



**The Honourable Company of Air Pilots
Sir Frederick Tymms Memorial Lecture 2025**

Research Paper

The Royal Air Force Fighter Pilot in 1940

By

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The Royal Air Force Fighter Pilot In 1940



A

Foreword

This paper forms the research for the Honourable Company of Air Pilots annual Sir Frederick Tymms' Memorial Lecture of the 24 September 2025. The format is therefore interspersed with slides from that lecture.

Introduction

On the 25 June 1990 some 300 people attended a symposium at the Royal Air Force College. The event was to mark the 50th anniversary of the Battle of Britain and was chaired by Air Chief Marshal Sir Christopher Foxley-Norris (at that time Chairman of the Battle of Britain Fighter Association). In his introduction he recalled how he had been tasked, some years before, with writing a new appreciation exercise on the Battle of Britain. After a week he had sought an interview with his boss to tell him that, having applied all the usual considerations, he concluded that the Germans must win. Sir Christopher recalled that he had asked "*what do I do?*" To which his boss had replied "*go and fudge it!*", according to Sir Christopher that is what he did and the subject has been fudged ever since!¹

In opening that symposium Sir Christopher told the participants not to waste time by merely repeating the party line, but to try to be original and draw out anything which might possibly have affected the battle.

A great many of those 300 people who attended that seminar 45 years ago are no longer with us and much has been written about the subject in those intervening years. In this

^A L to R:- Flt.Sgt. George 'Grumpy' Unwin DFM, Flt.Lt. Walter Lawson DFC (KIA 28/08/41) and Sgt. Bernard Jennings DFM of No. 19 Squadron at Fowlmere, September 1940. They destroyed 26 aircraft between them in the Battle, with a number more damaged and probables.

anniversary I am attempting to do what Sir Christopher suggested by trying to find something original that has not been discussed before about the Battle of Britain.

I'm going to discuss the Fighter Pilot of 1940, by trying to understand the sort of man I grew up with, being the son of one of them and, for many years, being very closely connected to the veterans during my 37 years at The Royal Air Force Museum.

Those of us who grew up surrounded by RAF aircraft, immersed in books about flying, constantly looking upwards as an aeroplane flew over, discovered our history through the popular books of the day. I was never a fan of *Biggles*, but my interest has focused on the works of Richard Hillary, Paul Brickle and Larry Forrester. Those authors explained the life of a young pilot of the period telling youngsters like me all about Hillary himself, Douglas Bader and Bob Stanford-Tuck.

My qualifications to talk on the subject stem from my regular and easy access to the survivors; between 1981 and 1985 I was the Keeper of the Battle of Britain Museum at Hendon (now, sadly defunct) and my Chairman was Sir Douglas Bader. I had previously shared an office with Bob Stanford-Tuck and my association with The Polish Air Force Club and the Battle of Britain Fighter Association was very close. My childhood heroes became my mentors and friends.

Most of my time with those men was spent listening, and as they mellowed with age, their willingness to talk to a person young enough to be their son became more evident, particularly when they realised that I was the son of one of them. However, I discovered as the years went by, that my detailed knowledge of the Battles of Britain and France was incomplete. This was not because I had not done my due diligence as a historian it was for two quite separate reasons.

Firstly I digested everything I'd read but came to realise that many of the writers were immersed in the received wisdom of the official documents, wartime propaganda and post-war triumphalism.

Secondly, my conversations with veterans had been detailed and comprehensive, but they dwelled on their better memories, and their empirical knowledge of anything that went on outside the confines of their squadron or station was limited. However, their participation meant that they, too, had gathered their post-war knowledge from the same sources as me and had fallen victim to the same rhetoric.

Only in the last years did veterans truly open up about a variety of issues ignored or glossed over by writers; listening to these recollections peaked my interest. My respect for 'The Few', and the Royal Air Force as a whole, is very high but I think it is worth considering some alternative narratives in order to complete a true picture before it is too late.

I am therefore going to examine the character of the fighter pilot in 1940, the strategic and tactical leadership he was subject to, the equipment he was obliged to use and actively seek examples where the historical narrative has avoided the uncomfortable, particularly with regard to their ability to withstand the relentless pressure of operations.

Dr Michael Fopp

June 2025

The Royal Air Force Fighter Pilot in 1940

Carl von Clausewitz' (1780 – 1831) seminal work of *'Vom Kriege'* – (*About War*)² studied by military leaders for over a century, stressed the psychological and political aspects of waging war. His work would have been very familiar to Royal Air Force senior commanders, but probably of little interest to the fighter pilots actually fighting the war. However four of his notions are applicable to my thesis here:-

1. Strategy belongs primarily to the realm of art
2. Tactics belong primarily to the realm of science
3. Countless minor unpredictable factors cause things to go wrong
4. The friction of war takes a toll on the combatants

I shall use these notions to discuss the environment and experience of the fighter pilot in the first year of the war. Using them in sequence I will examine:-

1. Strategic planning and leadership
2. Tactical training, development and leadership
3. Equipment successes and deficiencies. Changes in the battle space
4. The psychological impact on leadership morale and combat capability

1. Strategic Planning & Leadership

- 1919 August, British government adopt the '10 Year Rule'
- 1932 Nov, Baldwin's *"The bomber will always get through."* speech
- 1933 March, Hitler elected Chancellor of Germany
- 1936 July, Fighter Command formed
- 1939 Sept 3, War declared
 - 39 Squadrons
 - 570 Hurricanes, Spitfires, Defiants & Gladiators + 7 Sqns of Blenheims
 - 766 aircrew



ACM Sir Hugh Dowding
CinC Fighter Command



AM Keith Park
AOC 11 Group



AM Trafford Leigh-Mallory
AOC 12 Group

1. Strategic Planning and Leadership

Following the signing of the Treaty of Versailles in 1919 an understandable peace dividend was anticipated. No right-minded person would want another 'war to end all wars'; certainly not, when such a war was quickly followed by a flu pandemic and world financial crash. War weariness led to the '10 year guideline' adopted by Britain in August 1919. This set policy that the British Empire would not be involved in any major wars for the next decade.

The RAF, in the interwar period, was vulnerable to repossession by both the Army and the Royal Navy. Its existence was preserved by its quantifiable economic advantage in the policing of the fading British Empire; it was simply cheaper to use a few aircraft to keep order when, previously, the job required large numbers of ground troops.

The RAF became, for a short while, a sort of 'colonial service' with all the attributes we now associate with the ex-patriots serving the Empire. The country club, servants, sport, overseas allowances etc. This heady mixture of privilege and the chance to indulge in flying as well drew many young men towards the junior service.

In creating the RAF, Trenchard was determined to establish esprit de corps, tradition and a positive identity as quickly as possible. The establishment of the Royal Air Force College, Cranwell and No 1 School of Technical Training, Halton were the pillars to which the new service would be attached. Whilst Halton would produce the skilled technicians and artificers, Cranwell would be the single point of entry for officers. This was made architecturally obvious by the main gate leading to the imposing College Hall with its Wren-inspired features incorporated by the architect James West. Cranwell was to be the RAF's equivalent of Greenwich, Dartmouth and Sandhurst.

