DEFEAT TO VICTORY
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**DEFEAT TO VICTORY**

No.453 Squadron RAAF

JOHN BENNETT

Royal Australian Air Force Museum

An occasional series Number 6
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This work would not have been possible without access to the RAAF Historical Section in Canberra, and for that I thank the former Officer-in-Charge, Bob Piper, and his assistant, Steve Locke. Also the help of David Pullen and Jennette Colovatti of RAAF Records has enabled this to be a complete reference document.

I thank also historian Lex McAulay for his guidance, which led to the assistance of Jim Yarra and Ross Currie. Ross, an ex-453 Spitfire pilot, was generous with his time and introduced me to Bill Morath, Fred Cowpe and Don Andrews. Don, a key player in 453’s activities in Europe, has provided the foreword to the book. I can think of no-one better qualified than Don Andrews (who served on 453 as a Flight Commander, CO and finally Wing Leader) to open this history of No.453 Squadron. I would also like to thank Russ Baxter and Jim Porteous for their photographic assistance. I hope that those who served on 453 can look upon this book as an accurate record of their service to their country.

Finally, words of thanks to my mother, Dorothy Bennett, for her critical grammatical eye, and to my wife, Marijke, for her suggestions and understanding.
Several months ago I was given the opportunity to read the draft of *Defeat to Victory*, the history of No.453 Squadron. It is a comprehensive and detailed record of the Squadron's operations in both Malaya and Europe and surely will evoke telling memories and feelings for all who read it, particularly for those who served in the Squadron.

The operational successes described in the book are events of which Squadron members can be proud. On the other hand the reminder of the loss of so many fine comrades is a stark feature of the grimmest aspect of war and something those of us remaining continue to grieve over.

453 Squadron had a somewhat unique existence in that it was first formed in Australia in July 1941 and after a short but courageous period in Malaya it was withdrawn to Australia and disbanded in March 1942. Three months later, however, the Squadron was reformed in the United Kingdom where it again performed with distinction. Soon after the cessation of hostilities it was again disbanded, once and for all. I was privileged to serve as a flight commander, squadron commander and wing commander with 453 Squadron in the European Theatre of Operations. While my comments are necessarily drawn from experience there, it is abundantly clear from this book that the esprit-de-corps, the enthusiasm, the skill and dedication displayed by the Squadron personnel in Europe only mirrored the same qualities which were very much in evidence in those who served in the Squadron during the Malayan campaign.

Understandably a substantial content of the book relates to events
surrounding the pilots and flying operations but it is pleasing that the vitally important activities and efforts of the ground personnel have been recognised. Their efficiency, wholehearted application and cheerful outlook, working all too often under very difficult conditions, provided great support to the morale of the pilots. At take-off, a cheerful ‘good luck’ and wave goodbye and on return a relieved ‘welcome back — any luck?’ were indications of the strong teamwork and bond that existed between the ground staff and the aircrew.

Highlighted in the book are a number of individuals who had a strong influence in creating and maintaining the Squadron spirit. Enlisting from a wide variety of civilian occupations, these leaders, each in his own way, left the stamp of their personalities on the Squadron. They welded a number of individuals into an efficiently operating unit, both on the ground and in the air, whose spirit, camaraderie — call it what you will — may have been equalled but certainly was not surpassed anywhere.

One of the heart warming features to emerge from the war is the fact that the strong bonds of mateship established then, have not diminished over subsequent years. The impact that the Squadron had on its members can be readily felt in the comments made by two pilots many years after the war had finished — they are indicative of the spirit which still exists. One who flew Spitfires in Europe said, ‘We flew the best aircraft in the world and we were in proud company’. The other commented, ‘Anything that ever happened to me, happened in 453 — anything else is a non-event’.

The unit badge of 453 Squadron, granted during the war years, depicts a kookaburra perched on a branch, the motto underneath reading ‘Ready To Strike’. While the motto fittingly applies to the bird, it also reflects the spirit and attitude of the Squadron personnel. It is indeed pleasing that the unit badge has been installed in the floor of the famous St Clement Danes Church, London, in the honourable company of many other squadron unit badges — a lasting memory to all who served in the Squadron and a permanent reminder of its existence.

The compilation of this book has entailed considerable research and delving into records fifty years old, as well as contact with men associated with the Squadron. The concept of the book has been a laudable one, and the extent of information amassed and the way it has been presented is to be commended.

Don Andrews
surrounding the pilots and flying operations but it is pleasing that the vital important activities and efforts of the ground personnel have been recognized. Their efficiency, wholehearted application and cheerful outlook, working all the time under very difficult conditions, provided great support to every phase of the operations. At take-off, a cheerful mood held, as it had been, all through the operations, for this intense effort and resultant success would not have been achieved if there had been a lack of confidence in the ground personnel to back the operations."
CHAPTER ONE

Fortress in the Far East

During the 1920s and 1930s the British policy for their influence in the Far East hinged on the naval base at Singapore. Second only to the United Kingdom for the defence of the British Commonwealth, Singapore was planned to have the largest naval base in the region, with a small garrison and strong seaward defences. There was to be no fleet based in Singapore. Instead, it was proposed that when needed a relief naval force could reach Singapore in seventy days.\(^1\) The 1923 Imperial Conference had agreed that these provisions gave the necessary degree of security in the Far East and the Pacific.

