 - This squadron is to become non operational at 0630 hours on 15th April 1945 and is to be disbanded with effect from 18th April 1945.’

On the night of the 14/15th, the Squadron flew its last operational patrols in poor visibility without encountering the enemy and became non-operational at the conclusion of the night’s flying. As determined by Group, 604 Squadron disbanded on the 18th April 1945, and its aircraft dispersed as follows: nine to its sister unit at Lille/Vendeville, No.264 Squadron, that was to retain them until it too disbanded at Twente (B.106) the following August, three to No.409 (Canadian) Squadron at Rheine (B.108), two to No.151 Repair Unit and one to the School of Gunnery at Catfoss. Of the aircrew, two pilots, Flight Lieutenant Foster, DFC, and Pilot Officer Walters were posted to No.9 PDC for ‘disposal’. Five other pilots and four operators departed for the Base Personnel Centre for posting, and three crews proceeded to HQ 2TAF for ultimate employment in the Berlin Communications Squadron. There was some concern amongst the groundcrews as to their future, it being known that some airmen were to be compulsorily transferred to the Fleet Air Arm for service in the Pacific
Theatre to continue the War against the Japanese. The names of those unfortunate enough to have been chosen were read out at a parade from a list that was compiled in alphabetical order and which stopped at ‘O,’ whilst the remainder were posted to stations in the UK for further service or demobilisation, or were retained in Germany as part of the 2TAF’s occupation forces.”

During its fifteen years of existence, 604 Squadron had risen from its roots in 1930 as an AAF bomber squadron, to participate in the Night Blitz and establish itself as one of the RAF’s premier, if not THE premier, night-fighter squadrons. Throughout this period it led the field in the application of airborne radar to night-fighter tactics and training, and claimed the destruction of 132 enemy aircraft. However, by the 30th April, with its air and groundcrews posted to other units and its aircraft dispersed, 604 Squadron, AAF, for the first time in fifteen years, ceased to exist in the RAF’s order of battle.

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24 Keith Pearson thus narrowly avoided overseas service, returning to Ternhill to work at an Advanced Flying Training School, then to Weathersfield on glider towing Stirlings and finally to Syerston, Notts, and demob as an LAC in March 1947.
The end of the Second World War in Europe in May 1945 marked a watershed in relations between the Western democracies of Britain, the US and France, and their wartime ally, the Communist Soviet Union. During the War, the mutual desire of the US and the Soviet Union to defeat German fascism and the dependence of Russia on American military equipment and food to sustain that war, held sway and drove the alliance forward. However, with Germany’s defeat and the need for Russia to control the countries of Eastern and South-Eastern Europe to, as they saw it, prevent further invasions of the Motherland, the raison d’être for the alliance began to crumble. The conflict that followed might therefore be regarded as a struggle between the opposing ideologies of American Capitalism and Soviet Communism, for by then Britain’s influence and economy were in decline and her Empire was in retreat.

For their part the Soviet Union had no desire to see an economically strong America spread Capitalism and its version of Imperialism throughout Europe and the Communist satellite states. The subsequent deterioration in military and diplomatic relations created an atmosphere of mistrust between the two super-powers, which in turn led to the gradual political realignment of Europe along Eastern and Western lines (or Blocs) and the descent into a ‘Cold War’ in 1946.

By comparison, Britain possessed neither the military might of the Soviet Union, which at the end of the War numbered some 12,000,000 soldiers of the Red Army based in Europe, nor the wealth of the US, which by 1944 had overtaken the British Empire as the strongest economy in the world. In reality the country was broke and its people were tired after six years of hard fighting and desired nothing more that a rapid demobilisation of the armed forces and a return to normal civilian life. Nevertheless, Britain’s incoming Labour Government under Prime Minister Clement Attlee, found it necessary to retain sufficient manpower in the armed services to provide a counter to Communism in Europe and the Far East and maintain order in the overseas colonies in the face of growing nationalism.

1 Estonia, Latvia, Lithuania were absorbed into Soviet Russia in 1939, whilst Poland, Romania, Czechoslovakia, Hungary, Yugoslavia, Bulgaria, Albania and East Germany came under Soviet influence at the end of the War.
and demands for self government. Some means therefore had to be found to
maintain manning at the required levels and at a reasonable cost.

With a Government decision not to employ the AAF in the final stages of
the war against Japan, the Auxiliaries were effectively disbanded in
September 1945. ² With the defeat of Japan in August of that year, the
overwhelming majority of the pre-War RAFVR, like their Auxiliary
counterparts, had returned to ‘Civvy Street,’ as had all of the Wartime
conscripts, who for administrative reasons had been enlisted in the RAFVR
rather then the RAF. The fact that some form of Volunteer Reserve would
be required to bolster the Regular RAF in the Post-War period was accepted
by Government, but there was no clear thinking on what form these reserves
might take. Should they be based on a reconstituted RAFVR, or on the
AAF, or should greater emphasis be placed on conscripted (National
Service) personnel? By May 1946, plans had crystallised to provide an Air
Force Reserve comprising three elements: the ex-regulars who had an
ongoing reserve commitment, including the RAFO and Class E; the
Wartime and post-War conscripts of Class G, and finally, the non-regulars,
which included the RAFVR and the AAF. By September 1946, the
Government’s Defence Committee produced proposals for the creation of an
active Air Force Reserve of 72,000, of which 12,000 were to be drawn from
a reconstituted AAF, alongside some 20,000 RAFVR pilots, all ex-warriors
veterans, and 40,000 groundcrew. ³

In the pre-War order of battle, the AAF formed a constituent part of the
front-line RAF, but in the post-War scenario, the Auxiliaries were to be
constrained by the type of aircraft they could reasonably be expected to fly
and hence the roles in which they could operate. Heavy bomber, transport
and maritime reconnaissance, were deemed inappropriate, due to their being
too complex for ‘part-time’ aircrews. There was also the need for Auxiliaries to operate from a fixed home flying station, which ruled out the
essentially mobile nature of tactical light-bombers and fighter-bombers.
Leaving out photographic reconnaissance and maritime attack, for which
there were sufficient regular crews, the only practical proposition was to
concentrate on fighter operations in the air defence role.

During May 1946, approval was granted for the formation of twenty
AAF squadrons, of which 604 was one, with recruiting beginning in June
1946. This plan envisaged each squadron forming around an operational
cadre flight of nine aircraft, supplemented by a regular-based training flight

² The last Auxiliary squadrons, Nos.609 and 615, disbanded in September 1945.
³ Jeff Jefford [2], Post-War RAF Reserves to 1960, (RAF Historical Society, 2003), pages
79 to 83.
of six Harvard and/or Oxfords for flying tuition and instruction. A second operational flight of nine aircraft and a full personnel complement was planned to be in place by December 1947. Aircraft were to be the later marks of the Spitfire (F.21, 22 and 24), when they were released from the Regular Air Force on transition to jet-fighters, and Mosquito NF.30s and B.25s. Meanwhile, those squadrons accorded a day-fighter role, were to be issued with the earlier Spitfire Mks.14 and 16.\(^4\) It goes without saying that these ambitious numbers were never realised.\(^5\)

Although recruitment was authorised from June 1946, the administrative effort precluded both air and ground crews ‘signing-on’ before November of that year. Some twelve months later, 932 airmen had been recruited, a figure that represented 37% of the total required, which was regarded as a reasonable beginning considering the task in hand. Whilst recruitment proceeded at a reasonable pace, concerns were being expressed as to the levels of flying proficiency the Auxiliaries could be expected to achieve.\(^6\)

In June 1947, the ACAS (Training), Air Marshal Sir Basil Embry, KBE, CB, DSO, DFC, AFC, wrote to the VCAS to express the view:

‘that the auxiliary squadrons were presently living off the fat represented by wartime veterans and that the air force needed to face up to the fact that, once this stock had been depleted it would have to start using inexperienced crews.’ Continuing, Sir Basil asked that ‘We should at least get rid of the worst present anomaly - the attempts of the AAF to maintain operational standards of efficiency on night fighters and light bombers, which is even now beyond their capabilities.’\(^7\)

Sir Basil’s recommendation was accepted by the Air Staff and consequently those Auxiliary squadrons which had formed as Mosquito night-fighter and light-bomber units were phased out by the end of 1948 in favour of single-seat Spitfires and Vampires. Equally, the Secretary of State for Air, Mr Arthur Henderson’s desire for an expansion of the AAF in 1949 that would have doubled its squadrons to forty, was rejected by the Air Staff on the grounds of there being insufficient recruits to man the existing twenty Auxiliary squadrons. Senior officers were concerned that a gulf existed

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\(^4\) It should be noted that from 1947 all aircraft mark numbers were expressed in Arabic numerals; this convention will be used here for the post-War era.


\(^6\) *Ibid*, pages 96 to 98.

\(^7\) *Ibid*, page 99.
‘between the man who can fly a modern fighter and the skilled pilot who can operate it effectively.’ In other words, they doubted the ability of the AAF to absorb sufficient training to become proficient on the more demanding fighter aircraft scheduled to be introduced into Fighter Command in the coming years - Hunter, Swift, Javelin and Sabre - a situation that was to come back and haunt the AAF in the mid-1950s. It was therefore against the background of a decline in national standing, severe financial constraint and concerns over the Auxiliary’s ability to provide an effective fighting force, that 604 Squadron was reborn in June 1946.

1946

When the Squadron was disbanded by Wing Commander Hughes at Lille/Vendeville in April 1945, it was understood by the Auxiliaries that the AAF would be reformed by the Government at the earliest opportunity. This point was reinforced by Group Captain Cunningham at the Squadron’s first reunion dinner at the Paviours Arms Hotel in Westminster on the 1st June 1946. In a short speech to the membership, Group Captain Cunningham announced the Squadron was to be reformed on the 15th May, and he had been invited to assume command as an Auxiliary officer in the rank of Squadron Leader - a task he would be pleased to undertake.

Owing to 604’s fine record as a night-fighter unit, it had been intended to reform the Squadron with Mosquito NF.30s in the night air defence role at Northolt. Unfortunately for the Squadron, the Civil Aviation Authority (CAA) chose to base their aircraft at Northolt and since there was insufficient room to accommodate the CAA unit and two Auxiliary squadrons, 601 and 604 were returned to their pre-War airfield at Hendon. Hendon’s shorter runways precluded the safe operation of Mosquitoes, forcing the Air Staff to allocate single-engined fighters to the Squadron in the form of the Spitfire LF.Mk.16e and a change of role to day-fighting. Accommodation at Hendon was to be shared with their pre-War Auxiliary comrades, No.601 Squadron, commanded by Squadron Leader, the Hon Max Aitken, DSO, DFC, MP and a communications flight of the Belgian Air Force.

Flight Lieutenant J.W.Simpson-Smith, OBE, a Regular officer, reported for duty with 604 at Hendon on the 11th June as Assistant Adjutant, to be

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8 Air Vice Marshal Douglas Macfadyen, quoted in Tony Freeman’s The Post-War Royal Auxiliary Air Force, page 100.
9 Squadron Leader Aitken was the son of Lord Beaverbrook and had served during the War as a night-fighter pilot, attaining the rank of Group Captain by its end.
joined on the 27th by the Adjutant, Flight Lieutenant Jeremy Howard-Williams, DFC, a former member of the Squadron who was granted a permanent commission at the end of the War. The new Adjutant was, as the ORB describes, ‘already … initiated into some of the characteristics of an Auxiliary squadron’ which it considered ‘possibly either a good or bad thing’ - given Howard-Williams’ exploits with aircraft-stealing in 1943, probably a bad thing from the Air Force’s view, as it showed a certain disregard for authority and an inclination towards youthful recklessness!

The principal problem at Hendon was accommodation. With the arrival of airmen and a Sergeant (Discipline), a start was made by everyone on painting and decorating what was to become the Orderly Room, the only habitable building in the ‘patch’ until the departure of the Belgians. In the meantime, letters and orders flooded in from No.65 (London Reserve) Group, the Squadron’s parent unit, to which the Adjutant was unable to respond owing to the lack of a typewriter - a problem that was quickly overcome by the acquisition of one by ‘private’ means, ‘after which the paper started to flow.’

The Squadron’s first aircraft, a pair of North American Harvard trainers, were delivered early in July, but with insufficient staff to undertake acceptance checks, both were pushed to the back of the hanger behind the Belgian aircraft and covered-up. It later transpired that neither Harvard was modified to the correct level and they were subsequently designated for disposal. A similar situation applied to the Squadron’s MT in the form of what was described as ‘an ancient wreck’, which was promptly condemned and, like the Harvards, pushed to the back of the hanger and forgotten.

As soon as 601 and 604 could muster eleven men, a cricket match between the two sides was arranged and took place on the 30th. 601 won convincingly by an innings and twenty-one runs, due in part to 604 only scoring fifty-three runs in their first innings to 601’s reply of 131.

By the 1st August with the posting-in of a permanent clerk, the Squadron was able to issue its own Personnel Operational Regulations and formally transfer the airmen from Station HQ to the Squadron’s ration strength. With very little in the way of operational equipment, the Squadron’s time was taken up in cleaning the airmen’s accommodation, gardening and the receipt and disposal of stores. The latter was the cause of some concern in relation to the need for proper stores accounting and location, since half of what was designated as 604’s space was still occupied by the Belgians. A similar situation was being experienced by 601, and permission was sought from Group to amalgamate both squadrons’ stores until such time as the Belgians departed. Receiving no satisfactory reply to their request, both squadrons took matters into their own hands and
amalgamated their stores by common consent. Formal approval was received later in the month.

On the 8th, a formal application from Wing Commander Keith Lofts, DFC*, to join 604 as one of its Auxiliary officers, was received from Group. Wing Commander Lofts was invited by Squadron Leader Cunningham to fill one of the two Auxiliary flight commander’s posts, a request he was pleased to accept. He had previously served with Nos.615 and 249 Squadrons during the Battle of Britain, was credited with eight-and-a-half enemy aircraft destroyed and later commanded Nos.340 and 66 Squadrons. Another of the Squadron’s key posts, that of Engineering Officer, was filled on the 15th with the arrival of Flying Officer Taylor, followed the next day by the delivery of a key piece of equipment, the Squadron car, driven by Flight Lieutenant Simpson-Smith. This vehicle, a Hillman Minx, was described as ‘a great advance on the last effort’. The Adjutant began a quest for the recovery of the Squadron’s silver with a visit to the Middlesex Territorial Association on the 23rd. In addition, he hosted several meetings with the Group’s Auxiliary Liaison Officer, Squadron Leader Daniel, its Flight Lieutenant (Organisation) and Squadron Leader (Equipment), in order to place the Squadron’s administration and organisation on a more formal footing.

Much of the spare time in August - and there was lots of it - was taken up in the organisation of a sports day in September, and participating in cricket matches. A team from the station played a combined team from the two Auxiliary squadrons on the 15th, which the Auxiliaries won by four runs, another on the 22nd that was lost due to bad weather and a third on the 27th, when 604 were beaten by 601 for the second time.

A resolution to the Harvard serviceability problem began to appear at the end of the month during a visit by Wing Commander Formby, the Chief Technical Officer (CTO) from HQ Reserve Command, who was able to clarify the engineering situation. There appeared to be no reason why the Squadron should not complete their acceptance checks on the two aircraft whilst awaiting the stores required to complete the modification programme. A start was made on the 29th when both aircraft were found to be serviceable and capable of undergoing an air test. It therefore fell to Flight Lieutenant Simpson-Smith to undertake the Squadron’s first post-War flight, which lasted forty-five minutes and included four landings and take-offs. The following day a normal Daily Inspection of the Harvards was carried out under the supervision of Flying Officer Taylor, who, in addition to his responsibilities as 604’s Engineering Officer, was assisting 601 in checking the modification state of their Harvards.
A second air test was completed on the serviceable Harvard on 2nd September, however, much as 604 felt that their aircraft was in full working order in compliance with the CTO’s requirements, questions were raised by Group as to the legitimacy of its flying. This may have had something to do with the delivery of a propeller for the Harvard on the 4th and a visit by the AOC to Hendon the following day. The new propeller was fitted and the engine run on the 9th, with satisfactory results, which, with the arrival of the correct type of grease four days later, enabled the aircraft to take to the air on the 13th. All appeared to be well and the aircraft undertook a second flight that day.

Heavy rain at the beginning of September quickly transposed the Squadron’s dispersal and barrack huts into a quagmire, which necessitated the digging of a drain to clear the CO’s office of water and divert it into the station drain. Further digging and trenching towards the middle of the month was required to complete the job, with the ORB able to report on the 20th that ‘the dispersal looks very much better’. The departure of some of the Belgians partially alleviated the accommodation problem, but left 604 with a ‘legacy of dirt’ to clear up.

As in the previous month, sport registered prominently in the Squadron’s itinerary. Station Sports Day on the 11th saw the two Auxiliary squadrons pitted against a combined Station HQ and MT Section, with the latter winning by three points. Two Squadron members, the Adjutant, Flight Lieutenant Howard-Williams and Aircraftsman Chowings, represented the station at Rugby, whilst Corporal Harrall did his bit for the Football XI. On the 19th a practise match between 601 and 604 concluded the month’s sporting calendar.

On the 25th the AOC No.46 Group carried out the Squadron’s first post-War AOC’s Inspection, with a parade and guard of honour and an inspection of the Squadron’s quarters.

Flying training finally got into its stride in October following repairs to Harvard FT342, a Mk.IIB, by a civilian contractor and a modification undertaken from the Squadron’s ‘private resources’. On the 7th, Flight Lieutenant Simpson-Smith took FT342 for an air test, but had to return early with low oil pressure. With the problem fixed, Flight Lieutenant Howard-Williams carried out his first solo later in the morning, which cleared him for a good deal of liaison flying to various stations around the Group in connection with his duties as Adjutant.

Following a meeting on the 16th at the Middlesex Territorial Association HQ, chaired by Brigadier Rackham, the Association’s secretary, and the CO, set a provisional date for recruiting as ‘sometime’ during November. Confirmation from higher authority was delayed until an announcement was
made in Parliament on the 5th November, when Friday the 8th was finally confirmed as the opening day for recruitment applications.

On the 18th, the Squadron was delivered the first of its operational aircraft, a Spitfire LF.16e. Derived from the earlier line of the famous fighter, the Spitfire 16 was powered by the Merlin 266 of 1,705-hp, a low altitude version of the two-stage supercharged Merlin 66, built by the American Packard Motor Company. In all other respects the Mk.16 was externally identical to the Rolls-Royce powered Mk.9, except in the later production versions which had clipped wings, a cut-down rear fuselage and ‘tear-drop’ cockpit canopy. Both aircraft had the universal wing mounting two 20mm Hispano cannon and four 0.5 inch (12.7mm) Browning machine-guns and provision for a rear fuselage fuel tank (sealed-off in Auxiliary service). Late production Mk.16s incorporated a more pointed fin and rudder. The type was optimised for low and medium-level operations up to 20,000 feet (7,000 metres), with its full-throttle altitude being 13,800 feet (4,210 metres), at which level it could achieve a maximum speed of 389 mph (625 km/hr) and maintain a rate-of-climb of 4,350 feet/minute (1,325 metres/minute). Maximum range was 980 miles (1,575 kms) with 130 gallons (590 litres) of fuel. The Vickers Armstrong’s Castle Bromwich factory built 1,055 Mk.16s, making it one of the more numerous marks available in the post-War era.

Although the Squadron was now in receipt of one Spitfire, it proved difficult to fly and maintain without the pilot’s notes and proper tools. To overcome some of these problems, the Adjutant visited HQ Fighter Command to obtain a copy of the pilot’s notes, before flying to de Havilland’s at Hatfield to acquire a Merlin spark plug spanner. Whilst in the air over Hatfield, the Adjutant encountered the CO flying a Vampire and in the ensuing one-sided ‘dog-fight’ the honours were accorded to Squadron Leader Cunningham. A further set of pilot’s notes and more detailed information on the Spitfire was obtained by Flight Lieutenant Simpson-Smith following a flight to Keevil in the Harvard. The first flight in the Spitfire was undertaken by Flight Lieutenant Howard-Williams on the 28th, closely followed by Flight Lieutenant Simpson-Smith the same day on a type familiarisation flight.

With the announcement of the reformation of the AAF in Parliament on the 5th November, Flight Lieutenant Simpson-Smith used the Squadron car

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to put up posters in the local area to drum-up recruits for 604. Applications to join the Squadron arrived on the morning of the 8th, with, as expected, most applicants wishing to fly! The weekend of the 10th was spent sorting applications and with the CO present, conducting interviews for the prospective members. On the 13th, Squadron Leader Cunningham accompanied by Flight Lieutenants Lofts, Howard-Williams, Simpson-Smith and the Squadron Intelligence Officer, Flying Officer Rawnsley, visited THQ with Captain Wise of the TA, to apportion the building and conduct further interviews. They were accompanied by Squadron Leader Peter Howard-Williams, the Adjutant’s brother, and Flight Lieutenant Spooner of 601 Squadron with Flight Lieutenant Ford of the Air Training Corps (ATC), to apportion the building and conduct further interviews. Recruiting and interviewing continued throughout the remainder of the month, by which time the Squadron had processed in excess of 100 officer pilot applications, thirty NCO pilots and barely thirty airmen - a bias perhaps towards ‘Chiefs’ as apposed to ‘Indians’ in the post-War AAF!