Defence in general was radically reduced and investment in new aircraft and technology by the RAF was slowed to such a pace that replacements for the World War I aircraft had only marginally greater performance and firepower. Estimates for the numbers of fighters to defend Britain were constantly deferred and the preference among key decision-makers was for the RAF to primarily be a bomber force. The thinking of the period was that if war came, it would be as it had been between 1914/18, at some distance, and that the bombing experience of the Great War would be repeated, but with more strength and ferocity. The concept of the enemy actually occupying France and the Low Countries did not occur. Thus the priority in the minds of policy makers was the offensive nature of bombers rather than the defensive need for fighters. Nothing emphasises this policy more than Prime Minister Stanley Baldwin's 10th November 1932 speech in the House of Commons when he said:-

*"I think it is well also for the man in the street to realise that there is no power on earth that can protect him from being bombed, whatever people may tell him. The only defence is in offence, which means that you have to kill more women and children more quickly than the enemy if you want to save yourselves... If the conscience of the young men should ever come to feel, with regard to this one instrument [bombing] that it is evil and should go, the thing will be done; but if they do not feel like that – well, as I say, the future is in their hands. But when the next war comes, and European civilisation is wiped out, as it will be, and by no force more than that force, then do not let them lay blame on the old men. Let them remember that they, principally, or they alone, are responsible for the terrors that have fallen upon the earth."*³

All the subsequent planning was based on the premise that Germany would be attacking from some considerable distance away; that enemy bomber formations would attack Britain either undefended, or by long-range fighters; the bombers would attack in formation and they would fly straight and level.

Thus the methods for defending the country were designed for this eventuality and the tactical result was sub-optimum, but the strategic provisions were radically innovative and successful. Radio Direction Finding (RDF, or *Radar* as it came to be called) and The Observer

Corps coupled with, for its day, a hugely technical command and control system allowed Fighter Command to utilise its available strength most effectively.

The 'Dowding System', as it has been referred to ever since, has elevated Dowding and Park to 'superstar' status and the other Commanders have suffered in comparison – particularly Leigh-Mallory and others. The senior officers of the Royal Air Force in 1940 have been variously described over the years, but a succinct description of all the main players was given by Dr Vincent Orange in a lecture in 1990. He described the top echelons of the RAF in 1940 as follows:-

1. Archibald Sinclair – Secretary of State for Air was well liked, but little regarded by the political establishment. He was according to the Australian High Commissioner in London (Stanley Bruce), *"While a perfectly nice person, I do not think Sinclair is much good or has any particular force or drive"*.
2. Cyril Newall – Chief of the Air Staff did not appeal to Bruce either, who had discussed his character with Lord Beaverbrook, Minister for Aircraft Production on 2 July 1940: *"We were in complete agreement that Newall had not the fighting weight necessary for the position of CAS"*. However, it was Newall who fought from within the War Cabinet to support Dowding's wish to halt further fighter reinforcements to France. Newall was, eventually, posted to a less demanding job in New Zealand, but not until the Battle of Britain had been decided.
3. Peter Portal who replaced Newall in October was considered *"a great improvement"*.
4. Hugh Dowding came in for equal criticism by Bruce who thought he should be replaced; writing on 5 November 1940, *"This, I have no doubt arises from Dowding's incapacity to co-operate with anyone, which has probably aroused antagonism in the Air Ministry"*.
5. Sholto Douglas, the Deputy CAS, angled for Dowding's job and after the Battle was won and a focus on night defence exposed weaknesses in Dowding's 'System', (including the lack of suitable aircraft to defend in darkness), he prevailed; not least because of the support of his ally Trafford Leigh Mallory.
6. Trafford Leigh-Mallory, the much maligned AOC in C of 12 Group. He was positioning himself to take over from Park at 11 Group and allying himself with Douglas made this a sure thing.
7. Hugh Trenchard and John Salmond, both senior and eminent retired officers also busied themselves in promoting the changes they believed would best suit their particular prodigies. Salmond told Trenchard on 25 September 1940, *"... as you and I know Dowding has not got the qualifications of a Commander in the Field, as he lacks humanity and imagination"*. He also voiced the opinion that Newall should also go because his *"... strategic judgement is completely at fault"*. Both these retired officers acted, supposedly independently, but actually in contrived co-operation to ensure the changes in command they sought with Trenchard telling Salmond, on 4 October 1940, *"I never mention that you and I are working in agreement on this matter as I feel it is more use our apparently being independent but working for the same cause"*.
8. Keith Park was universally liked by his aircrew, flew often and visited his squadrons regularly. His downfall was engineered by Salmond following the latter's appointment, on 14 September, to Chair a committee to consider the problems of

air defence in darkness. Following the night attacks on London and Coventry in late September and November it was easy for both Dowding and Park to be moved on.⁴

Of course, officers in the exalted ranks described above were, with the exception of Park, invisible to the Fighter Pilot on a squadron, but their reputations preceded them by the 'bush telegraph' which exists in all organisations. Veteran pilots, when gathered together and asked about their superiors would have very different opinions based on their locations at the time, their interaction with senior officers and the rumours they had heard. In spite of this it has been argued that their subordinates are entitled to expect higher principles from senior leadership, especially during wartime. At this distance from the events of 1940 it is unsavoury to realise that, while boys in their early 20s were fighting a life and death struggle each day, their Commanders were jostling for a better position on the greasy pole of promotion/advancement.

Interestingly the basic comparison between Leigh-Mallory and Keith Park, made by Dr Orange in his 1990 lecture was that, if the former had walked past wearing a white coat, he would have been taken for a house-painter, whereas the latter would be taken for a brain surgeon.⁵ German Intelligence phrased it differently when they perceived the difference between them. Park was "*Defender of London*", Leigh-Mallory was "*The Flying Sergeant*".

2. Tactical Training, Development & Leadership

- Pilot routes into the Royal Air Force
 - RAF College Cadet
 - Short Service Commission
 - Apprentice
 - Royal Auxiliary Air Force
 - RAF Volunteer Reserve



Hawker Audax at No 33 Elementary Flying Training School, Whitchurch 1937



North American 'Harvard' at No 2 Advanced Flying Training School, Brize Norton 1939

2. Tactical Training, Development and Leadership

Pilot routes into the Royal Air Force

Trenchard's visionary concept of an independent Air Force was spelt out in detail in a memorandum, preceded by a Note from the Secretary of State for Air, Winston Churchill, dated December 11, 1919. In that far-sighted document Trenchard outlined the importance of training overall, but was very specific about officers. With regard to officers he stated:-

*"Owing to the necessity for large numbers of officers in the junior ranks, and to the comparative paucity of higher appointments, it is not possible to offer a career to all. Consequently some 50 percent only of the officers have been granted permanent commissions, the remainder being obtained on short service commissions ..."*⁶

Recruitment of junior officers with permanent commissions in the earliest days of the RAF would create the senior ranks in 1940 and those commissioned (permanent or short service) in the mid-1930s would be the cadre of tactical commanders when World War II started. The process of selection of them and the reasons for joining the RAF in the interwar period is therefore key to each element of this study.

Between 1934 and 1939 86% of cadets at Cranwell came from British Public Schools.⁷ Very few squadron and flight commanders in the first year of the war were from the Royal Air Force Volunteer Reserve. They were primarily graduates of Cranwell, Royal Auxiliary Air Force (RAuxAF) or short service commissioned officers.