This assumption of having sufficient ships to send to the Far East in time of war had been challenged by Australia as early as 1926. Over the years, warnings that the lack of a fleet provided no deterrent were ignored, and Singapore’s defence remained geared to providing military and air cover to protect the naval base. When the situation warranted, the British navy would come to the rescue.

Japanese expansionism did not alter these plans. In 1937 Japan invaded China and strengthening of the naval base continued, with new airfields and air defences constructed to protect the empty port. War in Europe in 1939 did, however, alter the strategy, by extending the estimate for sending naval reinforcements from 70 to 180 days. The following year Britain was fighting for her very survival and realised she was in no position to provide any further commitment.

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to the Far East. The Japanese would be deterred by the American
fleet based at Pearl Harbour.

In November 1940, a new British Commander-in-Chief was
appointed for the land and air forces in the Far East. Air Chief
Marshal Sir Robert Brooke-Popham was 62 years old and had
already retired from the RAF. He had flown with the Royal Flying
Corps in the First War, but since 1937 had been in the backwaters as
the Governor of Kenya. He had been out of touch with the methods
of modern warfare, and was brought back from retirement evidently
because no serving officer could be spared from the war in Europe
for this command. It was considered that his most notable charac­
teristic was a tendency to fall asleep on the slightest pretext. A
disadvantage Brooke-Popham inherited with the position of C-in-C
was his lack of power over the navy, civil defence and any aspect of
civil administration. This absence of a supreme commander was to
have serious repercussions in Singapore’s defence. Brooke-Popham
was unable to harness the civil defences at an early stage, and his
having no control over naval movements led to uncoordinated
efforts in fleet defence.

The Australian response to the Commonwealth defence of the Far
East had resulted in four RAAF squadrons being committed to
Singapore and Malaya. Two Hudson general reconnaissance and
bomber units, Nos 1 and 8 Squadrons, were despatched to the region
in 1940. No.1 Squadron arrived at the Sembawang air base in
Singapore in July, followed the next month by No.8 Squadron.
These two squadrons were then to rotate through bases in northern
Malaya. A third unit, No.21 Squadron, equipped with Wirraway
trainers for army cooperation tasks, also arrived at Seletar in August.
The Wirraways were retained until arrival of a new fighter the
following year—the Brewster Buffalo. The RAF was to receive
sufficient numbers of these aircraft to equip its own Far Eastern
fighter squadrons and re-equip No.21 Squadron, in addition to the
new RAAF fighter squadron that arrived at Sembawang in August
1941. This fourth RAAF squadron was No.453 Squadron.

But even with this build-up in air defences, there remained in
Singapore little sense of urgency. The British Cabinet was fed with
optimistic reports. In October 1941, Brooke-Popham reported to
London that ‘the last thing Japan wants at this juncture is a
campaign to the South’. The following month he reaffirmed that
Japan was unlikely to attack as the north-eastern monsoon had set
in, making any attempt to land troops on the north-east Malayan
coast difficult. An attack was assessed as improbable before February
1942.

The prevailing policy of painting such a favourable situation
extended to maintaining public morale for the locals. There was a
reluctance to divert manpower to defence works so as not to shake
community confidence. Some of the military had been pressing for
the construction of defences along the northern shores of Singapore
island with forward defences at Johore Bahru.

The Army General Officer Commanding Malaya, Lieutenant
General A.E. Percival, was particularly against such fortifications. In
fact, Percival was to reject the advocating of defences on the
naked north shore of Singapore until January 1942, even after a
directive from Churchill. By that stage, of course, it was too late.

The Japanese had realised the Singapore coast facing Johore
Province was practically defenceless. The architect of the Japanese
attack, Colonel Mansanobu Tsuji, stated:

Styling Singapore the Gibraltar of the Orient and boasting of its
impregnability might possibly indicate a show of strength—or bluff.
But the absence of rear defences of the fortress constituted a very grave
defect. The strength of its position was purposely and extravagantly
propagandized without regard for the complacency which would be
promoted among the public and even among those responsible for its
defence. I was only one of many who were thinking seriously about the
capture of the island.