Practise parades for the AOC’s inspection began on the 19th. A dress rehearsal held on the 26th, followed by an inspection of the barracks and the execution of many domestic tasks went on well into the evening. The next

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11 Jimmy Rawnsley retired from the RAF at the end of the War following service with No.85 Squadron, where he once again flew with Group Captain Cunningham, and the FIU. Post-War he joined Flight Refuelling at Tarrant Rushton, Dorset, as an advisor on interception problems relating to in-flight refuelling.
day, in good weather, the AOC No.46 Group, inspected the Squadron and declared himself pleased with its state before giving everyone on the station the afternoon off. Whilst the officers celebrated until the ‘wee small hours’ of the 28th, the Adjutant journeyed to London to interview further candidates. The interviews, according to the ORB, ‘went with an unaccustomed swing’, unfortunately ‘the documents relating to the various persons interviewed were promptly lost.’

On the 29th, Flight Lieutenant Howard-Williams, accompanied by LAC Fothergill, flew Flight Lieutenant Crofts’ de Havilland Cygnet on an air test. Flight Lieutenant Simpson-Smith in the Squadron Hillman drove alongside the Cygnet and measured its take-off run at 400 yards (365 metres). The Squadron’s second Spitfire, ‘681, was air tested on the morning of the 30th by Flight Lieutenant Simpson-Smith.

604’s first post-War ‘Squadron Formation’ - if two aircraft can be called a ‘formation’ - was flown by Flight Lieutenants Howard-Williams and Simpson-Smith in the two Spitfires on the 1st December, with the former adopting a new technique by landing the aircraft sideways, fortunately with no damage to man or machine. On the 6th, Flight Lieutenant Simpson-Smith flew Spitfire ‘NG-X’ to Coningsby, Lincs, to have the aircraft’s rear fuel tank drained and probably sealed.12

Bouts of poor weather and aircraft unserviceability from the 5th interrupted the flying programme. Recruitment interviews and medicals, a concerted attack on the paperwork that continued to flow in from the ‘Whitehall Warriors’, and a house-warming party for the Ladies’ Room at THQ, to filled the available time. In the search for more recruits, hopefully for ground crews, Flight Lieutenants Howard-Williams and Simpson-Smith visited the Secretary of the 604 Squadron Old Comrades Association with a view to organising a reunion dinner, as this would provide an opportunity to persuade old members to return to the service as Auxiliaries. On the 22nd, the Squadron closed down for its first Christmas leave since 1944.

1947

The new year opened with a whimper and not a bang. Much of January was taken up with interviewing prospective officers and airmen for posts within the Squadron. A number of officers, warrant officers and NCOs were interviewed for pilot vacancies and the posts of Administration, Engineering and Equipment Officer by Squadron Leader Cunningham, Flight

12 Jack Meadows, who flew Spitfire 16s post-War as an Auxiliary officer does not recall the rear fuselage tank ever being used.
Lieutenants Lofts and Coltart and Flying Officer Rawnsley. Two, Messrs Gilbert and Deytrikh, are recorded as being accepted for officer flying duties. The interviews were conducted at Hendon and at THQ. By the end of February well over 100 applications had been received for pilot vacancies.

During February, the Squadron was advised there were two possible airfields that might be suitable as bases for 604. Looking towards the future and jet flying, both locations, North Weald and Bovingdon, Hampshire, were permanent RAF stations with concrete runways. The CO agreed both would prove suitable from the flying viewpoint. From the point of view of travelling, however, they would be unacceptable because of the distance involved in conveying the Squadron personnel from North London, where they were recruited and lived, to Essex or Hampshire. Nevertheless the CO did undertake an aerial reconnaissance of both airfields.

The commissioning of pilots limited flying to a few officers until something was done to speed up the process. For example Flight Lieutenant Lofts who was acting as OC ‘A’ Flight and was actively involved in the recruitment process, did not receive his commission until the 19th April. To overcome the delay it was agreed to enlist the pilots as AC2s and promote them to the ranks specified when their records came through. To which, AC2 Goodman (ex-Flight Lieutenant) was the first pilot to receive dual instruction on the Harvard, when he flew one hour and twenty minutes circuit ‘bashing’ on the 27th April.

On the 15th May, the AOC-in-C Reserve Command, Air Marshal Sir Alan Lees, KCB, CBE, DSO, AFC, began a three day inspection of Nos.601 and 604 Squadrons at Hendon and the THQ building which they shared, and where Sir Alan was met by the two Adjutants, Flight Lieutenants Peter and Jeremy Howard-Williams. The morning of the 17th was spent lining up the aircraft for the afternoon’s inspection. This was undertaken by Sir Alan, in company with Air Commodore E.D.H.Davies, CBE, the AOC No.65 Group, Group Captain A.M.Rogers, the Station Commander at Hendon, Wing Commander Bowes, DFC, and Squadron Leader Shirreff of No.65 Group staff. They were met by Squadron Leader Cunningham before carrying out their inspection of the aircraft and Auxiliary personnel, drawn up in one flight, and the regular airmen, paraded as a second. The AOC-in-C spent some time talking to the nine Auxiliary officer and airmen pilots present, before proceeding to discuss the day-to-day problems and progress in re-establishing the Squadron with the Regulars. A planned Spitfire escort for

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13 Flight Lieutenant ‘Benny’ Goodman had flown with Bomber Command during the War, earning a DFC before joining the AAF. After service with 604 Squadron he transferred to the Regular Air Force and later retired as a Group Captain.
the AOC-in-C’s Avro Anson C.19 from Hendon to Biggin Hill and Hornchurch on the 18th had to be cancelled due to poor weather conditions. At the end of the month, notification was received of the Auxiliary commissions for Flying Officer Ellis Aries, AFC (General Duties - GD) and Flying Officer Rawnsley (Intelligence). Those for Flight Lieutenant Brown (Admin), Flight Lieutenant ‘Charlie’ Zorab (Equipment), Flying Officer Colin Hodgkinson (GD) and Flying Officer Detrikh (GD) arrived in June. The Squadron took delivery of its thirteenth Spitfire 16, RW439, on the 22nd June.

Two more pilots were added to the flying roster with the commissioning of Flying Officers Gilbert and Russell in June and Flying Officer Hodsman in August. The problems with commissioning and the delays in the training programme, coupled with the longer days of summer, brought about the introduction from the 13th August of flying on Wednesday evenings to ease the burden at the weekends. The Squadron was advised that the Manor House at Stanmore might provide a suitable THQ for 604. Although described as a ‘lovely house’, it was nevertheless inaccessable by public transport and some distance outside town. However, after two inspections by the Adjutant, the Squadron was advised on the 4th September that the Manor House was to become their second THQ. Arrangements were quickly put in place to prepare the Manor House for seven weeks of recruiting organised by the Middlesex Territorial Association, with the AAF being allocated the first week beginning on the 7th.

Following a parade and a march to the Odeon Cinema, where the Adjutant addressed the audience from the stage and showed a short recruiting film, a loudspeaker van toured the local district in an effort to persuade the civilian population to join the Royal Auxiliary Air Force (RAuxAF). The Adjutant also attended meetings of the Local Employers Recruiting Committees at Harrow and Uxbridge, supported by Flight Lieutenant Simpson-Smith touring Edgware, Stanmore, Kingsbury, Cricklewood and Kilburn in the loudspeaker van. In the middle of the recruiting week, when the Squadron was fully committed to its task, it was required to provide a guard of honour on the 11th for the AOC-in-C Transport Command, Air Marshal Sir Ralph Cochrane, who was returning to Britain after observing a Command exercise. A flypast over the Mill Hill Barracks by three Spitfires from 604, scheduled for the 12th, in support of the TA, had to be cancelled due to bad weather. The following day, five

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14 By order of HM King George VI, the AAF was retitled the Royal Auxiliary Air Force on 6th September 1947.
15 The depot of the Middlesex Regiment.
Spitfires flew to London Airport to form part of the static display and were persuaded to carry out a flypast in the afternoon. A planned formation flight to Turnhouse (Edinburgh) on the 19th by ten Spitfires flown by Auxiliary pilots, accompanied by the two Harvards flown by Regular officers, to attend the station’s Battle of Britain celebrations, had to be cancelled once again, due to poor weather. This must have been a great disappointment, as not only had the pilots already reported-in at Hendon, it would also have been the Squadron’s largest formation to date and the furthest distance flown.

Flight Lieutenant Attrill, the replacement for Flight Lieutenant Taylor as Engineering Officer, arrived on the 1st October in time to attend a cocktail party at the new THQ on the 11th, overseen by the AOC-in-C Fighter Command, Air Marshal Sir James Robb, KBE, CB, DSO, DFC, AFC, the AOC 65 Group, the Chairman and Secretary of the Middlesex Territorial Association and the station commander. The ORB records this event as being ‘extremely successful’, so it may be assumed that a good time was had by all. Later in the month, ex-Flight Lieutenant Tony Nordberg, the Adjutant’s navigator from 1942 to 1943, presented the Squadron with a candelabra to light its way in THQ.

On the 18th, a beginning was made on the organisation of some form of operational training. A planned Battle Exercise involving No.615 (County of Surrey) Squadron, based at Biggin Hill, had to be cancelled due to bad weather over 615’s base. However in the afternoon, six Spitfires of 604, protected by four from 615 providing top cover, were ‘attacked’ by eight aircraft from 601 over Tilbury. 604 joined Fighter Command’s exercises with the Royal Observer Corps (ROC) and began the first practices in ground controlled approach (GCA) training at Bassingbourne, Cambs, during November. In order that the Squadron’s flying training be brought in line with that of the Regular RAF, an objective was set, probably by Group, to have all Auxiliary pilots tested at the earliest opportunity for their ‘Green Card’ instrument rating. A start was made in December, when the Transport Command Examining Officer, Flight Lieutenant Pearce, gave a series of lectures on instrument flying and procedures at Hendon.16

Poor attendance at THQ in the weekday evenings for lectures and training, due, it was thought, to difficulties getting to Stanmore by public transport. It was hoped to alleviate this by relocating the meetings to

16 In order that Fighter Command might become an ‘all-weather’ force, two instrument ratings were introduced. The Green Card for experienced pilots with a tighter test, which allowed the holder to fly entirely at his own discretion in any weather and a White Card for everyone else. Pilots were required to hold one or other of the cards.
Hendon, where the station commander made a lecture room available to the Squadron. The lecture facility at Hendon failed to reverse the attendance at evening parades, scheduling a return to THQ in the New Year.

1948

Squadron Leader Cunningham’s commitment to test flying following his return to de Havilland’s at the end of the War had risen significantly with the death of Geoffrey de Havilland, the Company’s chief test pilot in September 1946, and his promotion to fill the gap. His job as chief test pilot required him to manage the Company’s flight test programme (DH 108, Vampire, Venom, Dove, Heron, Hornet and Sea Hornet and Chipmunk) and its twenty test pilots, in addition to providing input to the DH 110, later the Sea Vixen, and Comet projects. Early in January 1948, Squadron Leader Cunningham stood down as 604’s CO in favour of Flight Lieutenant Lofts, who was promoted to Squadron Leader.

The Squadron settled down in the winter and early spring of 1948 to a regular pattern of flying and operational training and continued practise for Green Card ratings. The operational training comprised two/three Spitfire ‘scrambles’ as a Battle Flight to 30,000 feet (9,145 metres) to practise interception techniques, cross-country flights by three or more aircraft, GCA landings and AA co-operation exercises. By February sufficient expertise had been gained for the Assistant Adjutant to consider a flight to the Continent, for which purpose he undertook a ‘recce’ on the 26th to survey a possible route (Hendon, Saint Omer, Dunkirk, Calais, Manston and back to Hendon). The following month three aircraft flew the route as a cross-country exercise, marking the Squadron’s return to Continental airspace since its days at Lille/Vendeville in April 1945.

Whilst much of April and all of May were spent preparing for the Squadron’s first post-War Summer Camp at Thorney Island, Hants, the Squadron found time to welcome its first CO, Group Captain Alan Dore, DSO, TD, DL, who visited THQ on the 11th April. It had been intended that some of the ground crews would depart Hendon as an ‘Air Party’ on the 29th May, but poor weather intervened to cause a postponement to the 30th. The main ground party, travelling by road, arrived at Thorney Island that evening, where they were able to settle into their billets and be ready to accept their aircraft the following day. On the morning of the 30th, nine Spitfires took-off in a practise Squadron scramble from Hendon, before arriving at Thorney Island in good time for lunch and a welcome from their ground crews. The Squadron’s three Harvards and its twin-engined Oxford
arrived later in the day. Apart from the Squadron Oxford collapsing on its undercarriage in front of the hangers, the deployment went well. The following day was devoted to Sector Reconnaissances to familiarise the pilots with the airfield and the surrounding countryside.

The Summer camp provided the Squadron’s air and ground crews with an opportunity to improve their flying skills and prove their proficiency in ground support. Operations on the first day of June, were dedicated to formation flying, during which two Spitfires were damaged in a collision whilst taxiing. The reasons, or causes of which are not known. Poor weather restricted flying to the morning on the 2nd, during which formation flying was enlivened by a series of practise attacks, before standing down at 1230 hours in good time for a cricket match with Littlehampton Town, which the Squadron won by four wickets. The following day, 604 operated under the guidance of the Sector Controller at Sopley, 604’s wartime ‘Starlight’ GCI station, which vectored a section of four aircraft to intercept Spitfire F.22s of No.504 (County of Nottingham) Squadron over Hampshire. That evening a very successful all-ranks dance was held in Chichester. On the 4th, seven Spitfires from 601 Squadron arrived at Thorney Island to practise formation
flying in preparation for their appearance with 604 at the Gatwick Flying Display on the 10th July. That afternoon, twelve Spitfires drawn from Nos.601 and 604 Squadrons flew a practise formation over the airfield. From June 1948, 601 was commanded by Squadron Leader Hugh ‘Cocky’ Dundas, DSO*, DFC, the air correspondent of the Daily Express.

Operational training, in the form of air-to-air gunnery, began on the morning of the 5th, with three aircraft taking their turn on the drogue. No hits were obtained before the towing aircraft became unserviceable. Air experience flights continued throughout the morning, giving those airmen who wished to, the opportunity to fly in one of the Squadron’s three Harvard trainers. At 1230 hours flying ceased and the Squadron stood down for a weekend of cricket (the airmen beating the officers by four wickets) and the traditional cocktail party in the Thorney Island Officer’s Mess. Air-to-air gunnery recommenced on Monday the 7th, with advice being provided by the Reserve Command’s Gunnery Officers, Squadron Leader Dickensen and Flight Lieutenant Doe. The actions of these two officers must have had some impact, as the first 604 pilot succeeded in hitting the drogue that afternoon, whereupon, apart from interruptions due to bad weather and/or poor aircraft serviceability, the majority of the aircrews were able to strike the target at least once by the end of the Camp.

On the 11th, the six pilots chosen to participate in the Gatwick Air Display gave a demonstration of their expertise to the AOC of No.65 Group, Air Commodore E.D.H.Davies, CBE, who later inspected the Squadron. Unfortunately one of the Squadron’s Harvard trainers swung on take-off and crashed, damaging the aircraft, but not the occupants. That evening the Squadron’s officers dined Squadron Leader Cunningham and Flying Officer Rawnsley out of the RAuxAF at a dinner in the Officers’ Mess. The current CO, Squadron Leader Lofts, presented them with tokens of 604’s appreciation from all ranks, past and present. The following day, the Squadron returned to Hendon, having accomplished 122½ flying hours on the Spitfire in 152 sorties, and seventy-one hours in ninety-eight sorties on the Harvards.

As scheduled, on the 10th July, six Spitfires from 604 Squadron took part in the Gatwick Air Display, where they gave demonstrations of formation drill to the assembled multitude.

Green Card pattern practise continued apace during August and September, with a number of pilots approaching the required standard, despite problems with aircraft serviceability and a shortage of Harvard trainers for dual instruction. Success was achieved on the 28th October when
Pilot One (P1)\textsuperscript{17} Goodman passed his Green Card Test, the first pilot in the RAuxAF to achieve this standard. Flying Officer Russell successfully passed his test on the 31\textsuperscript{st}.

Earlier that month Viscount Templewood,\textsuperscript{18} the Squadron’s honorary Air Commodore, visited Hendon to watch an air display given by five of 604’s Spitfires. No longer active in politics, Lord Templewood divided his time between presiding over the Lawn Tennis Association, the Howard League for Penal Reform, he was a strong opponent of capital punishment, and the Chancellorship of Reading University. He died in 1959 aged seventy-nine, having outlived the Squadron by two years.

Manor House proved to be something of a problem as an Auxiliary THQ, prompting the Middlesex Territorial Association to cast around for more accessible premises. On the 8\textsuperscript{th} December, the CO, the Adjutant, along with representatives from No.2604 Squadron, RAF Regiment and HQ No.65 Group, visited the HQ of No.28 Group at 17/19 Queen’s Square, London, WC1, with a view to taking it over as 604’s THQ. The negotiations for this building were destined to drag on well into the New Year and would ultimately prove unsuccessful.

Another landmark was reached on the 12\textsuperscript{th}, when the Squadron participated in its first GCI exercise as a unit of Fighter Command, operating as a squadron in the Metropolitan Sector.

It being the Christmas period, much time was taken up with social events: the All-Ranks Christmas Party on the night of the 11\textsuperscript{th}, was followed by the Squadron Dance at the Wembley Town Hall in conjunction with 3604 Squadron, ATC, 2604 Engineering Echelon and the Royal Air Force Association on the 16\textsuperscript{th}. The Squadron stood-down for Christmas leave on the 24\textsuperscript{th}.

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The Squadron’s new Adjutant, Flight Lieutenant R.H.Crompton, reported for duty on the 4\textsuperscript{th} January in preparation to takeover from Flight Lieutenant Howard-Williams who was posted to a Regular RAF unit.\textsuperscript{19} It was thanks to

\textsuperscript{17} In July 1946 new categories of rank for NCOs air crew was introduced by the Air Ministry. Flight Sergeant pilots were regraded to P1 and sergeants to P2. The scheme proved to be unpopular and was abolished in August 1950 when the old ranks were reinstated.

\textsuperscript{18} Sir Samuel Hoare was raised to the peerage as the 1\textsuperscript{st} Viscount Templewood in 1944.

\textsuperscript{19} Following his departure from 604 Squadron, Jeremy Howard-Williams served in Singapore, Germany and finally as Assistant Air Attaché at the British Embassy in Paris. He retired from the RAF as a Squadron Leader.
Flight Lieutenant Howard-Williams’ administrative expertise and his access to private channels when things went wrong, that ensured the Squadron’s return to the post-War RAF was made as trouble free as possible. Indeed, it might be worth remarking that Jeremy Howard-Williams’ unconventional approach to service life was altogether reminiscent of the Auxiliary tradition. Flight Lieutenant Simpson-Smith remained in his post as Assistant Adjutant.

With a growing number of pilots receiving their Green Cards, six, including the OC ‘A’ Flight, by the end of January, there were sufficient crews to participate in regular RAF exercises and operational training. Over two weekends in January, Reserve Command arranged for 604’s participation in two sector air defence exercises - one in the Eastern Sector and the other in the Metropolitan - and air-to-ground gunnery practise on the Bradwell Bay Gunnery Range. The standard of controlling was reported as being ‘reasonably good’ on one weekend, whilst the Bradwell Range Controller described 604’s gunnery as ‘excellent’. On the 17th, Flight Lieutenant Simpson-Smith and P1 Goodman flew a Harvard to the British Air Forces of Occupation (BAFO) station at Wahn, West Germany, to assess the feasibility of future cross-country exercises to the base. They reported the technical and domestic facilities as being ‘beyond reproach’. The only problem likely to be encountered was that of aircraft endurance and need for the fitting of long-range drop-tanks to the Spitfires, the search for which was promptly initiated.

On the 25th, the CO and the Adjutant visited Viscount Templewood to discuss the situation concerning the Squadron’s responsibilities towards those demobilised National Service pilots who had completed their basic flying training with the Regulars and wished to qualify as pilots with the Auxiliaries. National servicemen who wished to be considered for flying training, did so on the condition that, on the completion of their Regular service, they signed-on with the RAFVR or the Auxiliaries. The scheme was implemented in 1949, but it was not until 1950 - 1951 that the first of the national service Class H pilots emerged from the Regular Air Force to join the RAuxAF. The 1948 National Service Act specified that Class ‘H’ reservists were liable to be recalled for training in the event of an emergency. However, unlike the Army, the RAF rarely implemented this policy, preferring instead to release them from military service once they had completed their full-time commitment. This half-hearted approach on the part of the Air Ministry did little to assist the Auxiliaries in completing the training of National Service pilots and recruiting them to the RAuxAF.