RAF officer selection of pilot entrants was a relatively simple process relying on internal and essentially non-professional expertise. The RAF believed that choosing the 'right sort of chap' was more important than any scientific or psychometric measure of his suitability. The very idea of even consulting with psychiatrists ("trick cyclists", as they were universally referred to within the RAF) was an anathema. Provided the aspiring officer attained a level of physical fitness (assessed usually by questions relating to his sports activities), had good eyesight, a demeanour and social background that was acceptable, he had a very good chance of being accepted. Questions at interview usually centred around which school he had attended, mutual friends/acquaintances, horse riding, fox hunting, shooting, rugby, rowing etc; in essence the RAF College selection process reflected the upper-middle-class social strata of Britain at the time. As Max Hastings put it:-

*"The Air Ministry never gave up its notion that public school 'gentlemen' made the best officers and aircrew."*⁸

In Cranwell's early years there were also fees to be found, with uniforms and Mess bills to pay as well. Any aptitude for actual flying was virtually ignored on the basis that candidates would be taught to fly and, if they failed their appointment could be terminated. No test was applied to measure the psychological ability to deal with the complexities of flying (e.g. co-ordination or mental capacity) nor was an assessment made as to ability to perform under the pressures of combat. A medical officer commented on the qualities of a successful applicant in this way:-

*"... this question of background is really important ... breeding very definitely is of great importance. It is unlikely that the son of a coward would himself become a hero, for it is remarkable how heroism runs in families."*⁹

It is apparent that many young men joined the RAF in the 1930s because it offered free flying, sport, a social life and an almost seamless transition from school to adult life. A war was the last thing most candidates believed they would ever be involved in.

The route to becoming an RAF pilot which had been a process which leaned firmly towards the recruitment of middle to upper-class 'gentlemen' included, from 1924, an elite corps of civilians who would serve in their spare time. The Royal Auxiliary Air Force would be a spare-time way in which holders of pilots' licences (de facto members of the wealthier

classes) could be both positive influencers in 'society', but also direct participants in the new air arm.

However, by 1936, with obvious changes happening in Germany and Italy, the Royal Air Force Volunteer Reserve was created. The years of trying to attract young men from British public schools was not going to satisfy the demand created by the prospect of yet another war. The solution was to operate a two tier system where non-commissioned officer and NCO pilots were recruited without the financial and social strictures which had previously been so important. These young men became the majority of participants in the battles of 1940 and, indeed the rest of the war.

The pool of potential recruits to flying duties was greatly accelerated with the introduction of the RAFVR with the remit to train 800 pilots each year. In addition Trenchard's other belief that this new service should make it possible for the very best man to achieve his potential also allowed those who showed the right qualities to transition from Apprentice to aircrew by way of application and peer review.

It should be remembered that The Auxiliaries achieved a significant record during the Battle of Britain providing 14 of the 62 fighter squadrons with 30% of the accredited enemy kills; eight out of fifteen top scoring pilots from amongst their ranks. By the end of the Battle the members of the RAF reserve outnumbered the regulars.

Leadership training & career progression

By its nature, and by design, the selection processes for pilots prior to 1940 gave leadership training to officers and few opportunities to NCOs. The career progression of officers was by no means formalised and depended, in many cases, on influence from senior officers. It seems that there was some discontent within the officer corps, at squadron leader level and above, in the years up to the outbreak of the war in that many were being passed over for promotion with no reason given in spite of accruing an illustrious service career.

In March 1937 the discontent within the cadre of middle ranking officers within the RAF reached such proportions that it was mentioned, in detail, in Parliament. During the Air Estimates debate on 22 March 1937 the question of "... the democratisation of the Royal Air Force"¹⁰ was raised.

In this debate, George Garro-Jones^B pointed out that a number of airmen in WWI, from humble beginnings, were promoted from the ranks and became distinguished pilots. He was concerned that these opportunities were not extant within the RAF at that time and that selection for promotion was also opaque to serving officers.

Garro-Jones said:-

" ... there exists ... from squadron leader upwards a sense of grave dissatisfaction and discontent with the system of promotion.The system of selection is based upon unknown criteria of merit ... a feeling that it depends more upon the humour and caprice of senior officers than upon any factors of efficiency." He went on to suggest:- *" ... there is what is known as feminine influence in the Royal Air Force."*

^B MP for Aberdeen North, later 1st Baron Trefgarne

Winston Churchill responded:- *“Only in the Royal Air Force?”*

To which Garro-Jones explained:- *“It seems a strange place for petticoat influence, but it will interest the right hon. Member for Epping (Mr. Churchill) to know that there is one station in the Royal Air Force where when the commanding officer appears on parade murmurs go round to the effect: ‘Here comes the commanding officer and her husband.’”¹¹*

The internal and non-professional approach to recruitment and selection of pilots, coupled with the lack of tactical leadership training, inexperience of combat and a leisurely lifestyle may suggest that, when war came, the RAF fighter pilot would not be up to the task. However, fault-filled as it was, the processes adopted by the young RAF did, in fact provide the esprit de corps (*“Air Force Spirit”¹²* as Trenchard called it), high morale and true grit that Trenchard had envisioned at the outset. This was a direct result of his other guiding principle – training.

Pilot training

In all the conversations this author has had with veterans of the 1940 battles the consistent praise for their flying training has been marked. The creation of the Central Flying School, in 1912, set levels of tuition which became the gold standard throughout the world and, to a great extent, still apply today. Basic and advanced training were formulated in such a way as to produce excellent pilots and streaming individuals towards the types of aircraft most suited to their abilities was sophisticated for its day. Elementary training and advanced training were all that was available in this system. The concept of Operational Training Units had not yet been adopted. In 1940 a new pilot would fly his last few flights at an advanced training unit on the type of aircraft he was to fly on his allocated squadron. This meant that he would arrive at the squadron with about 10 hours, or less in some cases, on his operational aircraft type. His tactical training, was carried out by the squadron. Pilots joining operational squadrons during the Battle of France and Britain were lucky to find time to perfect combat skills as they were likely learning on the job whilst being shot at.

3. Unforced errors, successes & deficiencies

- Battle of France experience
- Re-assessment of:-
 - Squadron level leadership
 - Combat tactics
 - Performance of aircraft vs. enemy
 - Aircraft equipment
 - Defensive armour
 - Gun harmonisation
 - Ground servicing
 - Pilot training



No 501 Squadron, Biggin Hill

3. Unforced Errors, Successes & Deficiencies

Squadron level leadership

A fighter Squadron in 1940 consisted of 12 aircraft and between 16 and 20 pilots. It was commanded by a squadron leader and consisted of two Flights (commanded by flight

lieutenants) which were then split into four Sections (red, yellow, blue & green). This resulted in, until they were identified as experienced, the NCO pilots filling the role of 'follower' rather than 'leader'.

At the outbreak of war in 1939 squadrons and their flights were commanded primarily by regular officers who had an average of five years' service. The average fighter pilot had between one and two years' service, but by 1940 this dropped to about a year.

The leadership was a mix of pre-war training using the RAF Air Fighting Manual or the personal preferences of the particular commander of the squadron or flight commanders in some instances.

Combat tactics

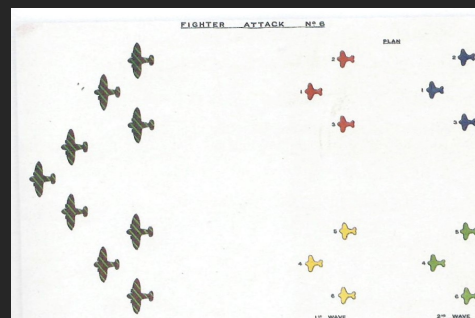
It became apparent to most fighter squadrons, as soon as they met the Luftwaffe, that each side was using different tactics. The Germans had perfected their tactics by re-visiting the lessons learned by their predecessors in World War I; they had then refined them still further during the Spanish Civil War. The RAF perfected theirs seemingly on drawing boards in planning for an air display. The lessons, learned in World War I, were set aside with an unwieldy set of 'Fighter Area Attacks' being devised and practised ad nauseam in peacetime.