2. Air Chief Marshal Sir Robert Brooke-Popham GCVO KCB CMG DSO AFC, Inspector
General RAF 1935–36; Governor of Kenya 1937–39; C-in-C Far East 1940–41. Born
Wetheringsett, Suffolk, England, 18 Sep 1878.
p.137.
4. Turnbull, op cit, p.163.
5. Report on the Operations of the RAF during the Campaigns in Malaya and NEL 8
December 1941–12 March 1942, AVM P.C. Maltby CB DSO AFC, para 114, RAAF
Historical Section, Canberra.
6. Lt-Gen A.E. Percival CB DSO OBE MC, GOC Malaya 1941–42. Regular soldier; b.
Asperden, Herts, England, 26 Dec 1887.
So Singapore remained simply a naval base, with nothing to protect it on the landward side and no coordinated plan of defence. The lack of inter-service agreement had also extended up the Malay peninsula. The RAF continued building airfields without consultation with the Army. To accelerate construction of new airfields, some sites were selected as a minimum of work was required at the sacrifice of operational requirements. Some were in exposed positions. This was to commit the Army to defending airfields that tactically were extremely difficult to defend.9

Also the policy at these airfields was to disperse the aircraft to safeguard them from enemy attack. Furthermore, the camouflage of buildings on the aerodromes in Malaya was not undertaken until after hostilities had commenced.10 In northern Malaya the anti-aircraft defences on airfields were, without exception, inadequate.11 In fact, some airfields had no anti-aircraft guns at all.12

The lack of such basic precautions in the defence of aircraft on the ground was to account for the majority of losses in allied aircraft during the forthcoming campaign. Quite simply, the allied air bases had not been converted into active service stations and such large numbers of aircraft should never have been destroyed on the ground. The airfields could not withstand attack, had inadequate fighter defence and defence on the ground, and lacked air attack warning systems. Indeed, on the first morning of the war, a Japanese air attack devastated the 21 Squadron base at Sungei Patani, north of Butterworth, leaving only three Buffaloes operationally serviceable, and that was only because two of these had been airborne during the raid.

At an early stage, the number of aircraft needed to defend the region had been identified. The Singapore Defence Conference in October 1940 had espoused as a basic principle the reliance on air power until the fleet became available. A total of 560 aircraft, as a minimum, was recommended for the adequate defence of the Far East.13

11. ibid, p.3.
12. Maltby, Dispatch, para 32.
The recommended RAF strength was composed of:

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reconnaissance and attack on Japanese seaborne forces</td>
<td>186</td>
</tr>
<tr>
<td>Bombers for striking land-based Japanese</td>
<td>192</td>
</tr>
<tr>
<td>Fighters to oppose Japanese fighters and protect vital areas</td>
<td>144</td>
</tr>
<tr>
<td>Army cooperation</td>
<td>44</td>
</tr>
<tr>
<td><strong>Total aircraft</strong></td>
<td><strong>566</strong></td>
</tr>
</tbody>
</table>

At the outbreak of hostilities in December 1941, the RAF order of battle for Malaya and Singapore was 167 serviceable aircraft (see Appendix 2).

Unpreparedness had been the hallmark of the colonial rule in Singapore. Right up until hostilities broke out, British units were observing the working hours of 0730 to 1230 only. RAAF squadrons worked an additional two hours in the afternoon during their time in Malaya and Singapore, a procedure which was not in force in RAF units.14 This extra training and maintenance time was undoubtedly beneficial to the efficiency of RAAF squadrons.15

To say that the rapidity and success of the Japanese onslaught was to take allied forces by surprise would be an understatement. The Japanese were continually underestimated and the incompetence of allied intelligence appreciations truly lulled the defenders into a false sense of security. In October 1941, Brooke-Popham publicly declared that Britain did not need US naval support. In early December he assured the population that the Japanese were too afraid of British power to attack Malaya.16 He castigated the Malay Tribune for printing alarmist views and stated 'the position isn't half so serious as the Tribune makes out'.17 Not only did Brooke-Popham fail to instil a sense of urgency into his subordinates, he failed to realise the necessity for it himself.

The Japanese were to be inspired by an unbroken run of victories. The tendency to underrate the Japanese had led to their capabilities not being recognised, with the feeling that Japanese soldiers were inferior, their aircraft were obsolete and their pilots could not fly in the dark.

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14. First Narrative of RAAF Participation in the Campaign of 1941–42 in Malaya, Sumatra and Java, W.R. Lyster, RAAF War History Section, Melbourne, 1946, para 47.
17. Dixon, op cit, p.133.
The result of the superior performance of the Zero was a disastrous surprise to allied fighter pilots who had been informed the Buffalo was superior to any Japanese fighter. Air tactics had been evolved around ill-founded assumptions. To underestimate your enemy is a certain path to defeat.

If this catalogue of incompetence was not enough to seal the outcome of the forthcoming campaign, then there would be more to follow. The way this ineffectual leadership blundered and ignored what was happening around them led to the chaos and confusion that highlighted the Malayan debacle. Despite what visions the British Government had of their stronghold in Singapore, the naval base without a fleet was an inadequate deterrent. There was no British fortress in the Far East, and the British didn’t realise it. However, the Japanese did.