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20 Jeff Jefford [2], op cit, pages 82.
In order to assess for themselves the feasibility of a deployment to BAFO, the CO and the Adjutant flew to Wahn, via Eindhoven, on the 3rd February, whilst the Assistant Adjutant attended a meeting at HQ 65 Group to be advised that Nos.601 and 604 Squadron would transfer their operations from Hendon to North Weald in the near future. It was proposed that both Squadrons make their preparations for operations from North Weald by the 1st April, provided that Fighter Command had flying control and other equipment in place by that date. It was also announced that Fighter Command was to take over all responsibility for GCI exercises prior to its absorbing the fighter squadrons from Reserve Command on the 1st March. This change was initiated following the ‘wash up’ after Exercise DAGGER on the 3rd - 9th September 1948, which showed that, whilst the Auxiliary squadrons were administratively responsible to Reserve Command, their operational procedures differed from those employed by Fighter Command in whose area they worked. The subsequent loss of inter-Command co-ordination was serious enough to warrant the transfer of the Auxiliary air defence squadrons to Fighter Command, thus righting the original decision and restoring the Auxiliary squadrons to their proper place as an integral part of the front-line defence of Great Britain alongside the Regular Air Force. With this in mind, the remainder of the air exercises were observed by officers from HQ Fighter Command, in preparation for 604 coming under the operational control of HQ No.11 Group’s Metropolitan Sector on the 1st March.

On what was to prove to be the Squadron’s last official visitor at Hendon, the Secretary of State for Air, The Right Honourable Arthur Henderson, KC, MP, inspected 604’s hanger and barrack block before speaking to the Regular and Auxiliary personnel and lunching in the Officers Mess with Viscount Templewood and the AOC No.11 Group, Air Vice Marshal S.F.Vincent. Throughout the remainder of the day, the Squadron flew a number of exercises with the Metropolitan Sector, which the officers from No.11 Group thought ‘better controlled and of more value to the pilots’ than previous exercises.

During March, Ian Ponsford, a future flight commander, who had previously flown the Merlin engined Spitfire Mk.IX and the Griffon powered Mk.XIV with No.130 Squadron during the War, and had been

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21 Prior to the decision to reactivate North Weald as a flying station, the airfield had been used as the base for No.9 Personnel Despatch Centre and consequently had no flying control facilities.

22 Exercise DAGGER was the first major post-War air defence exercise that included participants from Bomber, Coastal, Training and Reserve Commands, the USAF, Anti-Aircraft Command and the Royal Observer Corps.

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awarded the DFC, joined the Squadron. From his home in Highgate, North London, Ian had been able to watch the Spitfires of 601 and 604 Squadron in the circuit at Hendon, but it was not until the completion of his legal studies in 1949 that he was able to join 604. His application was accepted, and he reported to Hendon alongside another pilot and future CO, Tommy Turnbull. ‘Rather to my surprise’, writes Ian:

‘I found that the renewal of association with the Spitfire was less of a step into the unknown, but rather the feeling of rejoining an old friend, and after a few minutes in the cockpit, all seemed familiar ….. We were extremely lucky to be equipped with ….. the Mk.XVI which had not undergone the rigours of action during the War, and as a result we had few cases of unserviceability ….. Due to the varied background of experience of the Squadron, ….. the task of getting the various skills to merge into a day-fighter unit was interesting, and sometimes rather startling. A few of the pilots had the necessary skills to adapt quickly and easily. For some, the concept of a “Spitfire approach and landing” came as a daunting exercise, involving as it did a curved approach with wheels and flap down, until the aircraft was kicked straight by the use of the rudder pedal to coincide with touch down. Due to the length of the nose of the Spitfire, the ground immediately ahead and below was, in effect, blanked out. As a result, in order to ensure that the runway ….. was kept in full view on the final approach, a curved approach was practised - thus ensuring that there were no obstructions on the runway. Soon after arriving at Hendon ….. I was surprised to observe a Spitfire making a long low, straight in, bomber-like approach to land; whether this was one of 604 Spitfires, or from 601, who shared Hendon with us, I did not enquire.’

In preparation for the move to North Weald, the Adjutant, Assistant Adjutant, the Engineering Officer and senior NCOs visited North Weald on the 10th March to view the airfield, hangers and domestic facilities and allocate officers and airmen’s accommodation in preparation for the move. On the 16th, the Squadron received its operational orders for the move, enabling the Adjutant to complete his arrangements for an Advance Party under the Assistant Adjutant and the Engineering Officer. These were to be in place at North Weald over the weekend of the 23rd/24th, to receive the

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Main Party and supervise the unloading and storage of equipment. By the evening of the 23rd the Equipment, Instruments and Photographic Sections, the Armoury and half of the Orderly Room were in place at North Weald. Thanks in no small measure to the Movement Control Officer, London Region, this part of the move was safely accomplished, whilst a full flying programme was flown at Hendon.

On the morning of the 27th, the Squadron’s aircraft, twelve Spitfires and three Harvards, were drawn up in two ranks on either side of the taxi track outside 604’s hanger at Hendon, where the pilots and their aircraft were photographed. Following the pilot’s briefing session, the Spitfires took-off at 1445 hours to assemble over Hatfield before overflying Hendon in formation at 1,000 feet (300 metres), closely followed by two Harvard’s. Those pilots not on the flying roster that day were transported in an Anson of No.31 Squadron to North Weald. That evening the Squadron’s aircraft and pilots were safely quartered in their new accommodation on the Essex airfield.

The following day the Squadron ‘marched out’ of Hendon and along with the Main Party proceeded to North Weald, leaving behind one Harvard that had no R/T set to be collected later with the instructional Spitfire. According to the ORB the move was duly completed without, ‘generally speaking ….. a hitch’, except for a mass of paperwork that would take some time to sort out!

For the first time, apart from War, the Squadron did not stand-down at Easter, there being too many things to deal with and simultaneously maintain a full flying programme. Indeed, the weather over Easter was exceptionally good, enabling the Squadron to fly forty-one Spitfire sorties engaged in air-to-air firing and cross-country exercises. In celebration of May Day the Squadron attended a large parade in the Kingsbury area of London, with a trailer and five airmen (lucky them) for the drive-past and a formation of six aircraft to overfly the saluting base. On the 3rd May, a start was made in extending Runway 21 at North Weald to 2,000 yards (1,830 metres), with completion of the first phase being scheduled for the 31st July. Normal flying continued, with P2 Ian Ponsford making his first solo flight in a Harvard on the 7th and the Squadron overflying Alexandra Palace, South London, the following day when the AOC was inspecting a squadron of the ATC. The first AOC’s Inspection at North Weald took place on the 14th, when the AOC No.65 Group inspected the Regular and Auxiliary

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24 In reality the organisation of the move from Hendon to North Weald would have been completed some time before the ‘official’ orders arrived from Group.
25 One remained at Hendon for collection at a later date.
personnel drawn from Nos.601 and 604 Squadrons, followed by a tour of their hangers, aircrew rooms and barrack blocks. The event concluded at 1645 hours with a fly-past by the two Squadrons led by their respective COs. On the conclusion of his inspection the AOC ‘appeared pleased with all he saw’. With the Summer Camp at Tangmere beginning at the end of the month, and the Squadron stood down for the preceding weekend, the last weekend exercise with the Metropolitan Sector took place on the afternoon of the 15th. 604 flew a ‘sweep’ from North Weald to Chelmsford, Southend and West Malling to provide interception practise for Nos.500, 600 and 615 Squadrons and the Sector’s controllers. In the latter part of the afternoon, the roles were reversed to enable 604 to intercept the ‘force’, during which four ‘kills’ were claimed. The ‘scribe’ for the ORB appears unimpressed by the day’s performance, reporting that ‘the exercise as a whole ….. was marred by very poor controlling and a disregard of the correct R/T procedures at the Ops Centre.’

Preceded by the Adjutant, who flew to Tangmere to complete the final arrangements for the Squadron’s deployment, the Advance Party for the summer camp left North Weald in the charge of Flight Sergeant Steer on the 25th May. With the Auxiliary personnel arriving bright and early at North Weald on the 27th to begin packing, progress with the movement of the Main Party went well until the ‘transport’, in the form of a 32-seat coach, ‘failed to put in an appearance’ on the 28th, due to an oversight on the part of Movement Control. It was discovered that the coach had not been ordered,
leaving the Assistant Adjutant to deal ‘with a horde of angry airmen’ and arrange alternative transport. ‘As a result of the bungling it was well nigh midnight before the last men arrived at Tangmere.’ After unloading the vehicles and settling in, the Squadron was stood down until 0530 hours the following morning, the 29th. Thanks to the efforts of Flight Lieutenant Markham and Flight Sergeant Abbott, the Squadron’s aircraft were available for operations on the morning of the 30th, the first full day of the camp, when flying was restricted to Sector Recce’s and air-to-ground firing on the Chesil Bank Gunnery range.

On the 1st June, P1 Ponsford flew his Spitfire solo, whilst the Squadron practised formation flying in preparation for the AOC-in-C’s inspection on the 3rd. With the day dawning ‘dark and dull’ on the morning of the 3rd and the non-availability of the AOC-in-C Fighter Command, Air Marshal Sir Basil Embry, the inspection of the Squadron fell, once again, to Air Commodore Davies, AOC 65 Group, who inspected the Auxiliary Guard of Honour and 604’s personnel. The flypast was cancelled ‘owing to inclement weather’. On the 5th, the Squadron led by the CO overflew London in support of the Chief of the Imperial General Staff, Field Marshal Sir William Slim, who was taking the salute at a drive-past of the Middlesex Territorial Forces (Operation VOLUNTEER). Having obtained the necessary clearances, the Squadron flew a number of cross-country sorties over the Continent on the 7th - St Catherine’s Point to Cherbourg and Calais to Dover, thence back to Tangmere after refuelling at Manston. It was also planned that a number of pilots would have been given the opportunity to practise air-to-air firing, but the towing aircraft based at Thorney Island went u/s. With only two days of the camp remaining, the air-to-air firing was ‘dogged by ill luck’ due to poor visibility, which prevented the pilots seeing the towing aircraft flying some ten miles (16 km) off the south coast and rendering gunnery ‘hazardous’. So the Squadron did what they did best on these occasions, they played cricket against a Thorney Island XI and held a dance in Chichester that was organised very successfully by Flying Officer Aries.

Preparations for the return to North Weald began on the morning of the 10th, during which the Squadron ‘was treated to a display of aerobatics’ by Major Robin Olds, United States Air Force (USAF),26 the CO of No.1 Squadron flying a Meteor F.4. The ORB comments ‘it was a wonderful

26 Later Brigadier-General Robin Olds, who had a distinguished career in the USAAF and the USAF flying P-47 Thunderbolts in World War Two and F-4 Phantoms in Vietnam. He commanded No.1 Squadron from March to October 1949 on an exchange posting with the RAF.
show, fully emphasising the speed and power of the Meteor aircraft and in particular the ability of the pilot’. The Main Party left Tangmere the following day at 0930 hours to return to North Weald, with the Air Party diverting to visit No.607 (County of Durham) Squadron at Ouston to avoid clashing with 601 Squadron who were flying from North Weald to take 604’s place at Tangmere. All aircraft arrived safely at North Weald by 1700 hours. The final days flying brought the total for the Summer Camp to more than 350 hours, that was:

‘a tribute to the ground crews for maintaining such first class serviceability and to the aircrew for getting airborne with the least possible delay. In addition a large ground subjects lecture programme had been completed, which will assist materially in bringing u/t (under-training) tradesmen up to reclassification standard.’

On the 25th June, the Squadron participated in Operation FOIL, a combined exercise involving air forces from all the nations of the Western Union. In preparation for the exercise, an Ops Room was installed at North Weald. 604 undertook its first FOIL scramble in the early afternoon of the 25th, when a B-29 of the USAF and four Wellingtons were intercepted, the latter gaining the Squadron a mention on the BBC. The 26th was marred by the crash-landing of the CO at Manston with engine failure after taking off from North Weald. Fortunately Squadron Leader Lofts escaped without injury, however, the same could not be said of his aircraft which was declared a probable ‘write-off’.

Operation FOIL continued unabated until the 3rd July, with 604 participating at the weekends in further interceptions in support of UK air defence and earning a commendation alongside all the Auxiliary squadrons from the AOC-in-C Fighter Command:

‘The co-operation of your squadrons and the number of Fighter Command unit personnel in exercise ‘Foil’ has been splendid and in the highest tradition of the Royal Auxiliary Air Force. Please convey my thanks and congratulations to all who took part for their work and particularly to those who unselfishly came long distances to co-operate.’

The exercise was concluded on the 3rd when the Squadron entertained Viscount Templewood, the Chairman and Committee of the Middlesex Territorial Association, Air Commodore David Atcherly and Group Captain Cunningham, closely followed by the CAS, MRAF Lord Tedder, who spoke to the pilots and ground staff before leaving North Weald.

On the 7th July the Squadron was advised that its Assistant Adjutant, Flight Lieutenant Simpson-Smith would be standing down on posting to No.64 Group and promotion to Squadron Leader. His place as Assistant Adjutant and Training Officer was to be taken by Flight Lieutenant Harris, DFC, who was undergoing Qualified Flying Instructor training at Little Rissington.

In September the Squadron learned it was to convert to the de Havilland Vampire after participating in the annual Battle of Britain Display at Biggin Hill in company with Nos.600, 601 and 605 Squadrons, during which Squadron Leader Lofts and Flying Officer Hodgkinson flew the last solo performance in the Spitfire on the 6th. The aircraft establishment was to comprise ten Vampire F.3s and two Meteor T.7s, in addition to the three Harvards for initial flying training. The replacement of a section of the new runway at North Weald necessitated the delivery of the Meteors to West Malling where the conversion of Nos.601 and 604 Squadrons was to begin from 1st October. Over the weekend of the 8/9th October, the Squadron formally bade farewell to their old Adjutant, the now Squadron Leader J.Simpson-Smith, MBE, DFC, at an official party. The following weekend a group of nine prospective pilots were interviewed at North Weald, with Flying Officers Allen and Dempster being selected and invited to join the Squadron.

The jet conversion programme began in earnest on the 13th October when a ground party under the command of Flight Lieutenant Harris went to West Malling to familiarise themselves with the Meteor. The honour of the first conversion went to Flight Lieutenant Harris who completed the ‘course’ on the 17th before returning with one of the Meteors to North Weald. By the end of the month, fifty-two sorties had been flown on the Meteor.

Gratifying news was received on the 27th, when the AOC announced that 604 had, for the third time, won the Esher Trophy for Auxiliary efficiency, with another 65 Group squadron, No.600, taking second place. On the Sunday morning of the following weekend, the 30th, Squadron Leader Lofts addressed a parade of all airmen to congratulate them on their efforts in winning the Trophy, which reflected great credit on all ranks, both Auxiliary and Regular. The Trophy was ‘liberated’ from the current holders, No.603
De Havilland Vampire F.3 of 604 Squadron. VF329 was part of a batch of F.3s built by English Electric at Preston, Lancs, between April 1947 and May 1948. Note the Squadron badge below the windscreen, the acorn fairings on the tail and the characteristic de Havilland shaped fins (Derek Dempster).

Squadron, by Flying Officers Gillet and Russell, who flew to Turnhouse to collect it and return it to North Weald.

From the 1st November 1949, No.604 Squadron, along with all the Auxiliaries, formally ceased to report to Reserve Command and became an integral part of the Metropolitain Sector, of No.11 Group, Fighter Command.

The Vampires of Nos.54 and 247 Squadrons from Odiham were allocated to 601 and 604 and flown to North Weald on the 18th, when those squadrons converted to the Vampire FB.5. Led by the CO of 54 Squadron, Squadron Leader Plumtree, OBE, DFC, the first six Vampires were delivered amongst much publicity, with representatives of the Air Ministry Information Division, the national and local press and Flight being present to take photographs and statements from those taking part. All the euphoria could not hide the fact that whilst having five serviceable Vampire F.3s allocated to the Squadron’s establishment, the poor state of the runway restricted flying to those experienced pilots who could safely get airborne in 1,400 yards (1,280 metres).

The De Havilland Vampire F.Mk.3 was a development of the original Vampire F.1, sporting the more powerful Goblin 2 engine of 3,100 lbs thrust, increased fuel capacity, up from 202 gallons (920 litres) to 326
gallons (1,480 litres), and the ability to carry two underwing 100 gallon (455 litres) drop tanks. Poor stability under specific conditions required the tailplane cord to be extended by 4½ inches (114 mm) and lowered by 13 inches (330 mm). ‘Acorn’ fairings were introduced at the junction of the fin and the tailplane and the vertical tail profile was changed to the familiar de Havilland shape. The elevator cord was also reduced by 1½ inches (38 mm). Armament remained four 20 mm Hispano cannon with 600 rounds per gun. Performance in some respects was inferior to the F.1. Maximum speed was reduced by 9 mph (14.5 km/hr) to 531 mph (855 km/hr), but range and ceiling were increased, 1,050 miles (1,690 km) and 43,000 feet (13,105 metres) respectively.

The Sunday morning of the final weekend of November broke clear and warm, but by 1100 hours the airfield was completely shrouded in low cloud. The Adjutant and the Assistant Adjutant made successful landings with the cloud-base down to 150 feet (45 metres), whilst the Spitfires of Pilot Officer Hicks and Flying Officer Dore were diverted to Hendon, but P2 Ridge, flying another Spitfire without an R/T set, was forced to make a precautionary wheels-up landing in a field in the vicinity of Grange Hill station, near Chigwell, Essex.

1949 drew to a close with the Squadron determined to get on with Vampire conversion, but were hampered in their objective by bad weather (40 knot winds were not conducive to ab initio Vampire flying) and the unserviceability of the Meteor trainer. The rundown of the Spitfire element also restricted the training programme. With five machines allocated to other units and two awaiting Category 3 repairs, there were very few available on the flight line. The weekend of the 10/11th produced a good turnout amongst the Auxiliaries for the Christmas Dance in Epping Public Hall and the colour parade on the Sunday morning. The Squadron’s new AOC, Air Vice Marshal St Vincent, took time out to visit 601 and 604 Squadrons on the Sunday and spend a short time talking with them.

Flying training over the last weekend of the year and the accompanying Fighter Command exercise were cancelled due to bad weather. This state of affairs did not, however, prevent the officers enjoying a most successful dance in the Mess on the Saturday evening, before the Squadron closed for Christmas and New Year’s leave on the 20th.

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29 Flying Officer Bingham Dore was the son of the Squadron’s first CO, Group Captain Alan Dore.
CHAPTER TEN

The Final Years, 1950 - 1957

Until the early 1950s there was no threat to the UK from bomber attack by the principal enemy, the Soviet Union. Throughout the Wartime period the Red Air Force was structured to provide tactical support to the Red Army in the field and, as such, showed little interest in developing a long-range, strategic bombing capability. Greatly impressed by the strategic bombing campaigns of the RAF and the USAAF, and aware by 1943 of the existence of the American B-29 Superfortress, the Soviet Government authorised the development of a home grown strategic bomber. For a variety of reasons the Soviet aircraft industry failed to produce a specification, but late in 1944 the Government was presented with five relatively intact B-29s that were forced to land in Soviet territory after sustaining battle damage over China. Three of these aircraft were made serviceable and flown to Moscow in June/July 1945, where they were allocated to the Tupolev Design Bureau to be copied and built as the Tupolev Tu-4 and thus became the Soviet Union’s first strategic bomber. The first flight of the new bomber took place on the 19th May 1947, and was shown to Western air attaches for the first time in August at Tushino Airfield, near Moscow. Testing of the Tu-4, by now allocated the Allied reporting name of ‘BULL’, continued throughout 1948 and into 1949 and showed a performance broadly comparable to that of the original Boeing version.¹

In September 1949, a USAF weather reconnaissance aircraft detected the fallout from the explosion of the Soviet Union’s first nuclear device, which signalled to the West that Russia had developed an atomic bomb and had the means, in the Tu-4, to deliver it against targets in Western Europe and North America. Although exploded in 1949, the Soviet’s A-bomb, the RDS-3, did not see operational service with the Tu-4 until late in 1952 and then only in very small numbers. Nevertheless, unaware of the limitations of the Tu-4/RDS-3 combination, the deployment of a Soviet nuclear-capable bomber, when taken in concert with the Berlin Blockade and Airlift, June 1948 - May 1949, changed the outlook for European, and particularly, UK defence planning and stimulated rearmament. The UK Defence White Paper of March 1950 announced the strengthening of Britain’s bomber force with American B-29s supplied under the terms of the US Mutual Defence

¹ Yefim Gordon, & Vladimir Rigmant, Tupolev Tu-4, Soviet Superfortress, (Midland Counties Publishing, 2001), pages 3 to 32 & 34 to 36.
Assistance Programme and the doubling of Fighter Command’s strength. This proposal, reinforced by the invasion of South Korea by the Communist North in June 1952, triggered a massive and rapid drive towards the modernisation of Britain’s Armed Forces, that would incur further costs to an already over-stretched economy.  