The result was that, in the first months after Germany's May 1940 invasion of the Low Countries and France, the RAF was tactically inferior to the Luftwaffe and losses were consequentially high. The RAF lost 386 Hurricanes and 67 Spitfires in the Battle of France.¹³ The RAF tactical formations of this era are listed and illustrated below:-

Fighter Area Attacks

Tactics – Air Fighting Manual

1. An attack from Dead Astern and from Above Cloud
2. From Directly Below
3. (From Dead Astern)
 - a) Approach Pursuit
 - b) Approach Turning from Above Cloud
4. (From Directly Below) Two Types of Approach
5. (From Dead Astern) Two Types of Approach
6. (From Dead Astern) Two Types of Attack



Fighter Area Attack No 6 Original Illustration

The first realisation that these tactics were costly came to the initial squadrons sent to France, but only slowly recognised by the more senior strategic leaders. Furthermore, some of the older squadron leaders would not recognise the deficiencies in the tactics they had been using for so many years. It follows that they were most reluctant to change them or try alternative suggestions from subordinates. Even as the evidence of the losses mounted and they had empirical evidence of the superiority of their enemy's manoeuvrability and

flexibility, they insisted that their men follow the prescribed area attacks. This approach, by a number of commanders caused a lowering of morale amongst their pilots, particularly the NCOs and new joiners who were assigned the most vulnerable positions in these unwieldy formations. One of these positions was referred to by the pilots as “Tail End Charlie”. Sgt. Desmond Fopp of No 17 Squadron described this:-

“I'd been flying in a position which was very hairy and it was called 'Tail End Charlie'. In the days before the Battle, when we were in France, we flew tight formations; part of the procedure was to be covered by a chap at the back who was virtually the eyes for the whole Squadron. He had the job of patrolling, back and forward, across the tail of the whole Squadron, keeping an eye out and letting them know if anything was coming. Of course he was the first to be picked off! I think I gained quite a lot of experience from that because I never did manage to get anybody shooting at me, although I did warn the squadron a few times.”¹⁴

Aircraft & Equipment

The politicians, during the last few years of the 1930s, may now be termed appeasers, but they did ensure that the RAF was well prepared to defend Britain if war came. The design and production of the eight-gun monoplane fighters; the creation of an innovative, secret and effective, command and control early warning system; and the significant investment in training and production all happened in the four-year period before the war began.

The first combats between fighters forced ahead modifications to machines and systems which were a credit to all involved. Many modifications to RAF machines were actually carried out during operations by groundcrews on squadrons; a confirmation of the original belief that technical training was every bit as important as that of flying. Armour plate protection behind the pilot seat and windscreen were literally bolted on to Hurricanes and Spitfires whilst in service, at their airfields. More strategic improvements were made like the acquisition of 100 octane fuel from the United States and the provision of more efficient airscrews; camouflage re-paints; VHF wireless sets; these are examples of the many improvements made as a result of combat experience.

Obviously, all the deficiencies discovered when the actual fighting started could not be changed overnight and the 1940 period revealed a long ‘to do’ list which was dealt with when things settled down in 1941. Most of these were to do with pilot survivability. Examples of these include:-



Flight clothing and survival equipment were particularly deficient. The white flying suit worn by pre-war pilots proved to be ineffective and was dropped by many. The standard issue goggles, made with celluloid lenses, exacerbated the effects of fire by dripping into the pilot's eyes; the life preserver (Mae West) was dark green in colour and blended in with the English Channel perfectly (many pilots borrowed yellow paint from their ground crews and painted their jackets); the lack of a dinghy and fluorescent dye made it almost impossible to see a pilot's head bobbing about in the water. The German life preserver (Schwimmweste) was much prized by RAF crews for its kapok content and compressed air cylinder for inflation. A number of RAF pilots 'acquired' these and used them whilst flying. The deficiencies of the survival equipment used by pilots was noted in the Fighter Command Operations Record Book in early August:-

*"It is enquired whether immediate issue of smoke producing device cannot be made since the new type of lifejacket is not yet available for trial and it must be some time before a service issue is made. Meanwhile a device is necessary to enable MTB's and other vessels to locate pilots fallen in the sea."*¹⁵

Plt.Off. Jack Rose of No 32 Squadron recalled that, on 25 August, his squadron were issued with a pack of fluourescine to sew on their life jacket. He sewed his on immediately and later that morning was shot down over the Channel. He floated for two hours and was rescued after his squadron saw the dye and directed a vessel to him. Plt. Off. K R Gillman (the subject of a famous front cover of *Picture Post* magazine) who was also shot down during the same action, but had no marker dye, and was never found.¹⁶



Plt. Off. K R Gillman^C

^C Keith Reginald Gillman was born in Dover on 16th December 1920. He attended the County School and joined the RAF on a short service commission in March 1939. He began his flying training at 22 E&RFTS Cambridge. He joined 32 Squadron at Biggin Hill on 10th May. He baled out on 24 August and was never found.

During the official period of the Battle of Britain (10 July to 30 October) a third of the total RAF aircrew casualties (179) were posted missing and no trace of them was ever found. The overwhelming majority of these were lost over the sea.¹⁷

Air Sea Rescue services were virtually non-existent, relying mainly on range launches, Coastal Command tenders, fishing boats and the RNLI. The Germans saved a number of RAF pilots with their significantly more efficient seaplanes (He 59s of the 'Seenotdienst') and even operated their high speed rescue launches close to the English coast. On 26 August the Germans rescued the crew of an He111 which had come down in the sea just off the Isle of Wight. By contrast, a few miles away, Sgt. Cyril Babbage of No 602 Squadron came down by parachute in the sea off Bognor Regis and was rescued by two fishermen and two soldiers in a rowing boat.¹⁸

4. The psychological impact on leadership, morale & combat capabilities

- Age was a factor
- Character of leaders important
- British 'class system' of the day
- Regular RAF or Reserve
- Training system deficiencies
- Speed of transition from student pilot to operations
- Public support important



Fighting war has always been a young man's business and there is no question that a person's reluctance to put himself in harm's way increases with age. The age range of a squadron pilot during the Battle of France & Britain was between 18 and 30 years old. The average age was only 20. Their life expectancy was four weeks and 20% were from countries other than Britain. Two thirds were officers who were paid £264 per annum (about £32,000 today).¹⁹

The squadron and flight commanders were, primarily, pre-war trained regulars with either a full or short-service commission. The character of the leaders was every bit as important as the tactics and the way they led their squadrons or flights. The vast majority proved Trenchard's belief that the highest level of training was the key to success, but it was inevitable that a minority did not perform as expected or as required. In the Battle of France in particular it became obvious that some leaders were not performing. This is evident from the reports of veterans and from the movement of commanders from their squadrons to other duties.

As with most things the 80/20, Principle (The Pareto Principle) applies and, in the case of the Fighter Pilot, there is no substitute for examining the effect of this simple calculation to determine the performance of them all.

The Pareto Principle in Air Combat Success

The Pareto Principle suggests that a small percentage of individuals tend to have an outsized impact on outcomes. In air combat, this concept has historically been evident, as a minority of highly skilled fighter pilots (the 'aces') achieve the majority of victories. However, this does not mean that the remaining pilots fall neatly into categories of 'average' or 'cowardly.' Instead, performance in air combat follows a more complex distribution.