CHAPTER TWO

Lumbering Buffaloes

First flown in December 1937, the Buffalo was the product of the Brewster Aeronautical Corporation of Long Island, New York, and was designed as a fighter to operate from US Navy carriers. The first delivery of an F2A–1 Buffalo was made in June 1939. During 1939, as war appeared imminent in Europe, several countries desperate for fighter aircraft obtained the Buffalo, due primarily to the lack of any other available fighter. Finland received the Model 239 Buffalo, a de-navalised variant of the F2A–1 modified by the deletion of tailhook, life raft and catapult equipment. The later US Navy F2A–2, with a more powerful Wright R1820G–105A engine, was similarly de-navalised and supplied to Belgium as the Model 339B Buffalo.¹

In early 1940, the British Government recognised that domestic aircraft production would have to be supplemented from abroad, primarily from the US. The British Purchasing Commission was established and one of its first orders was for the Model 339E, known to the RAF as the Buffalo mark I. RAF fighter squadrons obtained 170, serialled W8131 to W8250, and AN168 to AN217. The first three were shipped to England in July 1940 for evaluation by No.71 Squadron. It was soon rejected as a first-line fighter in Europe, and it was decided to divert it to the Far East as the fighter to defend Singapore and Malaya.²

No.67 Squadron at Kallang, Singapore, received its first Buffaloes in March 1941. The autumn of 1941 was spent training, and during this period some twenty aircraft were lost in accidents. To meet Australia’s need for fighters, the British Air Ministry undertook to allocate the RAAF between one-third and one-half of RAF procurement of Buffaloes. These aircraft were destined to remain in the Far East. Australian Prime Minister Menzies had enquired about the availability of Hurricane fighters for Malayan defence. He was advised by the British Government that the Brewster Buffalo ‘appeared to be eminently satisfactory’ and would probably prove more than a match for any Japanese aircraft.

The first Buffalo for the RAF, serialled W8131, carrying a US civilian registration before delivery in 1940. The RAF rejected the Buffalo in Europe, relegating it to the defence of the Far East.

Menzies’ concern had been echoed at a meeting of the British Chiefs of Staff in April 1941. The Vice Chief of Naval Staff had advocated the despatch of Hurricanes to Malaya. The Vice Chief of Air Staff stated that the Buffalo would be superior to Japanese aircraft, which were considered not of the latest type. This opinion was later supported by Brooke-Popham. Either through arrogance or ignorance he stated: ‘We can get on all right with the Buffaloes here. They are quite good enough for Malaya.’

By the end of May 1941 the formation of four Buffalo squadrons in Singapore had been authorised. Sharing the defence of the city of Singapore at Kallang was No.243 Squadron, which had been formed with Buffaloes in June. In November, No.488 Squadron RNZAF arrived at Kallang and took over the Buffaloes left behind by 67 Squadron, which had just been posted to Burma. The aircraft were in various states of disrepair, and 67 Squadron had departed

5. ibid, p.158.
with all its tools, spare parts and accessories. The total equipment left to 488 comprised six trestles, six chocks, one damaged ladder and six oil-draining drums.9

Up to the northern side of the island, near the naval base, was the RAF air base at Sembawang. Here the two RAAF fighter units, Nos 21 and 453 Squadrons, were based under the command of an Australian, Group Captain John McCauley.10 No.453 Squadron had arrived at Sembawang in August 1941 and had commenced equipping with Buffaloes immediately. No.21 Squadron began converting from the general reconnaissance role with its Wirraways to the single-seat Buffaloes in the same month. On 19 November both Sembawang squadrons were declared operational and were inspected by the Air Officer Commanding Far East, Air Vice Marshal C. Pulford,11 who indicated his satisfaction and congratulated the units on the speed with which they had achieved readiness.12

The state of the aircraft on receipt was poor. Numerous modifications and inspections had been necessary on engines and airframes before the aircraft could be considered serviceable even for training. Particular difficulties were experienced with the armament. Crystals for the radio equipment were unavailable, and radio communications with the Buffalo were never to be satisfactory. In November five of the Buffaloes that had been made serviceable in all respects at Sembawang were then reclaimed by the RAF for despatch as replacements to Burma. The five new aircraft received from the maintenance unit at Seletar, although issued as operationally serviceable, were in such bad condition they needed five days work before they could be flown.13

All Buffalo squadrons except No. 488 had been passed as 'trained to operational standards' by the time war broke out.14 But the training and the equipment were deficient. Experience was to show that allied training had been based on an underestimation of the Japanese strength and ingenuity, and the Brewster Buffalo could match the Japanese Air Force only in bravery.

In action against enemy aircraft the Buffalo definitely proved unsuitable as a fighter aircraft: the speed was at least 100 mph too slow and they were out-maneuved on most occasions.15 In 1942, during the Battle of Midway, a US Navy commander of an F2A-3 Buffalo unit reported:

It is my belief that any commander that orders pilots out for combat in an F2A-3 should consider the pilot as lost before leaving the ground.16

With its 1100 hp Wright Cyclone engine, maximum speed was only 292 mph at 20000 feet.17 It could take almost thirty minutes to climb to the enemy bombers operating at this height, and Zeros at 25 000 feet remained immune.18 The CO of 21 Squadron, Wing Commander W. Allshorn19 had stated to the RAF at Seletar, during a respite from battle, that 'the Buffalo was not good enough'.20 This had then led to him being threatened by the RAF commander with close arrest for running down the Buffalo as a fighter and ruining the morale of the troops. Later, in December 1941, he was replaced as the CO of 21 Squadron.