During the ensuing months combat aircraft production increased fourfold, day-fighter strength was doubled and a beginning was made on the conversion of night-fighters to jet equipment (Meteor NF.11 and the Vampire NF.10). Certain categories of reservists were called-up and pilot training was expanded dramatically and the modernisation of the RAuxAF to jet equipment (Vampire F.3 and Meteor F.8), that began in 1949, was completed in 1951.

Whilst it was possible to improve the quality of the Auxiliary’s equipment, the same could not be said of its manpower. Like their previous experiences in the 1920/30s, the RAF discovered that civilians were not disposed to volunteer for the RAuxAF to undertake jobs they were required to carryout for an employer during the week and certainly for far less money. Since the recruitment of ex-Regulars to the Auxiliaries in sufficient numbers was below expectations, the Air Ministry looked to the supply of those conscripts who would be prepared to complete their four-year reserve commitment with the ‘weekend flyers’. The system was introduced in January 1949, however, since it took eighteen months to train a pilot, the first tranche did not appear until mid-1950, at which point the Korean War broke out and National Service was promptly extended to two years. This action enabled the trainee pilots to complete their training and provide some six months of useful service at squadron level before passing to the reserves for three years. For whatever reason, the follow-through from regular to reserve service did not happen. By 1951 the pilot establishment across the whole of the RAuxAF’s twenty fighter squadrons stood at 340, against an actual strength of 326 (96%), falling to 298 (88%) in 1952, whilst the figures for groundcrew were 2,890, against a strength of 1,883 (63.5%) in 1951, falling to 1,764 (61%) the following year.

In 1953 Air Commodore John Baker-Carr produced a report to address the problem of aircrew numbers in the RAF and provide solutions. The report, amongst other things, addressed the Auxiliaries and concluded that the complexity of future aircraft would be beyond the capability of direct entry pilots, since their flying hours (reserve commitment) were insufficient to train them to fly the aircraft competently. Baker-Carr’s conclusion was

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3 Tony Freeman, *op cit*, pages 102 & 103.
neither endorsed, nor dismissed by the Air Staff, since the North Atlantic Treaty Organisation (NATO), had to be factored into the equation.\(^4\)

In order to expedite planning, senior NATO commanders required to know the numbers of squadrons allocated to them in time of war and their combat capability. Initially, because the criteria were not properly thought through, the Air Ministry declared all Auxiliary squadrons as ‘fully combat capable’ and promptly allocated them to NATO. However, in 1953, with the adoption of a more realistist measurement of competency, the RAuxAF was reassessed at the reduced level of Category B - not fit for immediate frontline use. This ‘demotion’ provided the Air Ministry with a further problem; what to do with a force that did not comply with NATO readiness criteria and yet cost a great deal of money to train and support?\(^5\)

In May 1954 the DCAS, Air Marshal Tom Pike,\(^6\) recommended a reduction in the RAuxAF to fifteen squadrons, equipped with Hawker Hunters and Supermarine Swifts, with ten squadrons temporarily flying de Havilland Venoms, until such time as sufficient numbers of the swept-wing types were made available. By August of that year the forecast was downgraded to the ten Venom squadrons, whose usefulness was then questioned by the ACAS(Policy), Air Vice Marshal Chilton. Clearly since the Venom had a limited operational life of 750 airframe hours, and would need to be replaced by 1959, there was little point in giving the Auxiliaries Hunters, or Swifts, because they ‘would do no more than postpone the inevitable, as there was no way they would ever be given Lightnings’.\(^7\)

The end for the RAuxAF came quickly. In 1956, under pressure from an Air Ministry compelled to cut costs, the VCAS, Air Chief Marshal Sir Ronald Ivelaw-Chapman, recommended the disbandment of the Auxiliary flying squadrons. There was then no way back. At a meeting of the Air Council on the 13\(^{th}\) September 1956, held to consider the VCAS’ paper, the recommendation was endorsed by the Council and approved by the Prime Minister, Harold Macmillan, the following December. On the 16\(^{th}\) January 1957, a letter was sent to the AOC-in-C Fighter Command advising him of the disbandment of the RAuxAF, the cessation of all flying and the formal disbandment of the squadrons by the 10\(^{th}\) March. That was it. Only eight Auxiliary Fighter Control Units, a Radar Reporting Unit and an Intelligence Unit survived until 1960, when they too were closed down.

\(^4\) Tony Freeman, *op cit*, pages 104 & 105.
\(^6\) In 1957 Air Marshal Sir Thomas Pike, KCB, CBE, DFC, would oversee the disbandment of the Auxiliary squadrons as AOC-in-C Fighter Command.
\(^7\) Tony Freeman, *op cit*, pages 106 & 107.
The availability of a second Meteor T.7 from January and the arrival of Flight Lieutenant Curtis as Training Officer and Assistant Adjutant, and Flying Officer Clark on loan at the weekends from No.226 Operational Conversion Unit (OCU) at Driffield, enabled the Squadron to begin its conversion to the Vampire. All pilots were required to attend classes given by the de Havilland representative, Mr Piercy, on the Vampire’s airframe and engine, followed by two hours on the Meteor before tackling the Vampire. Despite the non-availability of the whole runway at North Weald (it was still under repair), ten pilots were converted to the Vampire by the month’s end.

Two Meteor T.7s were supplied to each Auxiliary squadron for jet conversion and target towing during deployments and summer camps. It was as a young Pilot Officer that Mike Allen first encountered the Meteor trainer:

‘In the early 1950s, with the Korean War in progress and the possibility of a Third World War, the Air Ministry ….. re-opened the “Empire Training Scheme” ….. for pilot training in Canada, Rhodesia and the UK. National Servicemen flowed through the system in large numbers to help re-build the RAF, ….. and it was as a part of this stream, ….. with a little over 200 hours flying experience gained mainly in Harvards in Canada, I was introduced to jet flying in the Meteor 7.

On first sight the plane seemed large and powerful, but with stubby wings, and was notable for the long greenhouse canopy that covered the pilots sitting one behind the other (pupil in the front and instructor behind). The impression of power was confirmed on the first flight, when the plane surged forward down the runway, tilted sharply upward and within a couple of minutes was cruising happily above the clouds at over 300 knots (530 km/hr). After a brief flight around the local area we returned to base and slanted down on the runway and landed. Everything seemed to have happened so quickly. It was only after several flights, when one’s reactions had speeded up considerably, that I found I had time to sit back and consider what corrections I should be making to ensure that the aeroplane did what I wanted it to do.

The view from the front cockpit was magnificent. The nose sloped away so steeply that there appeared to be nothing in front of...
you. The controls were very sensitive and in my first few flights I couldn’t stop the plane from rocking gently from side to side, as I over-reacted to every movement. My instructor led me rapidly through the plane’s characteristics. Flying at high speed, at high altitude (35,000 feet/1,070 metres), was particularly exciting ….. As the plane ….. neared the speed of sound, ….. it flicked about in any direction, whilst the control column jerked around the cockpit trying to escape from my hand. The only solution was to throttle back, extend the air brakes and wait for the plane to descend to a lower altitude and a slower speed, whence ….. it would recover its poise and behave like the good mannered plane it was.’

The Meteor ‘was very robustly built and powered by Rolls Royce engines which never gave trouble. Compared with the Harvard, taking-off and landing was simple. You just pointed the plane where you wanted to go and it went there. It flew like a “powered brick!”’. The engines did ….. however ….. have a prodigious thirst for fuel and you watched the gauges constantly. Inevitably there were days when you landed with so little fuel that you hoped you would not have the embarrassment of running out before you managed to taxi back to dispersal. But that was all part of the wonderfully exciting world of learning to fly jets.’

Whilst discussing the Meteor 7, both Mike and Fred Grisley, who comments later on the F.8, highlighted the trainer’s predilection towards the so-called ‘phantom dive’. This phenomenon usually occurred towards the end of the downwind leg on the approach to landing at low altitude (1,000 feet [305 metres]), with the air-brakes out to kill speed and the aircraft in a nose-up attitude. This configuration blanketed the fin from the airflow and allowed turbulent air to flow over it, inducing a stall and rendering it completely ineffective. Should the pilot select undercarriage DOWN at this point, and should the aircraft yaw to the left or the right by the reason of the undercarriage lowering asymmetrically (the mainwheels on the Meteor never came down together), a powerful roll and dive would be induced in the direction of the yaw from which, at such a low altitude, there was no escape. Having no ejection seats, the results were always fatal. However, as Mike Allen recalls, with proper preventative action, the Meteor 7 could be flown safely at low speeds:

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8 Two 3,500 lb st, centrifugal flow, R-R Derwent Mk.8, turbo-jets.
9 Letter from Mike Allen to the author dated 22nd September 2004.
10 Bryan Philpott, Meteor, (Patrick Stephens, 1986), pages 75 & 76.
‘The phantom dive only occurred in the T.7, as the particular combination of increased side area, due to the longer canopy of the trainer and the fitting of the ventral tank, reduced the directional stability of the aircraft in comparison with the F.8. Care, therefore, had to be taken to ensure that the aircraft did not assume a nose-up attitude at slow speeds in the circuit and to immediately correct any yaw with opposite rudder. Whilst the problem of the phantom dive was inherent in the T.7’s design, the solution was so simple that most pilots rarely thought about it. The standard procedure was to put in the airbrakes and lower the flaps partially before lowering the undercarriage. This ensured that the airflow over the fin did not become turbulent and a high degree of directional control was retained even at low approach speeds. Throughout the years that the T.7 was flown by 604 Squadron, no pilot of any squadron, Regular or Auxiliary, was killed by this phenomenon whilst flying from North Weald.’

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Early in February, the Squadron was warned of the impending move of No.72 Squadron from its base at Odiham, Hants, to North Weald. Equipped with the Vampire FB.5, the arrival of 72 Squadron was intended to bring all the units at North Weald (Nos. 72, 601 and 604 Squadrons) together in a single Vampire interceptor wing, with a degree of centralised servicing. Unfortunately, there was insufficient room at North Weald to house the three squadrons, and this was predicted to lead to overcrowding in the hangers and on dispersals. Over the weekend of the 16/17th the Squadron’s pilots were lectured to by Flying Officer Smart from No.247 Squadron, 604’s affiliated unit, before being taught the principals of Vampire formation flying. Experiments were made with three aircraft ‘Vic’ takeoffs, followed by a climb-to-height. The Squadron initially experienced some difficulty in formation flying, but improved as their confidence increased. During tail-chases two pilots inadvertently entered spins, but recovered normally without undue loss of height. Practise formation flying continued on into March in order that the Squadron be awarded a slot in the Farnborough Air Display. As indicated, the ground party of No.72 Squadron arrived at North Weald on the 21st, with the aircraft arriving the following day led by their CO, Squadron Leader Don Kingaby, DSO, DFM. 72 were allocated part of 604’s hanger to store their aircraft, which entailed some reorganisation of the available space and a redistribution of the airmen’s billets.

On the 1st April, Flying Officer Staton flew his first two trips in the Vampire to qualify on the aircraft and complete the Squadron’s conversion from the Spitfire, of which only two machines remained at the month’s end. The Spitfire’s departure was marked by a feeling of sadness on the part of one pilot, Ian Ponsford, who commented:

‘Whilst ….. the Vampire ….. was a delight to fly, for many of us the departure of the Spitfire meant the end of an era, never to be forgotten. To hear a Spitfire overhead still provides one of the few tinges in the spine.’

From the other viewpoint, the Vampire was a more modern aircraft and better suited to UK air defence, as Derek Dempster recalls:

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12 Ian Ponsford, op cit.
13 Derek Dempster flew with the Cambridge University Air Squadron at North Weald, before joining 604 Squadron in 1949 and remaining until the Squadron was disbanded in 1957. He was also the air correspondent of the Daily Telegraph.
In January 1950, our Adjutant Norman Curtis and F/O Clark - a “Nobby” like all Clarks, ..... started familiarising us with jet aviation. Two things were immediately and noticeably different: engine noises and smell. Instead of coughing Merlin start-ups settling down into throaty rumbles, ..... the Vampire’s Goblins shrieked. And in place of quickly dispersed burnt high-octane petrol fumes, the air was heavy with the stench of paraffin. Another noticeable change was the shape of the aeroplane. We’d been used to the tail-draggers with massive engines and propellers up front of the cockpit, accessed by a hop onto a wing. In the Vampire we had a tricycle undercarriage with castering nosewheel, a cockpit in the nose with a small retractable step to help you climb in, an engine behind, ..... no propeller - and best of all, a superb view. Moreover, it was snug and comfortable, with a pretty-well standard instrument panel and flying controls for a fighter of that period. What we had not had before were dive brakes.

Its nearly 55 years since my first Vampire solo in VF335 on 5th February 1950 and my last in VV194 14 on 17th August 1952, so it’s not surprising I have forgotten the details ..... At this point in history it does not matter: the motor fired into a hum that hardly changed in pitch or volume with movements of the throttle ..... and ..... it took a fair amount of throttle to get it moving. Once under way, there was enough thrust with the throttles closed to let it roll on its squat undercarriage and steer around the taxi track, with light touches of brake on the appropriate wheel. In the cockpit there was no appreciable increase in noise from the engine when you powered up fully for take-off against the brakes, which you released as soon as the nose dipped like a bull’s head preparing to charge. It was then you felt the full power of the engine’s thrust forcing you into the back of your seat. Extraordinary, really, when you consider that the Goblin delivered only 3,100 lbs of thrust.

Another vivid memory of those early flights was the speed of climbing through thin layers of cloud to operational heights for Mach runs, cine-gun exercises, formation flying, high level QGHs and, of course, aerobatics. The Vampire was a lovely aircraft to fly and I always felt relaxed in it, although frustrated in the Spring and

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14 Vampires VF335 and VV194 were built at Preston, Lancs, by the English Electric Company and delivered to the RAF in 1948.
Derek Dempster’s Vampire, VF335, was another F.3 built by English Electric at Preston (Derek Dempster).

Autumn manoeuvres when trying to intercept Canberra bombers flying above its ceiling of 44,000 feet (13,400 metres) - an altitude I reckon was a myth, because I never achieved it. Besides, the Vampire above 40,000 feet (1,220 metres) wallowed like an unstable coracle. Lower down ….. we could track-in on the USAF’s B-29 and B-50s\(^\text{15}\) far more easily, but the melees of criss-crossing fighters all heel-bent on getting pictures of those great bombers in their camera-guns could be unsettling for anyone of a nervous disposition.

I could go on waxing lyrical about the Vampire, ….. but perhaps the most enduring and ridiculous recollection I have of this little fighter comes out of the mouth of a babe. When you shut down the engine, a small jet of paraffin was ejected from the belly. One of our members brought his small son to Thorney Island one day and, seeing this happen, turned to his father and said “Look Daddy, that aeroplane is having a widdle!”\(^\text{16}\)

In order to save time during exercises and improve the sortie rate, the Squadron Engineering Officer, Flight Lieutenant Piper, instructed the pilots in conducting the Daily Inspections on their Vampires. To qualify, each pilot was examined by the OC Technical Wing, following which, if successful, each pilot was able to sign for his aircraft should the necessity arise and undertake a number of Inspections each month under supervision. On the 23\(^\text{rd}\) the AOC visited North Weald with the SASO No.11 Group, to watch 601 and 604 perform individual flying displays in anticipation of their attending the Farnborough Air Show. This was followed by yet another

\(^{15}\) The Boeing B-50 was an improved version of the wartime B-29 Superfortress.

\(^{16}\) Derek Dempster in an e-mail to the author dated November 2004.
flying competition to decide which squadron would represent the RAuxAF at the RAF display in July. On the 13th May, 604 competed in the Farnborough fly-off, with the AOC-in-C, Air Marshal Sir Basil Embry, the AOCs of Nos.11 and 12 Groups, Air Vice Marshals Tom Pike and G.Harcourt Smitar, and Fighter Command’s SASO, Air Vice Marshal David Atcherley, deciding that the Squadron should indeed participate in the Display.

On the 8th May, it was announced that the Esher Trophy was to be presented to the Squadron by HM the King at Buckingham Palace on the 21st June. Much of the Adjutant’s month was therefore taken up planning and organising the event in association with the Air Ministry, HQ Fighter Command and the Palace. The 21st dawned wet, but improved gradually as the morning progressed, whence it remained fine for the remainder of the day. The officers and men arrived at Wellington Barracks at 1015 hours in good time to make final adjustments to their uniforms, before marching off behind the Central Band of the RAF (under the direction of Wing Commander A.E.Simms, MBE) at 1130. The parade entered Buckingham Palace by the Electrician’s Gate and drew up in open order on the lawn at the rear of the Palace at 1145 hours to await Their Majesties. HM the King and Queen Elizabeth, accompanied by the Princess Margaret and their Air Equerry, Group Captain Townsend, CVO, DSO, DFC*, and a Lady-in-Waiting, the Countess Spencer, appeared at 1205 to take the salute. The Hon Air Commodore, Viscount Templewood, read a short address, then The King and Queen, accompanied by Squadron Leader Lofts and Flight Lieutenant Hartley Crompton, inspected the Squadron, after which the King made a short speech before presenting the Trophy. Other distinguished guests present were: the Secretary of State for Air, Mr Arthur Henderson, the Lord Lieutenant of Middlesex and the Chairman and Secretary of the Middlesex Territorial Association. Led by the Central Band, the parade returned to Wellington Barracks where they were dismissed for refreshments at two venues: Londonderry House for the officers, distinguished guests and relatives, and Wellington Barracks for the NCOs and airmen, their families and guests. Having discharged their duties at Londonderry House the CO, the officers and the Hon Air Commodore retired to Wellington Barracks to join the airmen for a party.

In the King’s Birthday Honours, announced on the 8th June, Flight Sergeant G.LLuckhurst was awarded the BEM for ‘meritorious service and constant devotion to duty’ - all round, June 1950 was a very good month for 604.

The Annual Summer Camp was held at Thorney Island, Hants, preparations for which began on the 4th July with the departure of the
Inspection of the officers of 604 Squadron by HM King George VI at Buckingham Palace on the occasion of the presentation of the Esher Trophy to 604 Squadron. From left to right: Colin Allen, Ellis Aries, Tom Russell, Bob Staton, Bill Wilson, HM King George VI, Keith Lofts, Viscount Templewood, Andy Detrikh & Ian Ponsford (RAF Museum).

Advanced Party, including all the Squadron’s 20mm ammunition, followed by the Servicing Party under Flight Sergeant Abbott, who was at the airfield in good time to receive the first seven Vampires. The following day the remaining six aircraft were safely delivered and one aircraft was flown to Farnborough to participate in the ground display. By the 8th, all ground personnel and equipment had arrived at Thorney Island. That same day, Flight Lieutenant Detrikh led six Vampires of 604 Squadron in a demonstration of ‘air drill’ as part of the RAF’s contribution to the Farnborough Display. The Camp that year concentrated on air-to-air and air-to-ground gunnery, instrument flying and Meteor conversion for instrument flying training. On the 19th, thanks to the RNAS Lee-on-Solent, the Squadron was given the opportunity to test their skills when the Navy made two glider targets available for air-to-air gunnery. These gliders provided

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17 The pilots were: Pilot Officers Hicks, Turnbull, DFC, Salandin and Flying Officers Ponsford, DFC, and Gillett. Flying Officer Dempster assisted in ferrying the single Vampire from Farnborough to Thorney Island.

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the pilots with ‘their first opportunity for five years of using a Gyro (gun)sight with live ammunition against’ an aerial target. On the social side, the Squadron held an all-ranks dance in Chichester on the evening of the 11th, a cocktail party for the AOC-in-C in the Officers’ Mess on the 14th, which was also attended by Group Captain Dore, played cricket against a Thorney Island XI on the 19th, which 604 lost by five wickets, and closed with a farewell dance, again in Chichester, on the 20th. Two days later 604 ‘struck camp’ and returned to North Weald.

Early in August the Squadron’s replacement Engineering Officer, Flight Lieutenant R.G. Chapman, arrived on station to hand-over from Flight Lieutenant T.J. Attrill, who was declared ‘tour expired’ and awaiting a posting to another appointment. On the 30th August the Squadron hosted a contingent of the Royal Swedish Air Force (Svenska Flygvapnet) for a ten day goodwill visit to the UK, who arrived at North Weald complete with five Junkers Ju 86 bombers. Poor weather on the 15th September forced the cancellation of 604’s participation in a scheduled flypast over London. The weather did not, however, prevent the Squadron participating fully in the station’s Battle of Britain Display the following day, when some 30,000 members of the public were entertained to a flying display, in which the Squadron flew its air drills, and manned ground exhibitions of its equipment and aircraft. Joy-flights were provided by four de Havilland Dominies of the Broxbourne Flying Club.