1. Top 5-10% (Aces/Elite Pilots)

These pilots account for a disproportionate number of kills and victories. They have superior situational awareness, reflexes, tactical thinking, and aggression. Their skill allows them to dominate engagements and significantly influence battle outcomes.

2. Majority (60-80% - Competent/Average Pilots)

These pilots perform their duties adequately but don't stand out in terms of high kill counts or strategic influence. They may get a few victories, assist aces, and generally hold their own, but they don't significantly shift the tide of battle.

3. Bottom 10-20% (Ineffective Pilots)

This group includes those who lack the skill, confidence, or aggression needed for air combat. Some may avoid engagements (out of fear or hesitation), while others may simply lack the ability to react effectively in high-stakes dogfights. Many in this category end up as easy targets.

Other Considerations:

- **Experience Matters** – New pilots often struggle, but with time and training, some improve and move up the performance curve.
- **Psychological Factors** – Not all 'cowards' are incapable; fear is natural in combat, and even some skilled pilots may hesitate under extreme pressure.
- **Luck & Circumstances** – Many pilots' success or failure is also influenced by mission type, squadron quality, aircraft performance, and even sheer luck.

So while the Pareto Principle suggests that a small number of pilots account for most air combat success, the distribution is more nuanced than just 10% aces, 80% average, and 10% ineffective pilots. Skill, experience, psychology and external factors all contribute to how a pilot performs in battle.

The public's reaction to the dashing figure of the fighter pilot, so heavily promoted by the media of the day, added to the pressures upon the men themselves. Not all of them appreciated the historic and momentous battle in which they were involved, but many did. They were also thrust into a daily scenario of watching their colleagues and friends being killed or injured, often in an horrendous way. This took its toll and the vast majority admitted to being frightened. In fact pilots were suspicious of their colleagues who exhibited fearless characteristics, particularly if their job, as a subordinate, was to provide cover (as wingman) to such an individual. One of the fearless pilots was Fg. Off. Manfred Czernin of No 17 Squadron. A European minor aristocrat, who enjoyed being called 'Count', Czernin was a colourful, hard drinking, socialising, gambling character. He was also a top scorer, accounting for 14.92 enemy aircraft²⁰, and according to his colleagues, totally fearless:-

Sgt. Desmond Fopp recalled, *“I was flying ‘number two’ to Count Manfred von Czernin who was quite a character. He was a fearless man who wanted to shoot down everything he possibly could and ‘to hell with the hindmost’. I was detailed as his number two, or ‘wingman’, which meant that I had to protect him under all circumstances. Although I say it myself I think I must have done a good job, but I was not able to get near any aircraft until he'd finished with them - this was a bit off-putting for me.”*²¹

Sgt. Leonard Bartlett remembered, *“He was a fearless chap, a fantastically good shot, but not an outstanding tactician or pilot. ... It would not be true to say that he was popular with his brother pilots, mainly because he was flamboyant and tended to shoot a line but he was a fearless man and an above average fighter pilot.”*²²

Fearlessness was actually a rare attribute and many veterans have expressed the view that anyone who professed to have not been frightened was being economical with the truth. P.O. ‘Birdie’ Bird-Wilson expressed this in an interview:-

*“Anyone who said he was not frightened when he saw little dots in the sky which gradually increased in numbers and size as they came from the French coast towards London. I maintain that anyone who says they were not frightened or apprehensive on such an occasion is a very bad liar.”*²³

With all the parameters of the Pareto Principles applied to fighter pilots it is inevitable that some would crumble under the pressure, but it was the leaders who became the most notable failures in France and the early stages of the Battle of Britain. Some squadrons had multiple squadron commanders in the space of a few days; losing them from either combat attrition or for their poor performance and subsequent re-assignment.

Sqn.	Reason	Age
17	Did not lead Squadron (Battle of France)	35
46	Posted away after a week	32
64	Posted away after 6 weeks	31
87	Acknowledged inexperience by delegating leadership of squadron to Flight Commanders. KIA on first operational flight	28
234	Relieved of command Aug 1940, resigned commission a year later	29
242	Disputed reasons for poor performance of Sqn in France. Went AWOL on return. Relieved of Command. Distinguished airman of the RCAF	34
257	Posted away, resigned commission in 1943	29
601	After 9 days in command posted away	33

The table above may indicate failures, but not in all cases. In two cases the Squadron Commander understood that his inexperience in combat would jeopardise his squadron and delegated the leadership to a more experienced flight commander. In another the officer went on to dispute the reasons for his being relieved of command, challenged the accusations made against him publicly and continued to serve, completing a distinguished

career in other Commands. However, as with any organisation, rumours and opinions abound in fighter squadrons and the regular clashes of personalities amplified, in some cases, by sensational post-war biographies have given rise to accusations which do not stand up to close scrutiny. There is little doubt however, that a person who is 'posted away' and subsequently resigns his commission in wartime was not an effective officer.

In many ways it is surprising that there were not more cases of ineffective leadership when the tactical training was so poor. The reasons for joining the pre-war RAF are also a factor. A look at the ages of the commanders in the table above also illustrates that they were all at the top or above the age range of the fighter pilots they were leading. They had been serving for many years, had built up a comfortable career, probably with a wife and family at home. In 1941, in his "Battle of Britain Despatch", Dowding advised that only in exceptional circumstances should a pilot over the age of 26 be posted to command a fighter squadron.²⁴ It would take some many months of real war to allow the rather rigid system of advancement in the RAF to identify the best people to promote and to move them to the positions where they could exercise their experience best. The highest scoring pilot of the Battles of France and Britain was Sgt. J H 'Ginger' Lacey with 23 aircraft shot down (eventually scoring 28).²⁵ This was a massive score for an NCO pilot, particularly because the RAF policy at the time was for NCOs to provide cover as wingmen to their officer leaders. The NCO pilots were therefore confined to the 80% of the Pareto Principle where they would act in a support role unless particularly tenacious or lucky. Lacy was not commissioned until 1941, as a probationary pilot officer. The promotion of 'tactically aware individuals', regardless of their rank, became a feature of the RAF's development of 'talent' for the rest of the war, but the lesson had been learned the hard way.

Aircraft production was built up to incredible levels under the stewardship of Lord Beaverbrook and the RAF out-produced the Luftwaffe during the latter part of the Battle of Britain. However, the provision of experienced pilots was a constant issue, as was their fitness to fight. This was of great concern to the commanders and they tried their best to ameliorate the effects of daily attrition which risked outnumbering the ability to replace pilots. Dowding covered this issue in detail in his post-battle report 'Battle of Britain Despatch' of 20 August 1941 in which he stated:-

*"By the beginning of September the incidence of casualties became so serious that a fresh squadron would become depleted and exhausted before any of the resting and reforming squadrons were ready to take its place. Fighter pilots were no longer being produced in numbers sufficient to fill the gaps in the fighting ranks. Transfers were made from the Fleet Air Arm and from the Bomber and Coastal Commands, but these pilots naturally required a short flying course on Hurricanes or Spitfires and some instruction in Formation Flying, Fighter Tactics and Interception procedure."*²⁶

Squadrons were downgraded, experienced pilots posted to front-line units and some squadrons assigned to build-up the training and experience of the new arrivals replacing the losses. Dowding explained this:-

"I considered, but discarded, the advisability of combining pairs of weak units into single Squadrons at full strength, for several reasons, one of which was the difficulty of recovery

when a lull should come. Another was that ground personnel would be wasted, and a third was that the rate at which the strength of the Command was decreasing would be obvious.