In a vain attempt to match performance of enemy aircraft, the engines were continually over-boosted by the pilots. After each combat it was necessary to fit new spark plugs to the Buffalo's Wright Cyclone engine. The general feeling was that the engine was clearly not designed for fighter aircraft.21 After an oil pipe broke on 488 Squadron's Buffalo W8135 causing a crash-landing near Seletar, a laconic note in the accident record stated the 'Wright Cyclone G-105A motors are not built for front-line active service combat

14. Ross, op cit, p.84.
17. Thetford, op cit, p.130.
18. Maltby, Dispatch, para 313.
19. Wg Cdr W.F. Allshorn, 165 Command 453 Sqn 1941; 21 Sqn 1941-42; 4 Sqn 1942-43; 74 Wg HQ 1943; 83 Sqn 1943-44. Regular air force officer of Camden, NSW; b. Randwick, NSW, 20 Apr 1913.
Another serious handicap to pilots was the inability to climb beyond 18,000 feet without having to resort to the manual fuel pump. Fuel pressure delivered by the engine pump dropped off to such an extent that the engine would fail to give sufficient power. Being distracted by the need to manually pump fuel was a great disadvantage in the heat of battle.

The difficulties encountered by the armament personnel throughout the campaign were described by the RAAF commander as 'heartbreaking'. The 0.5 inch machine gun rounds were preserved in grease. This grease vaporised as the nose guns fired through the propeller, causing a greasy spray over the pilot's windscreen. The pilot in combat not only had his hands full, his forward vision was now blinded. Also constant blockages of the guns occurred. During one engagement, three Buffaloes attacked three unescorted Japanese bombers. From the three aircraft, a total of only four guns fired, and only one bomber was shot down. As the 453 Squadron Operations Record Book shows, 'a glorious opportunity was unfortunately missed'. However, by working tirelessly, the 453 armament personnel were able to ensure on the next mission that all guns worked properly. The efforts of the armament crews were due in no small way to their senior NCO, Sergeant Eric Haines. Haines was recognised for his services by the award of the British Empire Medal.

With combat experience it was decided that drastic measures were necessary to improve the performance of the Buffalo. The radio mast was removed, and all excess weight such as Verey tubes, parachute flare bins and cockpit heaters were taken out. Drag was reduced by removing gun blisters, pilot’s relief venturi tubes and rear vision mirrors. The two 0.5 inch wing guns were replaced by two 0.303 inch guns and the mountings, port openings and ammunition were bins modified to suit. Fuel load was reduced by 45 gallons, and the ammunition load was also reduced. Apart from the much cleaner lines resulting, the weight of the aircraft was reduced by 1000 pounds. This produced a remarkable difference in performance. The Brewster Buffalo could now even loop.

CHAPTER THREE

Day of Infamy

On 13 May 1941, Flight Lieutenant Bill Wells was posted from Station Headquarters at RAAF Base Richmond, NSW, to take temporary command of a new RAAF squadron to form at Bankstown ten days later. The new unit was No.453 Squadron, a squadron to be formed under Article XV of the Empire Air Training Scheme.

After the start of the war in Europe in September 1939, Britain elicited assistance from the Commonwealth to supply aircrew to bolster the expansion of the Royal Air Force. The conference called in Ottawa in November agreed to the establishment of an Empire Air Training Scheme (EATS) under which the three dominions, Australia, Canada and New Zealand, would provide trained aircrew to the RAF. Prime Minister Menzies had accepted the idea of contributing to an Empire air force under RAF control without consulting the Air Board, and announced it in Parliament on 15 November. Canada, in particular, was loath to supply aircrew to serve under British command with no control over their disposition, so terms were negotiated to form national squadrons within the RAF. Under Article XV of the EATS agreement Britain undertook that Canadian, Australian and New Zealand aircrews passing through the EATS would serve in Canadian, Australian or New Zealand

24. ibid, p.1.
25. 453 ORB, 15 Dec 1941.
26. ibid, p.3.

squadrons respectively, as part of the RAF. The vague compromise of Article XV reads:

The United Kingdom undertakes that pupils of Canada, Australia and New Zealand shall, after training is completed, be identified with their respective dominions, either by the method of organizing dominion units and formations or in some other way, such methods to be agreed upon with the respective dominion concerned.

Nothing further was ever agreed between Britain and Australia.

Canadian squadrons were to be numbered from 401 to 449, Australian squadrons from 450, and New Zealand squadrons from 485 to 490. Seventeen RAAF EATS squadrons were ultimately to be activated, Nos 450 to 467 Squadrons. No.465 Squadron was never formed. However, the Australian output of aircrew was to become so disproportionate to the number of RAAF EATS squadrons that most of those trained were inducted into RAF squadrons in the European theatre. By April 1945, there were 1488 Australian aircrew serving with RAAF Article XV squadrons, compared with 10,532 attached to the RAF.