In October the North Weald Vampire Wing hosted a visit from No.336 Squadron of the RNorAF based at Gardermoen, flying the Vampire FB.52. The Norwegians were invited by Fighter Command to participate in Exercise EMPEROR, the autumn air defence exercise of the 7/15th October, where they provided part of the defending force alongside Nos. 72, 601 and 604 Squadrons. 604 was able to participate in at least two of the Exercise’s three phases, operating from No.3 Dispersal on the north-west side of the airfield, which had recently been made habitable in an effort to increase the airfield’s capacity. During operations on the morning of the 10th, the Squadron ‘claimed’ one Spitfire 19, two Prentices, and a B-29, followed by a further B-29 in the afternoon. The B-29s were intercepted flying singly at 28,000 feet (8,535 metres), with attacks made on the quarter and from above. The other aircraft were intercepted at low-level whilst attacking the airfield. Throughout the period of the Exercise the Squadron flew seventy sorties, but struggled sometimes to maintain its full strength, due to the

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18 The export version of the RAF’s Vampire FB.6.
limited availability of pilots on a number of days. By contrast, aircraft availability was, to quote the ORB, ‘a glowing tribute to the Servicing Section’.

On the 22\textsuperscript{nd} October the Assistant Adjutant and Training Officer, Flight Lieutenant Curtis, suffered an unfortunate accident in one of the Squadron’s Meteor 7s. Whilst demonstrating aerobatics, the Meteor’s port oleo unlocked and prevented the undercarriage from extending properly. Having tried every means in the ‘book’ to clear the problem, Flight Lieutenant Curtis dropped the external fuselage tank and carried out a textbook wheels-up landing on the airfield. Little damage was accorded to the Meteor and neither the instructor, or his pupil were injured. For his actions on the 22\textsuperscript{nd}, Flight Lieutenant Curtis was later ‘highly commended’ by Group for his airmanship and initiative. The annual AOC’s inspection was carried out by Air Vice Marshal Tom Pike on Sunday the 29\textsuperscript{th}, when he inspected a guard of honour at 1000 hours before reviewing a parade of the regular personnel and inspecting the technical and domestic sites. After lunch the crews, aircraft and hanger areas were inspected, followed by a fly-past and a stand-down until the 4\textsuperscript{th} November - from which it may be concluded that the AOC was pleased with 604’s performance.

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1951 provides a flavour of the daily operations of an Auxiliary squadron such as 604: weekend flying to gain proficiency in aircraft handling, formation flying, instrument ratings, week-day parades at THQ for lectures and drill, recruiting, summer camps to hone air-to-air and air-to-ground gunnery. Also, participation in air defence exercises and AA co-operation with the Army and the ROC, the provision of aircraft for air displays at shows up and down the country, AOC’s inspections to maintain proficiency, the hosting of visiting dignitaries, particularly with reference to the officers, and the annual festivities.\textsuperscript{20} Therefore to avoid repetition, only the significant events from the succeeding years will be recorded and examined.

The CO and the Adjutant attended the second Annual Meeting of the Auxiliary Squadron Commanders, which took place on the 2\textsuperscript{nd} February 1951 in the Air Council Chamber under the chairmanship of the Secretary of State for Air, and in the presence of the CAS, Air Chief Marshal Sir John Slessor, KCB, DSO, MC, the ACAS (Training), the Inspector of the RAuxAF and members of the Air Council. The main topic of conversation was the impending move by the Air Council to impose a period of three

\textsuperscript{20} Unfortunately, very few of these events make reference to the NCOs and airmen.
months mobilisation on the Auxiliaries to hone their training and improve proficiency. This was thought necessary in light of the serious situation in Korea and the possibility the Soviet Union might exploit their military advantage in Europe whilst the Western Allies where otherwise engaged in the Far East. Apart from some concern in relation to hardships some airmen were likely to encounter supporting their families on airmen’s pay, the action was generally greeted with approval and the call-up was welcomed. In 604’s case this amounted to fifteen hardship cases being referred to a Hardship Tribunal, comprising a barrister, Mr C.J.Webber, LLD, Colonel S.A.Wise and Mr A.E.Kilingback of the Middlesex Territorial Association and Squadron Leader W.H.Harrison representing No.11 Group, who held a session in March to establish reasons why some men might be excused. Initially, three such cases were subsequently identified.

On the 20th May, the CO, Squadron Leader Keith Lofts, DFC, was tragically killed whilst competing in the Cooper Trophy race at West Malling, Kent. During the second heat Squadron Leader Lofts Vampire broke up in mid-air as a result of excess ‘g’ generated when turning around a pylon on the course. Flight Lieutenant Deytrikh took temporary command of the Squadron until he was confirmed in the post the following month.\(^{21}\) It is to the Squadron’s credit that it had sufficient Auxiliary officers with the right experience and sufficient time and enthusiasm in their civilian occupation, to take on the demanding role of squadron commander. Some Auxiliary units were less fortunate and had to rely on Regular officers filling the CO’s post, whilst suitable Auxiliaries were groomed for the role.

The Summer Camp for 1951 saw the Squadron deploy to Malta for two weeks training at RNAS, Hal Far. Transport was courtesy of three Handley Page Hastings that conveyed 129 men and some 1,000-lb (450 kg) of stores and equipment. Flying and air-to-air gunnery began on the 3rd June, but were restricted by fuel shortages in the Meteor 7s that towed the target ‘flags’, brought on by faulty fuelling adapters, creeping unserviceability with the Vampires and the poor state of the refuelling bowsers. This, and a number of other ‘difficulties’, severely reduced the flying programme and initiated a spate of report writing. The following day flying had to be suspended due to the airfield being the HQ of the Inter-Service Sports Final. Flight Lieutenant Ponsford, OC ‘A’ Flight, also commented on the tricky approach to the main runway, where the prevailing wind gradient was very

\(^{21}\) The Diary/ORB is vague about the date Andy Deytrikh took command of the Squadron. However, John Rawlings in his *Fighter Squadrons of the Royal Air Force*, (Crecy Books, 1993), confirms the date as June 1951.
marked, in addition to the runway being ‘rough and hilly’. The ORB entry for the 9th June is typical, and gives some idea of the general mood:

‘Results (of gun firing) are still disappointing in spite of the fact that we have been here for a over a week, but the attacks are beginning to sort themselves out and the flags are coming back from the range with far more holes in them than they had last week. There are still hopes that the results will improve during the last two days the Squadron is in Malta.’

From the airmen’s viewpoint:

‘There have been a number of complaints concerning the long working hours of the men in the heat of this climate. They say that working from five am to five pm is very tiring indeed and that this is jeopardising their efficiency. The food is also the subject of many complaints. There is not enough and the lag between breakfast and lunch is too great. Breakfast starts at 5.30 am and finishes at 0600. Lunches start at 1230. This gives a period of six and a half hours between meals, which is regarded as too long’ and ‘there is not enough food given out at breakfast to sustain the men until lunchtime.’

And the armourers:

‘Throughout the camp the ground staff as a whole worked extremely hard to keep the aircraft going. The armourers have the toughest job of the lot, having to re-arm the aircraft in the extreme heat of the day lying on their backs amidst dust and other objects thrown up by the jet streams of other aircraft in and out of the dispersal. In many cases they have to start the job from the beginning again owing to the dust blown onto the guns.’

Air-to-air firing ended on the 10th and the Squadron’s camp ended on the 12th with a mock attack on the Fleet (Exercise BEEHIVE 2) by seven aircraft led by Flight Lieutenant Ponsford. During the camp the award of the AFC in the Queen’s Birthday Honours to the CO was announced on the 6th, which the Squadron duly celebrated by taking the rest of the day off.

22 604 Squadron Diary/ORB, Part 2, page 222.
23 Ibid, page 222.
squadron was also introduced to the C-in-C Mediterranean, Vice Admiral Earl Mountbatten of Burma, at their dispersal on Hal Far airfield. By the 18th, the Squadron was safely back at North Weald.

On 16th July, the fateful day as described by the ORB, the RAuxAF was mobilised for three months continuous training in compliance with the terms and procedures of the Auxiliary Forces Training Act (1951). All Squadron members, with the exception of six men who had been granted exemption on hardship terms, reported for duty at North Weald in good time to be addressed by the Under Secretary of State for Air, Mr Aidan Crawley, MP. There were however, two noticeable absentees, Flight Lieutenant Curtis and Flying Officer Wilson were incapacitated with broken ankles following ‘high spirits’ at a dining-in night to celebrate the call-up. They both reported for duty the following morning with their legs encased in plaster. Because of his being debarred from flying duties, Flight Lieutenant Curtis took over the role of Adjutant, leaving his training role to Squadron Leader H.M.Chinnery. Training began on the 19th when the Squadron detached to Acklington to begin an armament practise camp at the Yorkshire airfield.

Whilst at Acklington, Flying Officer Bingham Dore ‘bent’ a Vampire on the very first day. Landing with practically full tanks due to R/T failure and therefore overweight, the nose wheel collapsed after touch-down, resulting in the Vampire sustaining some damage and Flying Officer Dore receiving a tearing off ‘of the proverbial strip’ by the CO and Squadron Leader Wootton, the OC Flying Wing.

The Squadron’s strength at the end of July 1951 comprised: three RAF officers, twenty-one RAuxAF officers, seventy-one RAF airmen and eighty-four RAuxAF airmen, making a total of twenty-four officers and 155 airmen. In aircraft terms the Squadron’s main equipment remained the Vampire F.3 and the Meteor T.7, supported by a training flight of possibly one Boulton Paul Balliol T.1 and two or three, Harvards.

Gunnery training, air exercises, both at home and abroad (France), interception exercises with the USAF, visits by the Hon Air Commodore and the AOC, lectures, sporting and social events, attendance at training courses, flying at Battle of Britain Days and visits to the Fleet Air Arm at RNAS Ford, completed the call-up period. At their final armament practise camp at Acklington in September, the OC of the Armament Squadron remarked, ‘No.604 Squadron achieved the highest (target) glider score of any squadron to date ….. The squadron proved themselves above average in gunnery training: the pilots were keen and shot well.’ The call-up period officially ended on the 13th October 1951, with each pilot averaging fifty-three flying hours and all holding a current instrument rating and, according
Squadron Leader Andy Deytrikh took over as CO following the death of Keith Lofts in May 1951 and stood down in June 1952 to take-up a commission in the Regular Air Force (Derek Dempster).

to the CO, ‘the Squadron has been informed that it is now as good as a Regular squadron’. 24

At the end of the year Flying Officer J.Barrett joined the Squadron as Training Officer, to enable Flight Lieutenant Curtis take up the post of Squadron Adjutant on the departure of Flight Lieutenant Hartley Crompton. A listing of the Squadron’s officers and aircrew at December 1951 is shown at Appendix 4.

1952

The New Year’s Honours List brought the award of the BEM to Flight Sergeant G.W.Hayhoe, RAuxAF, and Corporal J.N.Whitehead, RAF. Flight Sergeant Hayhoe was the NCO-in-charge (I/C) of 1st Line Servicing and Corporal Whitehead the NCO I/C the Squadron Orderly Room. Both honours being awarded for ‘exceptional service and devotion to duty.’ The awards were presented by the AOC-in-C, Air Marshal Sir Basil Embry, at a ceremony on the 27th April. Squadron Leader Gunton (Retd), the HQ No.11 Group’s ex-Group Armament Officer, was accepted for service with 604 at the end of January as the Squadron’s Armament Officer in the rank of Flying Officer, RAuxAF.

24 604 Squadron Diary/ORB, Part 2, page 204.
During the afternoon of the 3\textsuperscript{rd} February Sergeant Patmore suffered a ‘flame-out’ of his Vampire’s Goblin engine whilst flying at 15,000 feet (4,570 metres). By dint of some good airmanship, Sergeant Patmore made a very successful wheels down, ‘dead-stick’ landing at Hunsdon, a disused wartime airfield, near Sawbridgeworth, Herts. The cause was assessed as negative ‘G’ encountered during a cine camera attack. However, since there was no apparent damage to the aircraft, the crash party succeeded in restarting the engine before Squadron Leader Deytrikh flew the aircraft back to North Weald, where the engine was changed. Later that month one Pilot Officer Norman Tebbitt,\textsuperscript{25} RAFVR, was interviewed and selected to fill a pilot vacancy on the Squadron.

Throughout its establishment in peacetime, 604 was supported by a cadre of Regular Air Force personnel, who ensured the correct adherence to maintenance standards. For this purpose Regular NCOs and airmen in the airframe, engine, electrical, armament and instrument trades, were attached on a two or three year posting. One of these, airframe fitter, LAC Norman Burton, describes the composition of the Regular establishment. The Senior NCO, a Flight Sergeant, reporting to the Squadron Engineering Officer, had direct responsibility for:

- 4 x Airframe Fitters
- 1 x Corporal
- 1 x Sergeant
- 2 x Electrical Fitters
- 3 x Armourers
- 4 x Engine Fitters
- 1 x Corporal
- 1 x Sergeant
- 2 x Instrument Mechanics

Wireless/radio mechanics were provided from a central pool at North Weald that supported all the squadrons based on the airfield (Nos.72, 111, 601 & 604).\textsuperscript{26}

Norman’s first job on joining 604:

‘was to go down inside the Harvard’s fuselage with a plate, four washers, four nuts, in order to change the tail oleo. The hanger used by the Squadron until September/October 1952 was by the Epping-Ongar Road, after which we moved to a new hanger on the other

\textsuperscript{25} Later the Baron Tebbitt of Chingford and Chairman of the Conservative Party in Prime Minister Margaret Thatcher’s 1980’s Government.\textsuperscript{26} Norman Burton in a letter to the author dated 5 July 2004.
side of the airfield - a hanger that exists to the present day and which I walked around fifty years later.27

During March the Squadron’s Adjutant, Flight Lieutenant Curtis, was promoted to Squadron Leader and posted to HQ Fighter Command as Auxiliary Liaison Officer. During the month a number of pilots resigned from the Squadron: Flight Lieutenant Frost, Flying Officer Allen, Flying Officer Edwards, Pilot Officer Ranson and Sergeant Humphreys, whilst a National Service pilot, Pilot Officer Elliott, joined to complete the last two months of his service and Flight Lieutenant Mansfield arrived to replace Flight Lieutenant Chapman as the RAF Engineering Officer.

Flight Lieutenant Curtis’ replacement as Adjutant, Flight Lieutenant M.Lloyd, joined the Squadron during May, much to the relief of the CO and the Training Officer, who had meanwhile been covering the workload, and just in time to assist in the administration for the summer camp on Malta. With Khaki drill issued to the airmen at the last moment and inoculations given to one and all, plus an AOC’s inspection on the 24th just to make life interesting, it was with some relief on a cold and dull May morning that the Squadron’s ten Vampires left North Weald for the warmer climes of Malta. Departing at 0700 hours on the 31st in two flights of five led respectively by the CO and Flight Lieutenant Ponsford, the Vampires flew the first leg of their journey to the French Air Force base at Istres in Southern France, ‘where the aircraft and the pilots were refuelled’. All aircraft, with the exception of Flying Officer Dore’s which required an undercarriage oleo pumped up, were serviceable and able to take-off at 1115 hours on the last leg to Malta. All aircraft arrived safely at RNAS Takali some two hours later, and twelve minutes ahead of their estimated time of arrival, to a welcoming committee comprising the Captain of HMS Goldfish and a selection of the ‘nobility’ from Air HQ.

Like previous camps on Malta, that in June 1952 most probably followed the line of the camp in the previous year (the pages from the ORB covering 1952 are missing): air-to-air gunnery against drogue targets ‘pulled’ by Meteors and ‘attacks’ on HM ships of the Mediterranean Fleet. The return to the UK began at 0930 hours on the 13th, with the aircraft scheduled to refuel at Istres, before proceeding to North Weald. When calling in to the Istres tower for clearance to land, the CO was advised of a diversion to the civil airfield at Marignane because the French were testing the Leduc ramjet powered experimental aircraft, which was forced to make engine-less, dead-stick landings every time it flew. Being a civil airfield,

27 Norman Burton, op cit.
Marignane had no stocks of jet-fuel and no servicing facilities for military aircraft, these having to be sent by road some forty miles (64 km) away. The delay, which was blamed on ‘finger’ trouble by AHQ, Malta, resulted in the Squadron, minus Flying Officer Barrett’s aircraft, getting airborne at 1830 hours and arriving at North Weald two hours later. The remaining Squadron personnel were returned to the UK, courtesy of three Transport Command Hastings aircraft on the 15th.

On Saturday the 23rd August, the Squadron flew its last operational Vampire sorties prior to conversion to the Meteor F.8. ‘The Squadron, led by the CO, made several formation runs over the airfield to mark the honourable retirement of the Vampire’, after which the aircraft were grounded prior to disposal. The Squadron’s new mount, the Mk.8, was the fourth day-fighter variant of the ubiquitous Meteor that had entered RAF service in December 1949 and was, in 1952, making way for more modern equipment (Hunter, Swift and Sabre) in Fighter Command. Based on the earlier F.4 variant, the F.8 had a fuselage of increased length to accommodate additional fuel, a redesigned tail unit with the lower fin deleted, Derwent 8 engines of increased power (3,600-lb static thrust), a modified single-piece cockpit canopy and an ejection seat as standard. Later production models incorporated engine nacelle intakes of larger diameter for the Derwent engines, spring tab ailerons and a modified cockpit canopy. The aircraft’s handling characteristics at high Mach numbers were much improved by comparison to the F.4 and showed an increase in maximum speed to 550 mph (885 km/hr) at 30,000 feet (9,145 metres) - Mach 0.81. Armament remained the same as that of the Vampire, four 20mm Hispano cannon. By the end of August, half the Squadron’s pilots had completed their initial conversion in the Meteor T.7, with sufficient pilots converted by mid-September to participate in the Battle of Britain Display on the 20th. The Squadron’s pilots were all converted to the Meteor 8 by the end of October.

Fred Grisley, who joined the Squadron in 1954, provides an appreciation of the Meteor 8:

‘The Meteor F.8 was the culmination of fifteen years development of the type. It was therefore almost completely debugged, very strong and very reliable. Compared to the F.4 and the T.7 the cockpit was pressurised and roomier. It had a clear-view bubble canopy and an ejection seat (thank God!). The control-column had a pistol grip and the retracting Mk.4E gunsight gave superb forward vision when it was lowered.
Airborne, the F.8 felt subtly different. It was indefinably smoother, steadier and free from the snaking tendency of earlier marks, making it a good gun-platform. Single-engined flying was easy at normal speeds, but low and slow in the circuit, when the rudder forces were heavy. The 1:2 thrust-to-weight ratio was still good in the mid-1950s and endowed the F.8 with its strong points: good acceleration, high rate of climb and fast corner speed.

The 1942 era airframe made no concessions to supersonics, so flight beyond Mach (M) 0.81 became progressively uncontrollable. If you forced the nose down you could get to M 0.84. Then, despite closed throttles and extended airbrakes, you ended up in an uncontrolled rollercoaster dive. You held onto the stick with both hands to stop it thrashing around and regained control when increasing air-density and temperature reduced the airspeed and Mach number.

This, incidentally, was the only way you could shake a de Havilland (DH) Venom; and even then only above 30,000 feet (9,145 metres). Any lower and you might not recover in time. If he tried to follow he would be in even worse trouble and, with any luck, on recovery you would find him in front of you. The North American Sabre couldn’t be caught, but it could be out-turned and out-climbed. DH Vampires could be caught and out-climbed, but not out-turned. To shake off another F.8 you pulled maximum G until induce drag slowed you to corner speed. Holding the G you rolled down into a vertical “spilt-arse” turn. As you recovered to the horizontal you
racked around into another maximum G turn. From starting on your tail your opponent should then be on the opposite side of the circle. Having achieved parity it was then up to you to demonstrate your superiority; if you could. The English Electric Canberra bomber was simply humiliating. I only tried it once. After two turns he was on my tail and after another two he was 1,500 feet (460 metres) above me!

The service ceiling was 45,000 feet (13,715 metres). We weren’t supposed to go above 40,000 feet (12,190 metres) or we would not get enough oxygen, but, what the hell, we were young and foolish. You took a glove off and kept an eye on your fingernails. If they started to look a bit blue, then you went down. Flying at this height was like trying to drive a racing car on sheet ice. Acceleration was slow due to the reduced engine thrust in the thin air. The air-brakes had less to “bite” on so deceleration was also slow. Controls were very light, with noticeable delay between input and response. Anything more than a 30º banking turn and you lost height. If you met someone head-on all you could do was pray! So why did we go up there. Simply, for refuge. Superior opponents had similar problems and found it almost impossible to manoeuvre for a “firing” pass. In my experience the best operating height for the F.8 for all round effectiveness was between 20 and 30,000 feet (6,095 - 9,145 metres). Spinning characteristics were uncomfortable. You could expect a rough ride and you needed to hold the stick with both hands to stop it thrashing about. A two-turn spin, plus recovery, could consume 10 to 20,000 feet (3,050 - 6,095 metres).

All-in-all, the Meteor F.8 was a great aircraft; simple, rugged, reliable and a delight to fly. She was forgiving of my indiscretions and never let me down; a real lady.