I decided to form 3 Categories of Squadron :—

Cat (a) The units of 11 Group and on its immediate flanks, which were bearing the brunt of the fighting.

Cat (b) A few outside units to be maintained at operational strength and to be available as Unit Reliefs in cases where this was unavoidable.

Cat (c) The remaining Squadrons of the Command, which would be stripped of their operational pilots, for the benefit of the A Squadrons, down to a level of 5 or 6. These C Squadrons could devote their main energies to the training of new pilots, and, although they would not be fit to meet German Fighters, they would be quite capable of defending their Sectors against unescorted Bombers, which would be all that they would be likely to encounter.”²⁷

He seemed to be acutely aware of the fatigue his pilots were experiencing and mandated that they should comply with the rest periods allotted to them. Not only were they to have 24 hours off every week, but they should also have access to accommodation off-base in order to wind down in a quieter and more peaceful environment. Because many pilots were anxious not to be absent when their chums were fighting the time-off had to be made mandatory in order to ensure compliance. Fatigue led to impaired performance and psychological problems. Veterans recall how their colleagues would develop uncontrollable facial twitches or become silent and depressed. Some of their ‘remedies’ for this sort of behaviour were cruel, but their understanding of the stresses and strains their friends were going through were all the more apparent to them as they were often close to the point of failure themselves. However, in the years after the Battles of France and Britain the examination of the true effects on the young pilots of Fighter Command in 1940 tended to be couched in terms consistent with the true, but biased, image created by the propaganda machine of war followed by a sensationalist media effort ever since. The ‘Few’ were all heroes and nothing could be said that might cast a shadow over this impossible reality.

Many aspects which might have seemed inappropriate whilst the veterans were still alive were spoken of in hushed tones or rarely discussed at all. The psychological effects of fatigue and combat had been categorised by the official term “Lack of Moral Fibre”. ‘LMF’ was considered an infectious disease and became a hated reference to be avoided at all costs, including in open conversation.

This was brought home to the author by occasional references to it whilst talking to veterans and in editing my father’s autobiography. The following paragraph stood out:-

“No 132 Squadron was then posted to 122 airfield, Eastchurch. RAF Eastchurch is on the Isle of Sheppey and it was rather awkward for us that we were posted there as an operational squadron, for we lived in the Mess with lots of other NCO and Officer aircrew who were there purely and simply because of “LMF,” or lack of moral fibre. In other words they did not want to fly on operations against the enemy and had opted out of doing so.”²⁸

RAF Eastchurch was home to an obscure unit called the 'Aircrew Reselection Centre' (ACRC). This entity was colloquially known to, it seems, everyone in the RAF as the 'LMF Unit' and was referred to as such by all aircrew. During 1940 the RAF's approach to combat stress was primitive, but it did not improve much throughout the war. This was simply because the constant shortage of trained and experienced aircrew did not allow for 'wastage' and everything was done to keep airmen flying.

The photographs, letters, diaries and logbooks of the 1940 period give a unique illustration of the insidious effects of fear and tiredness. At the height of the Battle of Britain an 11 Group pilot's daily schedule could be as strenuous as this:-

- 07:00 – 07:50 Scramble for 'X-Raid'
- 10:50 – 11:30 Scramble for 'X-Raid'
- 12:45 – 14:15 Convoy Patrol
- 15:45 – 16:05 Move to forward base (Martlesham Heath)
- 18:00 – 19:30 Convoy Patrol
- 20:50 – 21:10 Return to home base (Debden)²⁹

The total flying for that single day was 5 hours 10 minutes; in a single engine, single seat Hurricane which included the time usually set aside for refreshment and rest.

Often, the comments in logbooks would include fashionable phrases of the day such as 'wizard prang' or 'unable to get close enough – too bad!'. The logbook would be completed either straight after a mission or, if shot down, some time later. The former would be positive from an individual who had just survived combat. The latter was usually a more detailed and considered description of what actually happened.

"Opps.(Sic) Intercepted 60 E.A. 1 D.o.17 probable. Shot down in flames by three Me110's. Baled out 17,000ft in hospital 2 months. Flight time 00:50 and 00:15 by parachute".³⁰

The words used often substituted for a feeling that, having witnessed friends and colleagues killed or injured, your turn was ever closer. On the day of the logbook entry above the writer had seen a good friend bale out of his Hurricane far too low to survive and, by the time he wrote up the entry he knew his chum had not survived.


Many logbook entries copy the behaviour of the individuals who wrote them – an attempt to hide the fact that they were terrified a huge part of the time.

Lack of Moral Fibre (LMF)

LMF (Lack of Moral Fibre)

The RAF's treatment of Emotional Casualties

- Sept. 1940 'The Waver Letter' provided a definitive LMF disposal policy for the first time:-
 - Diagnosis by Commanding Officer and Medical Officer
 - Treated immediately on unit
 - Sent on leave
 - Hospital admission
 - If diagnosis was LMF
 - Passed up chain of Command
 - Officers cashiered or resigned
 - Airman reverted to basic grade or discharged



The public and the military commanders were conscious of the neurological effects of combat and their view of what had become to be known as “Shell Shock” after World War I was tempered by this knowledge. The public were generally sympathetic towards sufferers and “Shell Shock” was categorised as an illness with a military pension paid to those diagnosed as suffering from it. By the outbreak of the second war there were still thousands of WWI veterans receiving a disability pension for psychoneurosis. It was decided that the term “Shell Shock” was not to be used in the military and that neurological or psychiatric conditions were to be looked at differently. In the RAF that difference was characterised by new thinking on the part of medical officers (MOs) based on inter-war medical/psychiatric theories from people like Freud^D, Birley^E, and Bartlett^F. When coupled with popular thinking around the fields of eugenics and the socio-economic tropes of the period the result is the view that:-

‘Gentlemen’ (officers) of breeding will not suffer from such problems because of the inherited traits of bravery, duty and service they bring to the service.

In the case of other ranks, their training, assessment and selection will weed out the ones most likely to lack the traits which are natural in officers.

Both types of people would actually be immune to neurosis because of the extensive training they would go through and because they were volunteers.

What had not been taken into account was the need, as war became closer, for conscription to result in the majority not being volunteers in the complete sense. They were volunteers to become aircrew, but the motivation for joining the aircrew ranks was often driven more by the perceived glamour, notoriety and popularity that aviators enjoyed at the time and which would only be enhanced by the RAF’s own propaganda/recruiting machine and the speeches of famous politicians. The result was, that after the first few months of war when Bomber Command and Coastal Command had been involved in dangerous and attritional

^D Sigmund Freud, ‘The Disillusionment of the War’, from ‘Thoughts for the Times on War and Death’, (1915)

^E John Birley, ‘The Principles of Medical Science as Applied to Military Aviation (1920)

^F Frederick Bartlett, ‘Psychology and the Soldier’ (1927)

operations there was a short term crisis in confidence in crews and it was felt that it was necessary to increase pressure on air crew generally to undertake hazardous missions.³¹ An urgently convened meeting was held in March 1940 which included the most senior RAF Commanders and they decided that *“some procedure for dealing with cases of flying personnel who will not face operational risks”* had to be devised.³² Immediately after the meeting a letter drafted by AVM E.L. Gossage (Air Member for Personnel)⁶ included the following, first use, title for the solution that was devised:-

*“... a residuum of cases where there is no physical disability, no justification for the granting of rest from operational employment and, in fact, nothing wrong except lack of moral fibre ...”*³³

Against the background insistence that “Shell Shock” was no longer to be used as a term, and that the government was not inclined to have recourse to ongoing military pensions a new term, had to be found and Gossage’s was adopted. Once the term ‘LMF’ was in use the processes to be put in place were to be kept intentionally oblique in order for the whole concept of ‘carrot and stick’ would naturally occur. Indeed, as we shall discover, the myths and rumours which surround the matter, and still persist to this day, ensured that the deterrent effect worked very well.