EATS squadrons were to remain a bone of contention throughout the war. In December 1939 Air Vice Marshal S.J. Goble, the acting Chief of Air Staff, resigned from the Air Board in protest at the way Cabinet was allowing Britain to take over the running of the RAAF. Confusion existed as to whether they were RAF squadrons or RAAF squadrons. Australia never had the right to suggest what type of squadrons should be formed or how its nationals were posted. Australia abdicated responsibility of her trained airmen and never had operational control over these RAAF designated units.

Basically, an EATS unit was an RAAF squadron operating under RAF control, terms and conditions, with RAF equipment. Confusion even occurred with orders or signals like the following from the RAAF Air Board to RAAF Headquarters in London:

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SIGNAL

TO: AUSTRAIR LONDON
FROM: AIR BOARD L.320 2/3/42 AL 144/28/2
SIGNAL FROM RAF WESTGROUP AOC/1/22/2 NOT RECEIVED THIS HEADQUARTERS. SINCE 453 SQUADRON IS RAF UNIT, RAAF PERSONNEL ATTACHED RAF AND POSTED THAT UNIT ARE ADMINISTERED BY RAF.

True, No. 453 Squadron was administered by the RAF, but it was an RAAF Squadron. (The signal was later corrected to show 453 as an ‘EATS Article XV’ Squadron.) This distinction was to feature in the chaos that was to result from the Malayan campaign, as whether personnel belonged to the RAF or RAAF was obscure. For instance, there was confusion over whether promotion lists should be forwarded to RAF or to RAAF Headquarters; this position was never clarified.

The groundcrew of 453 were Australians who wore RAAF uniforms. They gathered at Bankstown over May to July 1941. On 5 July, the members were informed that 453 would become a fighter squadron instead of a general reconnaissance squadron for which they had been preparing. On 29 July, the 19 pilots and 145 ground staff sailed from Sydney on board the SS Marella and SS Katoomba for Singapore. Those on the Katoomba transhipped to the Dutch steamer Sibajak in Fremantle and arrived in Singapore on 15 August. The Marella arrived six days later.

By 17 August, Squadron Leader W.F. Allshorn had been posted to the RAF station at Sembawang to command 453 with the assistance of Flight Lieutenant Les Jackson. But this was intended only as a temporary measure, as the British Air Ministry had advised three days earlier that they had selected an RAF officer to command 453. The RAF maintained there was no suitable Australian available to lead this EATS squadron, and the man selected had considerable operational fighter experience. He was a 25-year-old Englishmen,

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5. ibid, p.26.
6. Robertson, op cit, p.54.
who had flown Spitfires since the outbreak of war—Flight Lieutenant (Acting Squadron Leader) W.J. Harper, at that stage instructing at No.57 Operational Training Unit—who would leave the UK on 20 August. The RAF did allow, however, Australian flight commanders for this RAAF squadron. They were Pilot Officers Mick Grace and Doug Vanderfield, both early graduates from EATS at Wagga, who had already done an operational tour together flying Hurricanes on No.258 Squadron RAF in the UK. They would proceed to Singapore also around the 20th.

453 joined two other RAAF squadrons at Sembawang: No.8 flying Hudson bombers and No.21 with Wirraways but about to convert to Buffaloes. The base was under the command of a RAAF officer, Group Captain John McCauley. Eighteen Buffalo fighters were allocated from No.151 Maintenance Unit at Seletar to equip the Squadron, and almost immediately flying training commenced. And almost immediately these young inexperienced pilots began having trouble with the Buffalo.

Most of the pilots were fresh from the EATS schools in Australia, with no flying time on single-seat fighters. Some had done their advanced training on twin-engined Avro Anson trainers and needed to consolidate on single-engine Wirraways before attempting to come to grips with the Buffalo. Fortunately Wirraways were available, as 21 Squadron was also re-equipping with the Buffalo, and these were organised into an ad hoc Operational Training Unit at Kallang for RAAF, RAF and RNZAF pilots.

On 27 August, Pilot Officer Leigh Bowes' first trip in a Buffalo was eventful. Due to his inexperience he landed aircraft W8202 with the undercarriage retracted, but fortunately the grass airfield at Sembawang accepted the 'wheels-up' Buffalo gently, so that there was only superficial damage done and he walked away uninjured.

10. Air Ministry Bulletin No.5526, dated 7 Nov 1941.
Another accident two weeks later was caused by an undercarriage malfunction. Sergeant Alf ‘Sinbad’ Clare was landing Buffalo W8188 at Sembawang on 15 September when, at the end of his landing run, the undercarriage collapsed and the aircraft was slightly damaged.15

Three days later Sergeant Harry Griffiths was flying Buffalo W8197 when the engine failed.16 He forced-landed just north of Sembawang in timbered country, totally wrecking the airframe. He was able to climb out of the wreckage but sustained shock and abrasions and was admitted to sick quarters for a week.