In the springtime of my youth I loved her dearly, and in the autumn of my life I love her still.”

1953

In January the Squadron joined the ATC Affiliation Scheme, whereby 604 provided support to the three Middlesex ATC units: No.85 (Southgate), No.16F (Wood Green) and No.1288 (Enfield) Squadrons, with the objective of promoting the interest of Auxiliary service amongst the older cadets, which in turn might persuade some of them to join one of the RAuxAF squadrons. Over the weekend of the 17/18th the first party of cadets accompanied by their CO were shown around the Squadron and given


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lectures on the ejection seat by Flight Lieutenant Piper, before being passed to the NCOs to be shown other aspects of an Auxiliary unit. Auxiliary commissions for Pilot Officer Ward and Pilot Officer Mike Allen were approved, as was the promotion of two senior NCOs to acting Flight Sergeant, nine Acting Sergeants to Substantive Sergeant and eleven Acting Corporals to Substantive Corporal. Four pilots and the Auxiliary Armament Officer were also recommended to Group for promotion. Subsequently, Flying Officer Guton was promoted to Flight Lieutenant, Acting Flight Lieutenant Salandin to substantive Flight Lieutenant and Pilot Officers Hoare and Tebbitt to Flying Officer. By the end of the month the transition to the Meteor was completed and the Squadron’s old Vampires were disposed of to other units, or the MUs.

The severe weather along the East Coast accompanied by high tides and flooding, brought the Squadron into its other less well publicised role, that of ‘aid to the civil power’. On the 2nd February, the Squadron was deployed alongside other station personnel in manning and filling the breaches in the Essex sea defences caused by the exceptional high tides, otherwise known by the Squadron Diarist as ‘Operation KING CANUTE’.
On the 22nd March, the Squadron hosted an informal visit from its first Adjutant, Air Marshal Sir Francis Fogarty, KBE, CB, DFC, AFC, and Lady Fogarty, before entertaining them to lunch in the Officers Mess. With Royal mourning for the late King, who died in June 1952, having passed, military preparations for the Coronation for HM Queen Elizabeth began in earnest towards the end of March. To this end the Squadron temporarily lost the services of Flight Sergeant Green who was given the task of visiting stations within the Group to advise and inform units on the Coronation procession and the lining of its route. In addition, two airmen, Corporal Mizen and LAC Bryant, volunteered for special training required of Auxiliaries representing their units on the procession.

Preparations for the summer camp in Malta began in May with the requisitioning of tropical kit and the vaccination of Auxiliary personnel. The movement plan required the transportation of 140 officers and airmen, of which, for the first time, 130 would be flown by a civilian aircraft chartered by the Air Ministry. One of the Squadron’s T.7s was flown to Benson by Pilot Officer Patmore, from where it would be flown by a ferry pilot to Malta in good time for the Squadron’s arrival in August.

Norman Burton describes an incident that occurred at about this time:

‘The station commander in 1953 was Al Deere\(^{29}\) whose Meteor went u/s, so he borrowed Squadron Leader Turnbull’s aircraft ….. for a flight to Malta to visit another squadron. We fitted the Meteor with drop-tanks and away he went. When the aircraft was returned to the Squadron, the Sergeant Engine Fitter got a few of us together to hold the wing drop-tanks, while he released them. “Take the strain” he said, and we did and the ventral tank dropped to the ground! This incident was kept very hush-hush. We tossed the damaged ventral tank in one of the boxes and quickly put another on the aircraft. After that for a little while afterwards we would go up to the Sergeant ….. and whisper “drop”.’\(^{30}\)

On the 12th June the Squadron bade farewell to its CO, Squadron Leader Andy Deytrikh, who stood down as the Auxiliary CO on his appointment to a regular commission in the RAF and a posting as Air Attaché to Finland.

\(^{29}\) Wing Commander (later Air Commodore) Alan Deere, DSO, DFC*, was one of ‘Dowding’s Few’ during the Battle of Britain, when he served with No.54 Squadron. He subsequently commanded Nos.602 & 403 Squadrons, before being appointed Wing leader at Biggin Hill in 1943 and ending the War with twenty-two confirmed victories.

\(^{30}\) Norman Burton, \textit{op cit.}
That evening the officers dined him out of the Mess and welcomed the OC ‘B’ Flight, Flight Lieutenant T.P.Turnbull, on promotion to Squadron Leader, as their new CO. Sergeant Howden was interviewed by the AOC for a commission in the Equipment Branch, which was granted the following month. One Regular (LAC Burton) and two Auxiliary airmen represented the Squadron at the Queen’s Coronation, after which Coronation Medals were awarded to Squadron Leader Deytrikh, Flight Lieutenant Piper, Sergeant Reading, Corporal Technician Sly, Corporal Mintern and Senior Aircraftsman Coulsen. During the month the Squadron provided a single aircraft for the static display at London Airport, the Queen’s Review Display at Odiham and a weekly attachment at Bovingdon. All of which had a depressing effect on the monthly flying hours.

Pilot Officer Ward flew his last sortie with the Squadron on, or about, the 24th July prior to his transfer to the Regular Air Force. His place on the Squadron being taken by Pilot Officer Davis, a National Service pilot, who had joined 604 to complete the last few months of his service. Two further National Service pilots, Pilot Officer J.Lee and Pilot Officer King, were accepted for service with the Squadron towards the end of the month. In preparation for the flight to Malta, the Squadron’s Meteors were fitted with
ventral and auxiliary wing tanks and some care was taken in the days prior to the flight to ensure their contents could be transferred to the aircraft’s fuel system. This work was carried out by the Adjutant and as many Auxiliary pilots as could be spared. Final tests and checks on the aircraft were completed by the afternoon of the 24th July, when all ten Meteors were declared fully serviceable, fuelled and ready for departure the following morning.

In order to ensure their early start on the morning of the 25th, the Squadron’s pilots arrived at North Weald the night before. Take-off for Malta was scheduled for 0700 hours, with the Squadron forming in to two flights of five led by the CO and Flight Lieutenant Ponsford. The 1,200 mile (1,930 km) trip, with a stop at Istres for fuel, was completed in a little under three hours flying. The remainder of the Squadron was airlifted to Luqa in Avro Yorks of Skyways and Vickers Vikings of Hunting Air Transport. Except for one York that was delayed by engine problems at Stanstead and arrived at Luqa at 2330 hours, the airlift worked satisfactorily. On this occasion the reception arrangements worked well and all ranks were soundly asleep in their beds after a good meal served at 0030 hours. The following day, the 26th, the Engineering Officer, Flight Lieutenant Piper, and his groundcrews made an early start in order to remove the wing tanks from the Meteors, prior to the commencement of the air-to-air gunnery programme on the 27th. By noon all aircraft had their external tanks removed and were fully serviceable.

Incidentally, Norman Burton recalls that Ian Ponsford owned two Yorkshire Terriers which frequently accompanied him on the Squadron. Unfortunately, when he went flying the dogs tried to follow him. To prevent this the groundcrews ‘hangered’ the two dogs in one of the open fronted lockers in the crew room and release them when he was safely airborne.31

The camp followed the normal routine for the air-to-air gunnery programme. The first two aircraft were airborne early in the morning, before it got seriously hot, with a general briefing to pilots by the Sector Controller, Squadron Leader Willis, and the Flying Control Officer, Squadron Leader Banks, commencing at 0730 hours. The first Meteor T.7 target tug was airborne at 0615 and by 0900 the ‘great firing programme’ was in full swing. Operations were completed by 1230 hours with the retrieval of the flag and an analysis of the results, following which, ‘dips’ in the Mediterranean appeared to be the order of the day. For the groundcrews the early part of the day was taken up by essential maintenance, followed by ‘bathing’, with the single exception of those unfortunate enough to have

31 Norman Burton, op cit.
been detailed to guard the aircraft. On the 28th, the AOC No.11 Group, Air Vice Marshal the Earl of Bandon, and his SASO, Group Captain Thompson, visited the Squadron and stayed until the 30th.

By the camp’s second week, 604’s shooting had improved to such an extent that the tugs were losing the flags in the sea ‘at an alarming rate’ and certain amongst the tug pilots were being assessed for ‘tug pilot’s twitch’. Results at the end of the camp showed 604’s gunnery to be ‘better than that of the previous squadrons’ in 1952 and better than the 1951 camp. On the evening of the 4th August, a grand all-ranks party was held on the beach at Ghaain Tuffera to celebrate the Squadron’s achievement and provide an occasion for much letting down of hair, and more, which, for the sake of modesty, we are unable to describe. Top of the gunnery scoring list was Flight Lieutenant Salandin with an average of 14.8%. On the 7th, preparations for the Squadron’s return to North Weald began with the installation of the external fuel tanks on the Meteors and the despatch of the aircraft, ten F.8s and a single T.7, to Tunis for an overnight stop before proceeding to North Weald the following day the 8th. The return airlift went smoothly, thanks in no small way to Flight Lieutenant Cathcart of Air HQ, Malta, with all personnel returning to North Weald by 1500 hours, closely followed by their Meteors, minus the Adjutant who had to remain at Istres with an unserviceable aircraft. The T.7, suffering from an inability to take fuel from the ventral tank, was forced to divert to Paris/Orly and await repair.

At the end of August the Squadron gained two more pilots: Pilot Officer Lee was granted an Auxiliary commission at the end of his National Service, and Mr Hanscombe was commissioned as a Pilot Officer, RAuxAF. On the 7th, the AOC inspected the Squadron and its three affiliated ATC squadrons and granted all units a forty-eight hour stand-down as a mark of his satisfaction with the turn-out. The CO and Adjutant attended a meeting on the 23rd to discuss the success, or otherwise, of the ATC Affiliation Scheme. The others present, Wing Commander Manners-Barrett and the three ATC Squadron COs, agreed the Scheme had proved a great success, which they believed ‘would stimulate recruiting to the RAuxAF’ and the Regular Air Force. The Scheme had a secondary, but important, advantage for those cadets destined for National Service, since they were invariably posted to their affiliated Auxiliary squadron on completion of their trade training - a not to be ‘sniffed-at’ privilege if one lived in the locality.

Throughout the year the Squadron had striven to acquire the necessary four hours of night-flying to comply with one of its operational requirements. Unfortunately the AOC’s award of a weekend off, combined with unfavourable weather, left some pilots below par in this regard.
Consequently, the CO placed a great deal of emphasis in his September report on getting all his pilots compliant at the earliest opportunity, as this target was also present in the marking for the Esher Trophy assessment.

On the 6th November, the Training Officer together with five Auxiliary pilots, participated in the Metropolitan Sector’s Escape and Evasion Exercise held in the Ipswich/Stowmarket area of Suffolk. The exercise, which began on Friday night the 6th, and ended at noon the following Sunday, proved to be somewhat arduous for those participating, with 50% of 604’s contingent being captured and put through ‘intense interrogation’. However, to their credit, no breaches of security were detected by the ‘baddies’. The ORB does, however, make the following comment on the exercise:

‘It was interesting to note that the Physical Training Instructors accompanying the teams of escapees to observe any lowering of morale and physical stamina, were themselves the first to “crack-up” and in some cases became a hindrance to the progress of the teams they were accompanying.’

So much for physical endurance from the professionals!

At the end of November three pilots, Flight Lieutenant Barrett, Flying Officer Fortescue and Pilot Officer Lee, flew to Fassberg in the Federal German Republic on a liaison visit to NATO’s 2nd Allied Tactical Air Force (2ATAF) where they were royally entertained by Pilot Officer Lee’s old unit, No.14 Squadron. The welcome was said to have extended to a ‘salute from two Bofor’s guns and a guard of honour.’

The formation of No.111 Squadron under Squadron Leader H.Pears, DFC, at North Weald during December and the arrival of yet more Meteor F.8s, necessitated a change round in accommodation and the move of 604 to No.4 Hanger on the far side of the airfield, shortly before the Christmas stand-down. After Christmas, the Squadron welcomed its new Training Officer, Flight Lieutenant Lang, who flew his first 604 Meteor sortie on New Year’s Eve.

1954

1954 was destined to be a poor year for 604 Squadron. On the 20th February, the recently appointed Training Officer, Flight Lieutenant Lang, and Pilot Officer Lewis, a National Service pilot who joined the Squadron the

previous month, were killed when their Meteors collided shortly after taking-off for a battle formation exercise. Norman Burton was the airframe fitter who had pre-flighted all three aircraft on that fateful day:

‘The Training Officer, F/Lt Lang, P/O Lewis and P/O Austin were converting from the Vampire to the Meteor. They all took-off from North Weald as a threesome, but when over Chigwell F/Lt Lang advised the other two that he had a red light on his nosewheel (indicating it had failed to retract properly) when he was at 1 - 2,000 feet (305 - 610 metres) he asked P/O Austin to move to one side so that P/O Lewis might go underneath his aircraft to see if he could see anything. This Lewis did, but as he came out the other side both aircraft clipped their wings, sending them both into a spin, from which they failed to recover.

Following the accident there was a Court of Enquiry, which I was on, along with the rest of the pre-flight crews ..... What in fact happened on Lang’s aircraft was that when the electrician came across to check the aircraft’s battery he found it discharged and removed it from the aircraft, but failed to place the u/s sign on the aircraft. The pilot ..... and the ..... Sergeant of the day, missed the fact that the electrician had not initialled the Form (700), perhaps because “electrics” and “instruments” were next to each other on the sheet ..... If the instrument mechanic had a large initial it may have appeared he signed-off both, or visa-versa, the engine fitter. This was indeed done on the day, because both the Sergeant and the pilot had signed at the bottom of the page.’\(^{33}\)

When the aircraft’s engine was started, it was the battery in the trolley-ack that provided the current to spin the engine and not the aircraft’s internal battery. With the engine running at over 3,000 revolutions per minute (rpm) when the external battery was disconnected, and the GROUND/AIR Switch turned to AIR, the engine carried on running! Had it been running at 3,000 rpm, or less, when the external battery was disconnected and the GROUND/AIR Switch turned to AIR, the engine would have failed.\(^{34}\)

‘The battery panel was found on the runway. What in fact was stopping the nosewheel doors closing was the battery leads that were hanging down from the battery tray ..... The Court of Enquiry

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\(^{33}\) Norman Burton, op cit.

\(^{34}\) Ibid.
convened on the Monday, but did not go on to the afternoon. I gave evidence and was allowed to go home ..... No individual was blamed, the Squadron got a ticking-off - well a bit more than that ..... As far as the Form 700 was concerned, the airframe trade ..... signs it last - I think that happens today.'

The remainder of the month was taken up with a Coroner’s Inquest and a Committee of Adjustments. On the 27th, both pilots were buried in Saint Andrew’s Church, North Weald, with full military honours, being borne and escorted throughout the funeral by officers of the Squadron.

At the Coroner’s Inquest held on the 1st March, the Auxiliary Adjutant, Flying Officer Austin, and Regular and Auxiliary airmen gave evidence relating to the deaths of Flight Lieutenant Lang and Pilot Officer Lewis. The Coroner recorded a cause of accidental death for both officers. On the 19th March, Flight Lieutenant Lang’s replacement as Training Officer, Flight Lieutenant E.J.R.Downes, reported for duty at North Weald. Prior to joining 604, Flight Lieutenant Downes, a Qualified Flying Instructor, had been instructing on Meteors at No.203 Advanced Flying School, Driffield, and had recently completed an advanced qualification in flying training (OATS - the Officer’s Advanced Training School course) at Bircham Newton, Norfolk.

604’s high hopes in retaining the Esher Trophy were shattered when it was announced that 615 Squadron had emerged victorious, with the Squadron’s partners at North Weald, 601 Squadron coming third and 604 tying for fourth place. According to the ORB, the standard in 1953 had been ‘higher than ever before’, with only eight points separating first and fourth places. Congratulations were extended by the CO to 601 and 615 Squadrons.

The Squadron suffered a second accident in April and the loss of another pilot. On Saturday the 3rd, a mid-air collision between a Meteor F.8 of 111 Squadron and a Meteor T.7 of 604 flying a sector-rece, resulted in the death of Flying Officer Austin. Happily the second occupant of the T.7, Flight Lieutenant Downes - the world seemed to have a ‘downer’ on 604’s Training Officers - and the ‘Treble-One’ pilot, Pilot Officer Ellis-Hill, previously of 604 Squadron, successfully bailed-out and landed uninjured. Flying Officer Austin was seen to release the Meteor’s cockpit canopy and make some effort to leave the aircraft. It was subsequently believed he left

35 Norman Burton, op cit.
the aircraft too late to make a successful parachute descent, as his body was found just 200 yards (180 metres) from the wreck.\textsuperscript{36}

As the ORB records, ‘Flying Officer Austin was one of the most experienced pilots, who recently joined the Squadron after serving as a Regular officer in the Middle East. His cheerful presence will be sadly missed.’ Once again the Squadron had to endure the inevitable enquiries and inquests. On the 6\textsuperscript{th}, a verdict of accidental death was recorded on Flying Officer Austin, followed two days later by his burial at Saint Andrews Church. On a brighter note, two new pilots joined the Squadron: Flight Lieutenant Robinson from 602 Squadron and Pilot Officer Lavery was commissioned into the RAuxAF on the 25\textsuperscript{th}. These postings brought the Squadron’s Auxiliary pilot numbers to sixteen - one short of the full complement.

After much negotiating and much ‘too-ing’ and ‘fro-ing’, the Squadron learned in May that their new THQ was to be located at No.29 Pembridge Gardens, London, W2, with the necessary building works required to make the premises habitable having already been put in place. The Squadron was advised they would be returning to Malta for the summer camp, with planning for inoculations and vaccinations and the storage and issue of khaki drill being well advanced by the month’s end. As in the previous year, it was expected the air bridge would support the move of the groundcrews and non-flying personnel and there were great hopes the Air Ministry would provide the names of the charter companies as quickly as possible.

The new Training Officer, Flight Lieutenant Bishop, arrived on the Squadron sometime during the first two weeks of June. However, much of the month was taken up with preparations for the summer camp. External tanks were fitted in preparation for the flights to Malta, with those pilots destined to fly aircraft on the outward leg undertaking a long-range sortie from North Weald to West Kappel, thence to Zaltbommel and back to base, with all aircraft using their wing tanks. By the 21\textsuperscript{st} June, the Squadron’s ten Meteor F.8s, complete with recently installed fully automatic, Martin Baker Mk.2E, ejection seats and external tanks, were declared fully serviceable in good time for the scheduled departure on the morning of the 26\textsuperscript{th}.

Led by the CO the Squadron’s Meteors\textsuperscript{37} took-off in two sections from North Weald at 0630 hours and reached Malta in time for lunch, where they were greeted by RAAF personnel with bottles of cold beer. As had now

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\textsuperscript{36} This account of the accident is confirmed by Norman Burton.

\textsuperscript{37} The ORB does not state that the Squadron’s Meteor T.7s accompanied the ten F.8s to Malta, although the CO remarks at the months end does confirm that two T.7s were on strength.
become the norm, the aircraft were refuelled at Istres before flying the final leg to Malta. Total flying time amounted to three hours and twenty-five minutes (one hour forty-five minutes North Weald to Istres and one hour forty minutes Istres to Takali, Malta). The remainder of the Squadron were ‘accommodated’ in three Yorks of Skyways Ltd, who took six hours to complete the journey from Stanstead to Malta.

As on previous camps, the flying programme gradually warmed-up after a shaky start, with twenty-one sorties being flown on the first day, the 28th, twenty-three on the 29th and twenty-five on the 30th, by which time scoring on the towed targets was rising in direct proportion to serviceability. By the 1st July, the gunnery score was reaching respectability, with Flight Lieutenant’s John Barrett and Bingham Dore gaining averages of 29.2% and the latter being more surprised than most by his skills as a marksman. On the 2nd the Squadron was visited by two journalists, Ronald Walker, the air correspondent of the News Chronicle, and John Fricker of the Aeroplane, who had the distinction of flying the first helicopter sortie from Takali. The Airmen’s Dance on the evening of the 2nd reduced the officer’s gunnery skills the following day. Nevertheless, the Dance held in the Australian’s Hall, was rated a ‘tremendous success’, due mainly to the efforts of Pilot Officer Paul Howden and a party of Wrens. 38

During their time in Malta the Squadron formed ‘Aqualung Flight’ comprising Flight Lieutenants Gerry Threlfall, Bingham Dore and Derek Dempster, which achieved some success under the water and even more on dry land with the local ‘popsies.’ However, during a ‘sortie’ to the island of Gozo on the 4th, the Flight was involved in an accident, when the car in which they were travelling was hit sideways on by another vehicle. No one was injured, but Flight Lieutenant’s Dore and Dempster were summoned to appear and give evidence at the subsequent enquiry, where, in order to ‘avoid any complications’, Flight Lieutenant Dempster pleaded ‘guilty’ to a charge of dangerous driving upon the instructions of the Provost Marshal. He was fined two pounds and deprived of his Maltese driving licence for three months.