The whole wording is a product of its time and could only have come from a senior officer of the calibre and background of Gossage. Unlike “Shell Shock”, LMF was never a medical diagnosis it was only ever an operational decision to be made by commanding officers. Doctors constantly reminded their military masters of this and post-war definitions such as PTSD and Combat Stress have been erroneously linked with LMF.

The first point of contact was expected to be the Station Medical Officer(s) (SMO) and they were guided by the Air Ministry pamphlet 100 and lectures for new MOs. The pamphlet outlined the prevalent Freudian theories concerning psychoneurosis. The warning signs of a “pre-neurotic state” indicating the need for a period of rest, leave or a change of duty were described as³⁴:

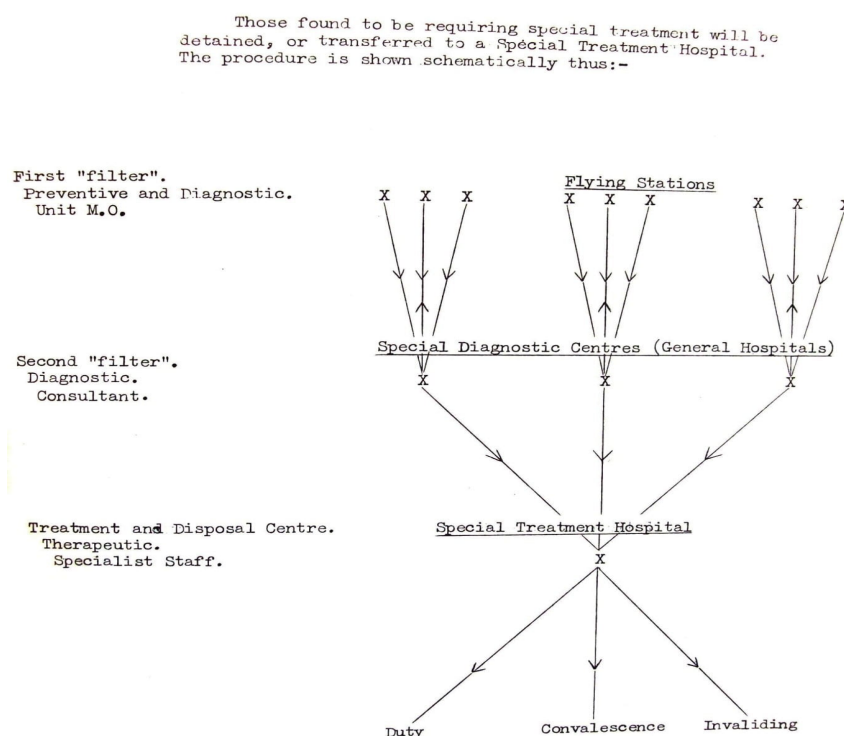
Any changes noted in the general behaviour, habits, or efficiency of an individual call for investigation. Abnormalities commonly met are:-

- a. Fatigue*
- b. Increased indulgence in alcohol or tobacco.*
- c. A tendency to become unsociable or irritable.*
- d. Loss of interests, disinclination for effort.*
- e. Emotional crises, loss of self-control.*
- f. Falling off in flying efficiency.*

⁶ AM Sir Ernest L. Gossage KCB CVO DSO MC was educated at Rugby & Trinity College Cambridge. He served in the Royal Field Artillery until seconded to the RFC in 1915. He commanded two RFC squadrons and in 1917, as a colonel, commanded the RFC’s 1st Wing. After commissioning in the RAF in 1918 he continued a very distinguished career.

*Physical symptoms such as loss of appetite, of sleep or of weight, the presence of tremors and tachycardia^H, and typical anxiety facies^I.*³⁵

The process was refined throughout the war, particularly within Bomber Command, but the initial labelling of LMF in 1940 was less formulative. However, the main aim of discouraging pilots from reporting their fears and anxiety was very successful; the severe penalties which aircrew believed would be levied against them were exaggerated and the result was a word-of-mouth knowledge of the LMF process which was only partially true. However, the process could follow a draconian path, depending on those who administered it. The formal process was started by the SMO and/or the OC of the unit/squadron. If a person refused to fly they were interviewed and if they could not be persuaded to recant they were removed immediately. If the MO believed there were symptoms of illness a rest in Station Sick Quarters (SSQ), combined with medication was tried for a few days. Referral to hospital was the next step and a number of 'Not Yet Diagnosed Neuropsychiatric' (NYDN) centres and hospitals were set up. Their purpose was to ensure that the candidate was not suffering from any diagnosable illness. The process was illustrated at the time with this flowchart:-



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The above chart only shows three outcomes of the process, all of them being results of medical diagnosis & treatment. The fourth action followed a decision by an MO that a medical diagnosis was not possible; the conclusion, militarily thereafter, was that the person

^H **Tachycardia** is a fast heart rate

^I **Facies** is a term applied to the expression or appearance of the face, which often gives indications of the presence of a disease in other parts of the body

was a coward, although that term was never used. LMF and 'Waverer' were the chosen substitutes and therefore these labels were used for executive action. A letter was attached to the re-issued AM Pamphlet 100A which contained this directive for MOs to make sure they:-

*"... establish a prima facie case of illness before considering or reporting a man unfit to fly on medical grounds."*³⁷

In other words, this was the infamous quandary vividly explored by Joseph Heller in his novel *Catch 22*; if a medical diagnosis could not be given, a downgrading due to LMF was the ultimate solution. This was via either the Aircrew Reselection Centres (ARC), which included the infamous RAF Eastchurch, or the Aircrew Disposal Unit (ACDU) was the next step. From then on a case was dealt with by commanding officers and treatment depended on the attitudes of those interviewing. The most draconian process he could face would be a public humiliation with his flying brevet and badges of rank, firstly having their stitches loosened and then, on parade in front of his cohort, those badges being torn from his uniform. He then faced discharge with the "LMF" label being added to with the term "Waverer" being used to describe him. Officers were invited to resign or face a court martial and NCOs were either reduced to the rank of AC1 or re-mustered to the Army or the mines. The final ignominy, they were told, was that their discharge papers (RAF Form 1580) would be stamped with a large red 'W' to indicate that they were "Waverers" to any future employer.

The reality was that this detailed process was rarely followed as described above, but the mere suggestion that this is what would happen proved to be a psychiatric stigma and humiliation that very few fighter pilots could endure.

The usual manifestation of a deterioration in performance by a pilot was picked up by his squadron colleagues. He was often found to be returning to base with mechanical, systems or radio problems for which no evidence could be found on the ground. He was seen to fall behind or turn away when the enemy was sighted. His behaviour around his colleagues changed or he, as it was termed at the time "got the twitch". Officers were at an advantage at this point because they lived and socialised with their commanders and could be talked to and counselled with advice and care. NCOs lived in the Sergeants Mess and officers would only enter when invited. Thus an NCO pilot did not have the same access to his commanders as his officer colleagues; he had only his peers to talk to and most were reluctant to divulge their real feelings in that way. In fact the whole LMF process was biased in favour of officers with NCOs, generally, treated much more severely, particularly when discharged.