Flying training continued throughout September without further incident. The pilots completed their elementary instruction on the Buffalo, but their progress towards operational efficiency was hampered due to insufficient aircraft. Various modifications had to be carried out to adapt the aircraft to local conditions, and that, compounded with a lack of radio and electrical tradesmen, restricted the flying hours.

The first casualty on the Squadron occurred on 8 October. Pilot Officer Max Irvine-Brown was flying a radio trial for Kallang in Buffalo W8208 and apparently became lost.17 He was killed attempting to force-land on the Dutch island of Pulau Buntang, 70 km south-east of Singapore. The following day Squadron Leader Harper took command of 453, replacing Squadron Leader Allshorn who then took over 21 Squadron.

On 13 October, Vanderfield and Grace assumed their duties as Flight Commanders of ‘A’ and ‘B’ Flights respectively. They were then able to guide the Squadron through advanced operational tactical flying and an army cooperation exercise, culminating in 453 Squadron being declared operational on 19 November. By the end of the month, 453 Squadron had flown nearly 1500 hours over three months in spite of still being deficient in some tradesmen. The Squadron was also now down six aircraft on establishment, due to another landing mishap earlier in the month. On 5 November,
Sergeant Keith Gorringe had overshot the aerodrome when landing W8226, resulting in its extensive damage.\footnote{18}

Deteriorating relations with Japan resulted in the introduction of a No.2 Degree of Readiness in Malaya at the beginning of December 1941.

No.453 Squadron on parade. The lumbering Buffalo was to prove no match for the surprise performance of the Japanese fighters.

The other concern to Harper had been the standard of his pilots. With the AOC’s approval, he departed for Australia the next day, endeavouring to obtain more pilots of, what he considered, higher calibre. This ill-conceived mission by Harper naturally led to animosity towards him by members of the Squadron. His place was temporarily filled by Flight Lieutenant Tim Vigors DFC, of 243 Squadron.\footnote{19}

Tim Vigors had an impressive record. He flew Spitfires with No.222 Squadron in England over the summer of 1940 and during the Battle of Britain, on 31 August, shot down three German Bf109 fighters. His score grew during September, and by the end of the month he had been awarded the DFC. By the time he was posted in 1941 as a flight commander on 243 Squadron at Kallang, his tally totalled 9½ enemy destroyed, four probably destroyed, and three damaged.\footnote{20}

No.1 Degree of Readiness was declared on 6 December. This meant that forces were to be ready for immediate operations and prepared for enemy attack without prior warning. A Japanese fleet had been spotted by an RAAF Hudson south of Indochina (Vietnam), presumably heading for Siam (Thailand). Right up until midnight on 7 December, the Singapore command anticipated that any Japanese expedition would be directed against Siam.\footnote{21} At 2345 Singapore time on the evening of 7 December, more than 5000 Japanese troops of the 56th Infantry Regiment began wading ashore on the North Malayan coast at Kota Bahru. By midnight General Percival was at headquarters telephoning the Governor, Sir Shenton Thomas. ‘Well, I suppose you’ll shoo the little men off’, retorted the Governor.\footnote{22} Two hours later, the ‘little men’ had pushed back the defenders at Kota Bahru to secure the first beachhead of Japan’s new empire.

An hour and a half later, General Yamashita’s main landing force approached Singora beach and quickly overwhelmed the Thai resistance. Simultaneously, Japanese naval attack aircraft were bombing the US fleet in Hawaii at Pearl Harbour. That morning the Japanese also bombed Singapore, Hong Kong, Guam, Wake Island and Luzon, in the Philippines.

The following day both Britain and the US declared war on Japan. President Roosevelt spoke to his nation:

Yesterday, December 7, 1941—a date which will live in infamy—the United States was deliberately attacked by the naval and air forces of the Empire of Japan.\footnote{23}

\begin{itemize}
\item[] 18. Flt Lt K. Gorringe, 402859; 453, 21/453 and 76 Sqns, 2 OTU 1942–43, 2 FSHQ and 114 FS, Schoolteacher of Lithgow, NSW; b. Wellington, NSW, 22 Feb 1916.
\item[] 21. Maltby, Dispatch, para 183.
\item[] 23. ibid, p.149.
\end{itemize}
CHAPTER FOUR

Early Setbacks

The invasion at Kota Bahru was the prelude to the running battle down the length of the Malay peninsula. Tim Vigors and the men of 453 waited to be called; their engines had been warmed up. The initial bombing raid on Singapore at 4 am on 8 December had been mounted by an attacking force of 72 Japanese Navy Type 96 ‘Nell’ medium bombers.1 Half turned back due to bad weather en route and returned to Saipan. Even with thirty minutes warning of the attack, no defending fighters were permitted to engage the enemy, in spite of the perfect bomber formation seen under the full moon. The intention was that anti-aircraft batteries would be adequate defence, and fighters would get in the way. The headquarters of the Air Raid Precautions organisation were not fully manned, and no reply was received to repeated summonses by telephone to go into action.2 None of the enemy were shot down.