The active part of the camp concluded on Thursday the 8th, with thirty sorties flown and all pilots eager to increase their scores. A new ‘Ace of the Base’, 39 perhaps better know today as ‘Top-Gun’, was Pilot Officer Al ‘Buster’ Browne who put fifty rounds through the ‘flag’ from a total of 120 fired - a score of 41.7% - a very creditable performance for a recently joined

38 The Women’s Royal Naval Service, the WRNS, or Wrens.
39 ‘Ace of the Base’ meaning, the best pilot in air-to-air gunnery on Malta at that time.
Overall the Squadron had flown 188 sorties, of which 148 were effective, expended 19,448 rounds of 20mm ammunition, for an averaged a score of 9.1% (approximately one round in ten hitting the target). The gun stoppage rate was one round in 1,620 fired.

The follow day the Meteors (two T.7s and ten F.8s) departed for El Aouina, Tunis, where they were supposed to refuel before flying to Istres and thence to North Weald. However, a u/s fuel bowser at El Aouina forced an overnight stay on the Tunisian airfield and a departure at 1000 hours the next morning. On arriving at Istres Flight Lieutenant Bishop, who was flying one of the T.7s, was forced to hand over his aircraft to Pilot Officer Patmore, whose Mk.8’s windscreen had cracked and was not sufficiently secure to complete the flight. Pilot Officer Allen was also delayed at Istres until the day after with engine starter trouble. The remainder of the Squadron arrived on schedule at North Weald later on the 10th.

On the 18th July, Flying Officer Tebbit was forced to abandon his take-off from Waterbeach, Cambs. His aircraft overshot the end of the runway, crashed and caught fire, with the pilot suffering minor injuries in his escape from the wreck after jettisoning the canopy. A new National Service pilot, Pilot Officer William Woollard, was given a familiarisation flight in the T.7 by Flight Lieutenant Lloyd on the 21st, and instruction covering circuits, overshoots, QGH descents and asymmetric flying the following day. Having received his Green Card instrument rating, courtesy of Flight Lieutenant Mercer of No.111 Squadron, Pilot Officer Mike Allen was flown to Langer in a T.7 to collect a new Meteor, raising the Squadron’s establishment to eleven F.8s and two T.7s.

The inadequacy of the Meteor as an interceptor was highlighted in the second part of Exercise DIVIDEND, conducted over the weekend of the 23rd/25th, when in poor weather the Squadron’s Meteors were able to identify, but not intercept, F-84 Thunderjets and F-86 Sabres of the USAF. This incident illustrated the decline in the capability of the Auxiliary’s equipment, at a time when the Regular Air Force was re-equipping with the

---

40 Al Hanley Browne qualified as a National Service pilot before serving with No.54 Squadron and participating in the Coronation Review of 1953. He was subsequently awarded the Coronation Medal before joining 604 in 1954 and later BOAC, flying Argonauts, Stratocruisers, Britannias, Comets and VC.10s. He ended his flying career as British Airways Flight Crew Manager on Boeing 747s.

41 Later of the BBC and a presenter of the science programme Tomorrow’s World.

42 QGH was a CRT-based system that enabled a ground controller, or his assistant, to guide a pilot to a safe landing when his airfield was covered in cloud down to a level (cloud-base) of some 200 feet (61 metres). It was a procedure that was practised quite frequently and should not be confused with the radar-base Ground Controlled Approach - GCA.
Hunter, the Javelin and the Swift, and Bomber Command was replacing its piston-engined Lincolns and Washingtons with jet-powered, higher performance, Canberras and Valiants.

On the 28th August, 604 recorded its fourth ‘incident’ of the year, thankfully not fatal, when Flight Lieutenant Salandin, OC ‘B’ Flight, was a little low on his approach to North Weald and struck the boundary fence, causing damage to the aircraft’s flaps, fuselage and one engine nacelle. ‘On reaching the dispersal he admitted to a rough landing in the undershoot area, but was surprised to find a length of fence under the mainplane.’

On the 14th October, the Squadron welcomed Flight Lieutenant D.Mullarkey, the new Adjutant to replace Flight Lieutenant Lloyd who was posted to 2ATAF on the completion of his two-and-half year appointment with 604. Another National Service pilot, Pilot Officer Fred Grisley, along with Pilot Officer Woollard, rejoined the Squadron after successfully completing their OCU Courses during the month.

The Squadron’s final incident of the year, and the fifth overall, occurred on the 5th December, when Pilot Officer Cross got into difficulties at 20,000 feet (6,095 metres) in his Meteor 8 and was forced to eject over the Thames Estuary, from where he was rescued relatively uninjured by an American amphibian.43

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43 The ORB does not specify the type of amphibian, but it was most probably a Grumman HU-16 Albatross of the USAF based at Manston.
The year\textsuperscript{44} got off to a reasonable start for 604 with no untoward incidents until March, when Pilot Officer Cross was once again forced to abandon his Meteor T.7, accompanied by his airman passenger, when the hood became detached at 5,000 feet (1,525 metres) over the English Channel. Both parachuted to safety (the Meteor T.7 was not fitted with ejection seats) in the vicinity of Dover, where they were rescued after sustaining minimal injuries.

The venue for the summer camp was changed from Malta to Wunstorf, an airfield in the RAF’s 2TAF that formed part of NATO’s 2ATAF in West Germany. 604’s arrival at Wunstorf was part of a general deployment of the RAuxAF to summer camp in Germany in 1955. The programme began in July with the deployment of No.615 Squadron from Biggin Hill for a period of two weeks, to be replaced by 601 at the end of July and 604 in late August, whilst Celle hosted Nos.616, 500, 611 and 609 Squadrons.\textsuperscript{45}

The Squadron’s twelve aircraft, ten F.8s and two T.7s, flew direct to Wunstorf on Saturday the 27\textsuperscript{th} August, following a delayed take-off due to

\textsuperscript{44} It should be noted that from January 1955, the ORB reveried to a ‘minimalist’ approach and much of the detail of the Squadron’s operations is subsequently lost.

bad weather. On arrival at the station, the Squadron suffered from poor weather, low cloud, accompanied by poor visibility, particularly during the first week, when flying was possible on one day only. Nevertheless, after a great deal of effort by all concerned, the Command flying hours target was met during the second week (individual details are shown at Appendix 5). Gunnery facilities were restricted to air-to-ground firing on the Strohen Range, and for many pilots this was their first opportunity to fire their weapons. However, most encountered few difficulties with a Squadron average of 15.6% being recorded (see Appendix 5). The Adjutant, Flight Lieutenant Mullarkey, operated as Range Safety Officer at Strohen on one occasion and subsequently criticised the inefficiency of the ground marking - only one man and a paint brush being available - and the poor recording of scores. A single incident marred an otherwise perfect camp, when the tread on a Mk.8’s tyre came adrift, causing the mudguard to break away and strike the wing centre section, rendering the aircraft Category 3 at Wunstorf for repair by the local MU. Servicing was organised on a three flight basis, two operational flights and a training flight, supported by a small Rectification Flight manned by Regular technicians - an arrangement that apparently worked very well throughout the period of the camp. Except for the Signals Section, which encountered some difficulties during the first few days with one VHF channel, all the ancillary trades worked satisfactorily. Eight Meteor F.8s returned to North Weald on Saturday the 10th September, whilst a section of three aircraft, presumably two F.8s and a T.7, transited via Soersterburg, due to unfavourable winds reducing the range of the T.7.

The continued obsolescence of the Auxiliary’s equipment was recorded in the ORB during September, in relation to Fighter Command’s air defence exercise, Exercise BEWARE. The main battle was fought out above the Meteor’s altitude and speed, forcing the controllers to allocate the Auxiliaries to the lower level targets. Despite these limitations, 604 remained effective and recorded its ‘highest interception rate since the War’.

1956

In the last year of operational flying, 604 continued to maintain its efficiency as an Auxiliary fighter squadron. Manpower returns for January 1956 showed a healthy state, with Squadron strength standing at thirty officers (two Regular Air Force and twenty-eight Auxiliaries) and 110 airmen (thirty-one Regular and seventy-nine Auxiliary). Air-to-air gunnery practise continued, with the younger pilots improving with experience. The Squadron averaged scores of 19% during February and Flying Officer Buckley returned an individual score of 50.4% the following month.
Flying Officer Derek Dempster with Meteor F.8, in 1950’s flying kit. Derek joined 604 in 1949 and remained as a Squadron pilot until disbandment in March 1957 (Derek Dempster).

The Squadron’s last accident occurred on the 30th June, when the aircraft flown by Pilot Officer J.E.Hutchinson hit the jet-wash of the aircraft ahead, causing the aircraft to roll and its wing-tip to strike the ground. Gaining some semblance of control the pilot overshot the runway and climbed to 1,500 feet (460 metres) before ejecting when he finally lost control of the aircraft.

Tangmere was chosen as the venue for the last summer camp held during the first two weeks of September, where, despite unfavourable weather conditions, the Squadron achieved its flying target and completed a very successful camp. With the decision that month by the Air Staff to recommend to the Government that the RAuxAF be disbanded, 604 participated in its last air defence exercise, Exercise STRONGHOLD, held during the latter part of the summer camp. 604’s involvement in the first phase proved to be very successful, with a ‘remarkably high number of sorties being flown’. Unfortunately, the second phase coincided with the Squadron’s return to North Weald, which was usually accompanied by a reduction in the number of available pilots. However, since virtually nothing happened during the second phase, nobody noticed the shortage, and the Squadron was not unduly embarrassed.

The final months of the year were affected by poor weather and an imposed limitation by Group on air-to-air firing and night flying. Instrument
ratings and Meteor conversion continued as if nothing was happening and two new officer recruits were confirmed.

1957

January began as normal, with the accent on camera-gun training. However, a signal made to the CO’s of the Auxiliary squadrons was received, stating that all the squadrons were to be disbanded, effective 10th March 1957, and that Auxiliary flying was to cease from the 10th of the month. From that date onwards, the only flying to be undertaken was by the Regular officers in preparation for the disposal of the Squadron’s aircraft. At 1630 hours on the 10th, the Squadron flew its last flypast of nine aircraft over RAF North Weald.

By the 8th February, the Adjutant, Flight Lieutenant Mullarkey, and the Training Officer, Flight Lieutenant Bishop, had delivered all the aircraft to their designated disposal points with other squadrons, or for destruction at the MUs. The remainder of February and March were spent disbanding the Squadron and posting-out the Regular personnel, disposing of stores and equipment and completing all necessary administration. At midnight on the 10th March 1957, the thirty-two Auxiliary officers and eighty-six NCOs and airmen of No.604 (County of Middlesex) Squadron, RAuxAF, stood down for the final time - twenty seven years, almost to the day, since it was founded on the 17th March 1930. The CO’s remarks on the final page of the ORB neatly summed up the occasion thus:

‘The 10th March 1957 saw the end of the fine history of a famous squadron.’
Epilogue

1960

The final act in the Squadron’s history took place on 28th May 1960. In the presence of Group Captain John Cunningham, OBE, DSO, DFC, DL, and two members of the Squadron Association, Mr John Annals and Mr John Davis, Air Chief Marshal Sir Francis Fogarty, the Squadron’s first Adjutant, Group Captain John Cherry, CBE, one of its first Auxiliary pilots, Squadron Leader T.P.Turnbull, DFC, the last CO, and Sir Frederick Handley Page, CBE, the Lieutenant for the County of Middlesex, 604’s Standard was taken by Flight Lieutenant John Buckley in company with the Queen’s Colour Squadron, from Richmond Terrace, London, to its resting place in the RAF’s Church of St Clement Danes.

Battle Honours

No.604 (County of Middlesex) Squadron, RAuxAF, was awarded the following Battle Honours:

- France & Low Countries 1940
- Dunkirk
- Battle of Britain 1940
- Home Defence 1940 - 1944
- Fortress Europe 1943 - 1945
- Normandy 1944
- France & Germany 1944 - 1945

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46 John Buckley joined 604 in 1956 from 111 Squadron and following the disbandment of the RAuxAF he rejoined the Regular Air Force.
## APPENDIX ONE

### 604 Squadron Key Appointments

#### COMMANDING OFFICERS

<table>
<thead>
<tr>
<th>Officer</th>
<th>Start</th>
<th>End</th>
</tr>
</thead>
<tbody>
<tr>
<td>S/Ldr A.S.W. Dore, DSO, TD</td>
<td>March 1930</td>
<td>April 1935</td>
</tr>
<tr>
<td>S/Ldr C.P. Gabriel</td>
<td>April 1935</td>
<td>February 1939</td>
</tr>
<tr>
<td>S/Ldr R.A. Budd</td>
<td>February 1939</td>
<td>March 1940</td>
</tr>
<tr>
<td>S/Ldr M.F. Anderson, DFC</td>
<td>March 1940</td>
<td>February 1941</td>
</tr>
<tr>
<td>W/Cdr C. Appleton, DSO</td>
<td>February 1941</td>
<td>August 1941</td>
</tr>
<tr>
<td>W/Cdr J. Cunningham, DSO, DFC*</td>
<td>August 1941</td>
<td>July 1942</td>
</tr>
<tr>
<td>W/Cdr Wood, DFC</td>
<td>July 1942</td>
<td>April 1943</td>
</tr>
<tr>
<td>W/Cdr M.C. Maxwell, DFC</td>
<td>April 1943</td>
<td>July 1944</td>
</tr>
<tr>
<td>W/Cdr F.D. Hughes, DFC**</td>
<td>July 1944</td>
<td>April 1945</td>
</tr>
<tr>
<td>S/Ldr J. Cunningham, DSO**, DFC**</td>
<td>June 1946</td>
<td>January 1948</td>
</tr>
<tr>
<td>S/Ldr K. Crofts, DFC</td>
<td>January 1948</td>
<td>May 1951</td>
</tr>
<tr>
<td>S/Ldr A. Deytrikh, AFC</td>
<td>June 1951</td>
<td>June 1952</td>
</tr>
<tr>
<td>S/Ldr T.P. Turnbull, DFC</td>
<td>June 1952</td>
<td>March 1957</td>
</tr>
</tbody>
</table>

#### FLIGHT COMMANDERS

**‘A’ Flight**

<table>
<thead>
<tr>
<th>Officer</th>
<th>Start</th>
<th>End</th>
</tr>
</thead>
<tbody>
<tr>
<td>F/Lt M.F. Anderson</td>
<td>September 1939</td>
<td>March 1940</td>
</tr>
<tr>
<td>S/Ldr S. Skinner</td>
<td>March 1940</td>
<td>May 1942</td>
</tr>
<tr>
<td>S/Ldr E. Crew, DFC*</td>
<td>May 1942</td>
<td>December 1942</td>
</tr>
<tr>
<td>S/Ldr Gonsalves</td>
<td>December 1942</td>
<td>May 1943</td>
</tr>
<tr>
<td>S/Ldr Hoy, DFC</td>
<td>May 1943</td>
<td>October 1943</td>
</tr>
<tr>
<td>S/Ldr D. Furse, DFC</td>
<td>October 1943</td>
<td>April 1945</td>
</tr>
<tr>
<td>F/Lt K. Crofts, DFC</td>
<td>August 1946</td>
<td>January 1948</td>
</tr>
<tr>
<td>F/Lt A. Deytrikh</td>
<td>January 1948</td>
<td>June 1951</td>
</tr>
<tr>
<td>F/Lt I. Ponsford, DFC</td>
<td>June 1951</td>
<td>March 1957</td>
</tr>
</tbody>
</table>

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1. Wing Commander Wood failed to return from a sortie on the night of 16/17th April 1943.
2. Squadron Leader Lofts was killed in a flying accident at West Malling on 20th May 1951.
3. Squadron Leader Deytrikh left the Squadron on obtaining a Regular commission.
‘B’ Flight

<table>
<thead>
<tr>
<th>Officer</th>
<th>Term 1</th>
<th>Term 2</th>
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<tbody>
<tr>
<td>F/Lt A.J.Davies</td>
<td>September 1939 - September 1940</td>
<td></td>
</tr>
<tr>
<td>S/Ldr J.Cunningham, DFC*</td>
<td>September 1940 - August 1941</td>
<td></td>
</tr>
<tr>
<td>S/Ldr R.Chisholm, DFC</td>
<td>August 1941 - February 1942</td>
<td></td>
</tr>
<tr>
<td>S/Ldr McLannahan</td>
<td>February 1942 - May 1942</td>
<td></td>
</tr>
<tr>
<td>S/Ldr J.Selway</td>
<td>May 1942 - November 1943</td>
<td></td>
</tr>
<tr>
<td>S/Ldr A.Carmichael</td>
<td>November 1943 - July 1944</td>
<td></td>
</tr>
<tr>
<td>S/Ldr B. Maitland-Thompson</td>
<td>July 1944 - October 1944</td>
<td></td>
</tr>
<tr>
<td>S/Ldr Drummond</td>
<td>October 1944 - December 1944</td>
<td></td>
</tr>
<tr>
<td>S/Ldr Hayhurst</td>
<td>December 1944 - February 1945</td>
<td></td>
</tr>
<tr>
<td>S/Ldr Wynn</td>
<td>March 1945 - April 1945</td>
<td></td>
</tr>
<tr>
<td>F/Lt T.P.Turnbull, DFC</td>
<td>March 1949 - June 1952</td>
<td></td>
</tr>
<tr>
<td>F/Lt J.R.Salandin</td>
<td>June 1952 - March 1957</td>
<td></td>
</tr>
</tbody>
</table>

ADJUTANTS

<table>
<thead>
<tr>
<th>Officer</th>
<th>Term 1</th>
<th>Term 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>F/Lt F.Fogarty, DFC</td>
<td>March 1930 - October 1936</td>
<td></td>
</tr>
<tr>
<td>F/Lt R.C.Jonas</td>
<td>October 1936 - Not known</td>
<td></td>
</tr>
<tr>
<td>F/Lt W.A.L.Locker</td>
<td>Not known - September 1939</td>
<td></td>
</tr>
<tr>
<td>F/Lt J.D.St Olliffe-Lee</td>
<td>September 1939 - July 1941</td>
<td></td>
</tr>
<tr>
<td>F/Lt Clennell</td>
<td>July 1941 - June 1944</td>
<td></td>
</tr>
<tr>
<td>F/O Webb</td>
<td>June 1944 - April 1945</td>
<td></td>
</tr>
<tr>
<td>F/Lt J.Howard-Williams, DFC</td>
<td>June 1946 - January 1949</td>
<td></td>
</tr>
<tr>
<td>F/Lt R.Hartley Crompton</td>
<td>January 1949 - December 1951</td>
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</tr>
<tr>
<td>F/Lt N.F.Curtis</td>
<td>December 1951 - March 1952</td>
<td></td>
</tr>
<tr>
<td>F/Lt M.Lloyd</td>
<td>May 1952 - October 1954</td>
<td></td>
</tr>
<tr>
<td>F/Lt D.Mullarkey</td>
<td>October 1954 -</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX TWO

Appendix 2 - Aircraft & Airfields of 604 Squadron

AIRCRAFT

<table>
<thead>
<tr>
<th>Aircraft</th>
<th>From</th>
<th>To</th>
</tr>
</thead>
<tbody>
<tr>
<td>De Havilland D.H.9A</td>
<td>April 1930</td>
<td>October 1930</td>
</tr>
<tr>
<td>Avro 504N</td>
<td>April 1930</td>
<td>March 1935</td>
</tr>
<tr>
<td>De Havilland Gypsy Moth</td>
<td>November 1930</td>
<td>August 1936</td>
</tr>
<tr>
<td>Hawker Hart (Trainer)</td>
<td>September 1934</td>
<td>June 1935</td>
</tr>
<tr>
<td>Hawker Demon</td>
<td>June 1935</td>
<td>January 1939</td>
</tr>
<tr>
<td>Bristol Blenheim If</td>
<td>January 1939</td>
<td>May 1941</td>
</tr>
<tr>
<td>Gloster Gladiator I</td>
<td>May 1940</td>
<td>May 1940</td>
</tr>
<tr>
<td>Bristol Beaufighter If</td>
<td>September 1940</td>
<td>April 1943</td>
</tr>
<tr>
<td>Bristol Beaufighter VIf</td>
<td>April 1943</td>
<td>April 1944</td>
</tr>
<tr>
<td>De Havilland Mosquito NF.XIII</td>
<td>February 1944</td>
<td>April 1945</td>
</tr>
<tr>
<td>North American Harvard IIB</td>
<td>July 1946</td>
<td>February 1957</td>
</tr>
<tr>
<td>Supermarine Spitfire LF.16e</td>
<td>October 1946</td>
<td>May 1950</td>
</tr>
<tr>
<td>Airspeed Oxford</td>
<td>1948</td>
<td>Not known</td>
</tr>
<tr>
<td>Gloster Meteor T.7</td>
<td>November 1949</td>
<td>February 1957</td>
</tr>
<tr>
<td>De Havilland Vampire F.3</td>
<td>November 1949</td>
<td>August 1952</td>
</tr>
<tr>
<td>Gloster Meteor F.8</td>
<td>August 1952</td>
<td>February 1957</td>
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</table>