In 1940 the fighter pilot with neuropsychiatric problems was faced with the dilemma of navigating his way through this deliberately opaque process, (with no independent advice) or carrying on in his debilitated state until he was killed. By September the shortage of pilots was so severe that measures to ensure the continued active service of pilots were a priority. Indeed, in October, AVM Keith Park (AOC No 11 Group) wrote:-

“ ... the necessity for speedy handling of such cases ... It is essential that any such cases be removed immediately from the precincts of the squadron or station.”³⁸

This conviction, that pilots suspected of LMF were to be moved away as quickly as possible was because the belief was that LMF was contagious. The result was that squadron pilots who saw their friends suddenly disappear believed that all of them were LMF. The alternative reasons such as normal posting, leave, re-assignment etc. were discounted and the myth of LMF inflated. In fact the only factual statistic for the number of possible LMF aircrew for the Battle of Britain are given in a report from 1941 wherein it states that the majority of the 250 ‘stress’ cases that had arisen in all three Commands (Fighter, Bomber & Coastal) had occurred in June, August and September 1940.³⁹ Clearly the number of LMF cases within Fighter Command during 1940 must have been very small.

Many historians have concluded that the whole LMF/Waverer (LMFW) process was counter-productive because it encouraged men not to report their illness and to continue flying. In doing so the person became a danger not only to himself, but also to his crew.

The lack of clear transparency led to aircrew developing hugely inflated stories about the LMFW process which continued in the minds of the RAF for many years and was to cloud the memories of veterans when interviewed after the war. The covered-up process also led to questions being asked in Parliament and in 1945 the process was abandoned. However, the stories of the degrading treatment, ripping of badges, parading of LMFW airmen through the streets, have few eye-witnesses. Most are hearsay, but the very few incidents which may have happened all fuelled the myth of what would happen to an airman if he could not fly operationally.

On page 20 above, Desmond Fopp (who was by then a commissioned flight commander) describes how it was “*rather awkward*” for his operational squadron to be posted for a short while to RAF Eastchurch – known to them all as ‘The LMF Unit’. I do not think he was ever aware that newly formed squadrons, about to go into action for the first time, were often diverted through ACRCs specifically to reinforce the consequences upon them of poor performance.

There were undoubtedly cases of LMFW in Fighter Command during 1940, but only a small number of fighter pilots succumbed, or were referred to the immature process which existed at that time. AM ‘Birdie’ Bird-Wilson recalled that he would never have referred a man to the LMFW process, but would rather assist him to overcome his difficulties or post him away to a more suitable job.⁴⁰ However, Bird-Wilson was commenting, in retirement, after a distinguished career as a senior officer.

It is very difficult to find evidence of actual LMF cases, for obvious reasons. It is also difficult to discover the truth about the feelings of aircrew around the whole subject of fear and stress except for the majority admitting that they were effected. However, during his interview as part of the Imperial War Museum’s oral history programme Wg. Cdr. George

'Grumpy' Unwin^J told the interviewer about his friend Sgt. Jack Roden. Unwin recalled that Roden was "scared stiff" and "hated operational flying ... but would not give in ... he should have been taken off flying and put onto something else ... but he flatly refused."⁴¹

Sgt. Henry Roden RAFVR^K had joined No 19 Squadron in early May 1940. In July he crashed on landing after an attack on a Ju88. On 11 September he claimed a Me110 destroyed and four days later he made a crash-landing after his glycol tank was damaged in an action with BF109s. Roden was slightly injured and the aircraft was written off. Following an action against Bf110s off Harwich on 15th November 1940 Roden hit a tree whilst attempting a forced-landing between Kersey and Boxford in Suffolk in bad visibility.

He died of multiple head injuries the next day in East Suffolk Hospital, Ipswich and is buried in Linlithgow Cemetery, West Lothian.⁴²

As George Unwin said, " He would never give in and I think that is courage of a different kind altogether."



Sgt. Henry Roden with his sister Margaret

^J Wg. Cdr. George C. Unwin DSO, DFM* (1913 – 2006) served as a Flight Sergeant with No 19 Squadron during the Battle of France and of Britain. He had a distinguished service throughout the war scoring 10 ^{1/3} enemy aircraft continuing in the RAF until 1961.

^K Henry Adrian Charles Roden was born in Bradford on 22nd August 1916. He was educated at Bellahouston Academy in Glasgow, after leaving he was employed by the Royal Bank at Dennistoun. Roden joined the RAFVR about July 1937 as an Airman u/t Pilot

Conclusion

The pressures placed on very young fighter pilots during 1940 were unique. They were operating in the hostile environment which is intrinsic to flying and, at the same time they were attempting to prevent a deadly and highly experienced enemy from gaining superiority over them. Their physical and mental health was under the most extreme pressure and their lives were in peril every day. Whilst their knowledge of the broader picture of what they were doing was extremely limited, they knew that they were expected to conform to the public image projected by their commanders and the media about them. If they lacked confidence in their leaders they did not show it, if they worried about the tactics they were employing they continued to obey orders. If they recognised the intrinsic class distinctions in their service they brushed it off. When they realised the consequences of failing to retain the confidence of their commanders and colleagues they, overwhelming, continued to fight – often to the inevitable death or injury that their impaired faculties caused.

Those that survived have borne witness to the life they led in 1940, but their memories are polished by the passage of time. The veterans also spoke with knowledge they had gained long after the events of which they actually knew so little. This results in the historian having to balance what he/she hears with the facts. In all the aspects, except one, covered in this paper the facts are relatively easy to discover and measure against each other. The area of highest opacity is that on the RAF's policy to deal with those accused of Lack of Moral Fibre – *the 'Waverers'*. Until about 20 years ago most of the material available was meagre and when the subject was discussed the writers were reluctant to be fully open about their thoughts. The records were often closed or in some cases actually 'lost' by the official holders. I have therefore tried my best to get to the bottom of the LMF situation during the 1940 period as far as it effected the fighter pilot. This is because it was during this period that the fear of the RAF's policy grew greater than the fear of death during operations. The secrecy surrounding the LMF policy seems to have been intentional in order that rumours of its processes be exaggerated and embellished by aircrew to such an extent that the stigma of admitting to being unable to continue was negated. This process was specifically designed to ensure that there was no 'open door' for any airman to opt out of flying and it was extremely successful. What it also illustrates for us today is that "The Few" were even braver than we thought, for they were not only fighting the enemy in the air, but also the enemy within their own soul.

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I am indebted to a few individuals who have encouraged me whilst I have been struggling to come to terms with speaking publicly about negative subjects concerning the Royal Air Force. They know who they are, so I will not name them. I am also grateful to the colourists who have taken black and white photographs and digitally coloured them. I have used these wherever possible as they bring a contemporary realism impossible with traditional media. The only caveat with this material is that it should not be assumed to be definitive.

I would also like to thank Paul Davies who hosts a Facebook page dedicated to the Battle of Britain. Paul provided significant detail on the squadron commanders of the Battles of France and Britain which gave indications with regard to the efficiency and performance of squadrons at the time.

I have leaned heavily on records, published papers and articles and have provided details of these in the endnotes. The following have been of particular use:-

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