AIRFIELDS

604 Squadron was formed at Hendon under the command of Squadron Leader Alan Dore on 17th March 1930:

<table>
<thead>
<tr>
<th>Airfield</th>
<th>From</th>
<th>To</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hendon, North London</td>
<td>March 1930</td>
<td>September 1939</td>
</tr>
<tr>
<td>North Weald, Essex</td>
<td>September 1939</td>
<td>January 1940</td>
</tr>
<tr>
<td>Martlesham Heath, Suffolk (det)</td>
<td>September 1939</td>
<td>January 1940</td>
</tr>
<tr>
<td>Northolt, West London</td>
<td>January 1940</td>
<td>May 1940</td>
</tr>
<tr>
<td>Kenley, Surrey (‘B’ Flt det)</td>
<td>March 1940</td>
<td>May 1940</td>
</tr>
<tr>
<td>Manston, Kent</td>
<td>May 1940</td>
<td>July 1940</td>
</tr>
<tr>
<td>Gravesend, Kent</td>
<td>July 1940</td>
<td>July 1940</td>
</tr>
<tr>
<td>Middle Wallop, Hants</td>
<td>July 1940</td>
<td>December 1942</td>
</tr>
<tr>
<td>Coltishall, Norfolk (‘B’ Flt det)</td>
<td>August 1941</td>
<td>September 1941</td>
</tr>
</tbody>
</table>
Predannack, Cornwall  December 1942 - April 1943
Ford, Hants (‘A’ Flt det)  February 1943 - April 1943
Scorton, Yorks  April 1943 - April 1944
Church Fenton, Yorks  April 1944 - May 1944
Hurn, Hants  May 1944 - July 1944
Colerne, Wilts  July 1944 - July 1944
Zeals, Wilts  July 1944 - July 1944
Colerne, Wilts  July 1944 - August 1944
Manpertus [A.15], France (det)  July 1944 - August 1944
Picauville [A.8], France  August 1944 - September 1944
Carpiquet [B.17], France  September 1944 - September 1944
Predannack, Cornwall  September 1944 - December 1944
Ford, Hants (det)  September 1944 - September 1944
Odiham, Hants  December 1944 - January 1945
Lille/Vendeville [B.51], France  January 1945 - April 1945

604 Squadron was disbanded at Lille/Vendeville on 18th April 1945 and reformed at Hendon on 15th May 1946 under the command of Squadron Leader John Cunningham:

Hendon, North London  May 1946 - March 1949
North Weald, Essex  March 1949 - March 1957

604 Squadron was disbanded at North Weald on 10th March 1957.
UK AIRFIELDS OF 604 SQUADRON BY LOCATION

(Ian White & Judith Last)
FRENCH AIRFIELDS OF 604 SQUADRON BY LOCATION

(Ian White & Judith Last)
APPENDIX THREE

Enemy Aircraft Claimed as Destroyed by 604 Squadron During World War Two

1940

<table>
<thead>
<tr>
<th>DATE</th>
<th>CLAIM</th>
<th>CREW</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 June</td>
<td>He 115</td>
<td>F/O Hunter &amp; LAC Thomas</td>
<td>English Channel</td>
</tr>
<tr>
<td>11 Sept</td>
<td>Do 18</td>
<td>S/L Anderson &amp; P/O Crew</td>
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<tr>
<td>19/20 Nov</td>
<td>Ju 88A-5</td>
<td>F/Lt Cunningham &amp; Sgt Philipson</td>
<td>East Wittering, Sussex</td>
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<td>12 Dec</td>
<td>Ju 88</td>
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<tr>
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<td>He 111</td>
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1941

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<td>He 111H-5</td>
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<td>English Channel</td>
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<td>Sea off Wells-next-the-Sea, Norfolk</td>
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<td>Ju 88C</td>
<td>W/C Cunningham &amp; P/O Rawnsley</td>
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<td>F/O Crew &amp; Sgt Facey</td>
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<td>P/O Tharp &amp; Sgt King</td>
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<td>Do 17Z</td>
<td>F/Lt Crew &amp; P/O Duckett</td>
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1943

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<tr>
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<tr>
<td>31 Dec</td>
<td>Ju 87</td>
<td>F/Lt Cross &amp; F/O Beaumont</td>
<td>Vicinity of the front line</td>
</tr>
<tr>
<td>1 Jan</td>
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</tr>
<tr>
<td>31 Dec</td>
<td>Ju 87</td>
<td>F/Lt Cross &amp; F/O Beaumont</td>
<td>Vicinity of the front line</td>
</tr>
<tr>
<td>1 Jan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/2 Jan</td>
<td>He 219</td>
<td>S/L Furse &amp; F/Lt Downes</td>
<td>Nr of Muchen Galdbach</td>
</tr>
<tr>
<td>1/2 Jan</td>
<td>Ju 88</td>
<td>F/Lt Foster &amp; F/Lt Newton</td>
<td>Not known</td>
</tr>
<tr>
<td>1/2 Jan</td>
<td>Ju 88</td>
<td>F/Lt Foster &amp; F/Lt Newton</td>
<td>Not known</td>
</tr>
<tr>
<td>1/2 Jan</td>
<td>Ju 88</td>
<td>F/Lt Foster &amp; F/Lt Newton</td>
<td>Not known</td>
</tr>
<tr>
<td>4/5 Jan</td>
<td>Ju 88</td>
<td>F/O Nicholas &amp; F/O Irvine</td>
<td>West of Horstmar</td>
</tr>
<tr>
<td>14/15 Jan</td>
<td>Ju 88</td>
<td>W/C Hughes &amp; F/Lt Dixon</td>
<td>South of Rotterdam</td>
</tr>
<tr>
<td>21/22 Jan</td>
<td>Unknown</td>
<td>F/O Beaumont &amp; unidentified R/O</td>
<td>Not known</td>
</tr>
<tr>
<td>24/25 Mar</td>
<td>Bf 109</td>
<td>F/Lt Leppard &amp; F/Lt Houghton</td>
<td>Vicinity of Haltern</td>
</tr>
<tr>
<td>26/27 Mar</td>
<td>Ju 88</td>
<td>F/O Wood &amp; F/O Leafe</td>
<td>Not known - last claim</td>
</tr>
</tbody>
</table>

Note: Overall, the Squadron was credited with 132 enemy aircraft destroyed.
APPENDIX 4

Officers & Pilots of 604 Squadron at December 1951

S/Ldr A.Detrikh, AFC  Commanding Officer
F/Lt N.F.Curtis       Pilot & RAF Adjutant
F/Lt I.R.Ponsford, DFC Pilot & OC ‘A’ Flight
F/Lt T.P.Turnbull, DFC Pilot & OC ‘B’ Flight
F/Lt J.R.Salandin     Pilot
F/Lt W.A.Wilson       Pilot
F/Lt G.H.Threlfall    Pilot
F/Lt C.G.Hodgkinson  Intelligence Officer
F/Lt E.W.Aries, AFC   Pilot & Auxiliary Adjutant
F/Lt A.Frost          Pilot
F/Lt D.W.Col tart    Medical Officer
F/Lt C.P.Zorab       Equipment Officer
F/Lt D.Bryden-Brown  Accounts Officer
F/Lt R.G.Chapman     RAF Engineering Officer
F/Lt R.J.Piper       RAF Engineering Officer
F/O F.J.Barrett      Training Officer
F/O D.D.Dempster     Pilot
F/O J.B.Dore         Pilot
F/O A.J.Edwards      Pilot
F/O C.C.Allen        Pilot
F/O J.Philips        Pilot
F/O J.Hoare          Pilot
P/O P.Ranson         Pilot
Sgt J.H.Ridge        Pilot
Sgt D.Yates          Pilot
Sgt A.G.Patmore      Pilot
Sgt G.A.Burns        Pilot
Sgt K.Humphreys      Pilot
F/O R.Statton        Pilot (supernumerary in USA)
**Glossary of Terms & Abbreviations**

Of necessity this book contains a significant number of terms and abbreviations that are applicable to the operation and administration of 604 Squadron. Nevertheless, the author begs the readers indulgence at the number of the abbreviations listed below:

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>A&amp;AEE</td>
<td>Aeroplane &amp; Armament Experimental Establishment, based at Martlesham Heath &amp; Boscombe Down, Wilts.</td>
</tr>
<tr>
<td>AAF</td>
<td>Auxiliary Air Force.</td>
</tr>
<tr>
<td>AASF</td>
<td>Advanced Air Striking Force - the RAF’s expeditionary air force in France, 1939 - 1940.</td>
</tr>
<tr>
<td>AC1</td>
<td>Aircraftsman 1st Class.</td>
</tr>
<tr>
<td>AC2</td>
<td>Aircraftsman 2nd Class.</td>
</tr>
<tr>
<td>ACAS</td>
<td>Assistant Chief of Air Staff.</td>
</tr>
<tr>
<td>AE</td>
<td>Air Efficiency Award, the RAF’s equivalent of the Army’s Territorial Decoration.</td>
</tr>
<tr>
<td>AFC</td>
<td>Air Force Cross awarded to officers for gallantry in the air when not opposed by the enemy.</td>
</tr>
<tr>
<td>AI</td>
<td>Air Intercept radar.</td>
</tr>
<tr>
<td>AMES</td>
<td>Air Ministry Experimental Station.</td>
</tr>
<tr>
<td>AMRE</td>
<td>Air Ministry Research Establishment, initially located at Bawdsey Manor and renamed TRE in November 1940.</td>
</tr>
<tr>
<td>AOC</td>
<td>Air Officer Commanding usually in command of an RAF Group.</td>
</tr>
<tr>
<td>AOC-in-C</td>
<td>Air Officer Commander-in-Chief usually in command of an RAF Command.</td>
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<tr>
<td>ARP</td>
<td>Air Raid Precautions</td>
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<tr>
<td>ASR</td>
<td>Air Sea Rescue.</td>
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<tr>
<td>ASV</td>
<td>Air-to-Surface Vessel radar.</td>
</tr>
<tr>
<td>ATC</td>
<td>Air Training Corps for cadet (youth) training.</td>
</tr>
<tr>
<td>BAFO</td>
<td>British Air Forces of Occupation in Germany.</td>
</tr>
<tr>
<td>BEF</td>
<td>British Expeditionary Force in France, 1939 - 1940.</td>
</tr>
<tr>
<td>BEM</td>
<td>British Empire Medal.</td>
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<tr>
<td>Boffin</td>
<td>Civilian scientist.</td>
</tr>
<tr>
<td>Bt</td>
<td>Baronet.</td>
</tr>
<tr>
<td>Bulls Eye</td>
<td>Air defence exercises that pitted night-fighters aircraft against friendly aircraft.</td>
</tr>
</tbody>
</table>
CAA The UK Civil Aviation Authority.
CAS Chief of the Air Staff and the RAF’s most senior officer.
CB Commander of the Bath.
CBE Commander of the Order of the British Empire.
CFS Central Flying School.
CFI Chief Flying Instructor.
CH Chain Home radar - a ground-based early warning radar.
CID Committee of Imperial Defence.
CO The Commanding Officer of an RAF squadron.
CRT Cathode Ray Tube display for radar sets.
CTO Chief Technical Officer - a title used in the post-War RAF.
DCAS, Deputy Chief of Air Staff.
D/F Direction Finder.
DFC Distinguished Flying Cross awarded to officers and warrant officers for gallantry in the face of the enemy.
DFM Distinguished Flying Medal awarded to NCOs and airmen for gallantry in the face of the enemy.
DSO Distinguished Service Order awarded to squadron and flight commanders and above for leadership in the face of the enemy.
Duppel The German equivalent of Window, or chaff.
EFTS Elementary Flying Training School.
EMI Electrical & Musical Industries Ltd.
Erprobung (EGr) A special Luftwaffe operational testing unit, somewhat similar to the RAF’s FIU.
EW Early Warning.
FDT Fighter Direction Tender.
FIU Fighter Interception Unit - Fighter Command’s operational testing unit.
Flieger A Luftwaffe non-commissioned rank broadly equivalent to a RAF AC2.
Fliegerkorps A grouping of Kampfgeschwader reporting to a Luftflotte and commanded by a Generaloberst, or a General.
F/O Standard RAF abbreviation for Flying Officer.
FTS  Flying Training School.
GCA  Ground Control of Approach system.
GCI  Ground Control of Interception radar stations.
GD   The General Duties Branch of the RAF, to which all aircrews belonged.

Gefreiter  A Luftwaffe non-commissioned rank broadly equivalent to a RAF AC1.

General  A Luftwaffe rank broadly equivalent to an RAF Air Marshal.

Generalfeldmarshall  A Luftwaffe rank broadly equivalent to a MRAF.

Generaloberst  A Luftwaffe rank broadly equivalent to an RAF Air Chief Marshal.

GL   Gun-laying radar.

Gruppe  A Luftwaffe bomber unit comprising some thirty aircraft, commanded by a major, or a captain (Hauptmann), who carried the title of ‘Kommandeur.’

Hauptmann  A Luftwaffe rank broadly equivalent to an RAF Flight Lieutenant.

HE   High explosive.

Hz   Hertz - radio frequency, previously quoted in cycles per second.

HM   His/Her Majesty.

HQ   Headquarters.

HRH  His/Her Royal Highness.

HMS  His/Her Majesty’s Ship.

I/C  In charge.

IFF  Identification Friend, or Foe equipment.

IR   Radio-frequency energy in the infra-red spectrum (0.8 - 30 microns).

IWM  The Imperial War Museum, Lambeth, London.

Jabo  The German term for fighter-bombers.

Kampfgeschwader  The Geschwader was the largest operational unit in the Luftwaffe, comprising three operational Gruppen and a forth training Gruppe, giving it an operational strength in excess of 120 aircraft. Bomber (Kampf) Geschwader were commanded by an officer of major, lieutenant colonel, (Oberstleutnant) or colonel (Oberst) rank, who carried the title of ‘Kommodore’.
**Kampfgruppe (KGr)** An independent bomber *gruppe* reporting to the HQ staff of a *Luftflotte*.

**Kriegsmarine** The German ‘War Navy’.

**LAC** Leading Aircraftsman.

**LCT** Landing Craft (Tank).

**Luftflotte** A German Air Fleet, comparable in importance to an RAF Command.

**Luftwaffe** The German Air Force.

**MAP** The Ministry of Aircraft Production.

**NAS** Naval Air Squadron.

**MBE** Member of the Order of the British Empire.

**MC** Military Cross.

**MHz** A frequency of 1,000 cycles per second (Hz).

**MO** Medical Officer.

**MP** Member of Parliament.

**MRAF** Marshal of the Royal Air Force.

**MT** Motor Transport.

**MTB** Motor Torpedo Boat.

**MU** Maintenance Unit.

**NAAFI** Navy, Army & Air Force Institute - in the context of this book, the airmen’s and NCOs ‘canteen.’

**Nachtsjagdgeschwader** A night-fighter *Geschwader*, usually comprising three operational *Gruppen* of some ninety aircraft. *Nachtsjagdgeschwader* were commanded by an officer of major, lieutenant colonel, (Oberstleutnant) or colonel (Oberst) rank, who carried the title of ‘Kommodore’.

**NATO** North Atlantic Treaty Organisation.

**NCO** Non-Commissioned Officers.

**NJG** *Nachtsjagdgeschwader* - a German night-fighter geschwader.

**N/R** Navigator (Radio), the RO’s title from early 1942.

**OATS** The Officer’s Advanced Training School course.

**Oberfeldwebel** A *Luftwaffe* non-commissioned rank broadly equivalent to a RAF Flight Sergeant.

**Oberleutnant** A *Luftwaffe* rank broadly equivalent to an RAF Flight Lieutenant.

**Oberst** A *Luftwaffe* rank broadly equivalent to an RAF Group Captain.

**Oberstleutnant** A *Luftwaffe* rank broadly equivalent to an RAF Wing Commander.
OC
Officer Commanding - in the context of this book, an officer commanding a flight, or a detachment of a squadron.

OCU
Operational Conversion Unit.

OKL
Oberkommando der Luftwaffe - the Luftwaffe High Command.

OKW
Oberkommando der Wehrmacht - the High Command of the German Armed Forces.

ORB
Operational Record Book - an RAF squadron’s diary of events.

OTU
Operational Training Unit.

Panzer
German armoured troops.

PDC
Personnel Dispatch Centre.

PHU
Personnel Holding Unit.

Pfadfinder
Pathfinder.

PI
Practise interceptions.

PoW
Prisoner-of-War.

PPI
Plan Position Indicator - a radar display with a rotating timebase.

PR
Public Relations.

PSP
Pierced Steel Planking.

PT
Physical training.

RAAF
Royal Australian Air Force.

RAE
Royal Aircraft Establishment, Farnborough.

RA
Royal Artillery.

RAF
Royal Air Force.

RAFO
Reserve of Air Force Officers

RAFSR
The Royal Air Force Special Reserve.

RAFVR
Royal Air Force Volunteer Reserve.

RFC
Royal Flying Corps.

RLM
Reichsluftfahrt Ministerium - the German Air Ministry.

RNAS
Royal Naval Air Station.

RNorAF
Royal Norwegian Air Force.

RNVR
Royal Naval Volunteer Reserve - the Royal Navy’s equivalent of the RAFVR.

RO
Observers (Radio) - the aircrew badge applied to radar operators from September 1941 and the abbreviation by which they and their ‘trade’ were known. The title changed to N/R early in 1942.

ROC
Royal Observer Corps.
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>RPM</td>
<td>Revolutions per minute.</td>
</tr>
<tr>
<td>R-R</td>
<td>The Rolls-Royce Company.</td>
</tr>
<tr>
<td>R/T</td>
<td>Radio Telephony.</td>
</tr>
<tr>
<td>SASO</td>
<td>The Senior Air Staff Officer - usually of an RAF Group, or Command.</td>
</tr>
<tr>
<td>SDF</td>
<td>Special Duty Flight of AMRE, the TFU from August 1942.</td>
</tr>
<tr>
<td>SKG</td>
<td><em>Schnellkampfgeschwader</em> - fast/fighter-bomber Geschwader.</td>
</tr>
<tr>
<td>SLO</td>
<td>Searchlight Liaison Officer - an RA officer on secondment to a night-fighter Squadron.</td>
</tr>
<tr>
<td>Stab</td>
<td>Staff flight of a <em>Luftwaffe</em> Gruppe, or Geschwader.</td>
</tr>
<tr>
<td>Staffel</td>
<td>The lowest grade of flying unit in the <em>Luftwaffe</em>, the <em>Staffel</em> usually comprised nine aircraft and was commanded by a <em>Staffelkapitaen</em> of Oberleutnant, or Hauptmann rank. Three operational <em>Staffel</em> made up a standard Geschwader Gruppe.</td>
</tr>
<tr>
<td>TA</td>
<td>Territorial Army.</td>
</tr>
<tr>
<td>TFU</td>
<td>Telecommunications Flying Unit, previously the SDF.</td>
</tr>
<tr>
<td>TRE</td>
<td>Telecommunications Research Establishment, previously AMRE.</td>
</tr>
<tr>
<td>THQ</td>
<td>An Auxiliary squadron’s Town Headquarters.</td>
</tr>
<tr>
<td>UAS</td>
<td>University Air Squadron.</td>
</tr>
<tr>
<td>UK</td>
<td>The United Kingdom of Great Britain &amp; Northern Ireland.</td>
</tr>
<tr>
<td>Unteroffizier</td>
<td>A <em>Luftwaffe</em> non-commissioned rank broadly equivalent to a RAF Corporal.</td>
</tr>
<tr>
<td>u/s</td>
<td>Indicates an aircraft, or a piece of equipment, that is unserviceable.</td>
</tr>
<tr>
<td>USAAF</td>
<td>United States Army Air Force.</td>
</tr>
<tr>
<td>USAF</td>
<td>United States Air Force, as the USAAF was renamed in July 1947.</td>
</tr>
<tr>
<td>V-1</td>
<td><em>Vergeltungswaffen No.1</em>, literally, first weapon of revenge.</td>
</tr>
<tr>
<td>VCAS</td>
<td>Vice Chief of Air Staff.</td>
</tr>
<tr>
<td>VHF</td>
<td>Very High Frequency, in the band 88 - 110 MHz.</td>
</tr>
<tr>
<td>VIP</td>
<td>Very Important Persons.</td>
</tr>
<tr>
<td>WAAF</td>
<td>Women’s Auxiliary Air Force.</td>
</tr>
<tr>
<td>Window</td>
<td>The Allied codename for the modern day ‘chaff.’</td>
</tr>
<tr>
<td>X- Gerat</td>
<td>X-equipment, a German radio bombing system.</td>
</tr>
</tbody>
</table>
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Index of People, Places & Aircraft of 604 Squadron

For reasons of space, this index only refers to the personnel, airfields and aircraft of 604 Squadron. All squadron members are indexed by name and initials, however, where these are not known the rank of the person is used as alternate means of identification.

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