This inactivity extended over into the first few days of the war for 453, but it was far from uneventful. On 9 December, Sergeant Viv Collyer was taking off from Sembawang in W8151 when the engine failed, and he crashed into an aircraft dispersal bay.3 Fortunately he was uninjured, but the airframe was damaged beyond repair. The offending engine was recoverable, however, and returned to the maintenance unit at Seletar for repair. That evening Sergeant Eric Peterson was on his final approach into Sembawang in Buffalo W8210.4 Under a mutual reinforcement program with the Dutch Army air service in NEI, Glenn Martin bombers had been deployed to Sembawang. One of these bombers had been dispersed to the aerodrome perimeter but, unfortunately, it was obstructing the approach path. Peterson could not see the bomber until it was too late and the impact was sufficient to write-off 453’s second Buffalo that day.

No.453 Squadron had been allotted to the role of fleet air defence. As a token gesture, Churchill had despatched a naval task force to Singapore in the hope that its presence would deter any hostile Japanese intentions. The aircraft carrier HMS Indomitable, was to have been escorted by the battle cruiser Repulse and the new battleship Prince of Wales. The Indomitable ran aground in the West Indies, so the two battleships pressed on to Singapore, under the command of Admiral Tom Phillips.5

3. Flt Lt V.A. Collyer, 402935; 453, 23 and 84 Sqns. Wool classer of Narrabri, NSW; b. Narrabri, 7 Dec 1917.
Phillips had been appointed as C-in-C Eastern Fleet in October 1941, but this promotion had not been greeted unanimously. He was considered by many as a theoretical staff officer, lacking in practical command. He had no recent sea-going experience, his last being in the First War. His self-opinionation and abrasiveness, combined with a reluctance to decentralise authority, were to affect the powers of leadership expected of a C-in-C.

After reaching Singapore, Phillips was advised he could not expect adequate air cover for his proposed dash north to intercept any further Japanese invasion forces, but despite strong warnings he was soon off with the two battleships ‘in search of trouble’. He then turned a blind eye to a second warning signalled from Air Headquarters stating: ‘Fighter protection on Wednesday 10th will not, repeat not, be possible’. As he sailed north with his ‘Force Z’ (a fleet of destroyers and the two prized battleships) up the South China Sea, he was soon to lose any element of surprise. Phillips’ foolhardiness and errors in judgement were to have disastrous consequences.

‘Force Z’ was sighted by the Japanese submarine 165 at 1400 hours on 9 December. Four hours later spotter aircraft from Japanese cruisers reported Phillips’ fleet. As night fell Phillips altered course to investigate reported attacks on Kuantan, on Malaya’s eastern coast. He made this fatal decision without informing Headquarters in Singapore, and aware that he was in range of Japanese bombers operating from Saigon. Singapore could have been able to provide air cover by 453 Squadron over this area, if only they had been advised.

Before 1000 hours the following day, Japanese aircraft had again located Phillips’ ships, and a striking force of 88 aircraft (27 Navy Type 1 ‘Betty’ bombers and 61 Navy Type 96 ‘Nell’ torpedo bombers) were vectored in for the attack. The Japanese had two air forces: the Army Air Force designed to strike in close support of the armies in the field, and the Naval Air Force to attack shipping and cover naval units. The enemy force was made up of the three groups of the 22nd Air Flotilla, part of the Japanese Navy 11th Air Fleet. The Genzan, Kanoya and Mihoro Air Groups had moved forward to Saigon and Soc Trang, in French Indochina, in preparation for the Malayan invasion.

Postwar interrogation of Japanese revealed the breakdown of the Japanese attacking force:

<table>
<thead>
<tr>
<th></th>
<th>Prince of Wales</th>
<th>Repulse</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bombers</td>
<td>18</td>
<td>24</td>
<td>37</td>
</tr>
<tr>
<td>Torpedo Bombers</td>
<td>9</td>
<td>9</td>
<td>18</td>
</tr>
<tr>
<td>Bombers</td>
<td>9</td>
<td>37</td>
<td>46</td>
</tr>
<tr>
<td>Torpedo Bombers</td>
<td>24</td>
<td>26</td>
<td>50</td>
</tr>
<tr>
<td>Total</td>
<td>48</td>
<td>46</td>
<td>94</td>
</tr>
</tbody>
</table>

Four Japanese aircraft were lost in the attacks.

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At 1030 the destroyer HMS Tenedos signalled Phillips—'Am being bombed by enemy aircraft'. But Phillips did not call for air cover. The Buffaloes assigned to this task were now within range at only one hour’s flight time. Soon the capital ships were both under attack, and Phillips still remained in radio silence. Finally Captain Tennant in the Repulse signalled Singapore on his own initiative reporting ‘enemy aircraft bombing’. It was received at 1204, too late to make any difference.

Eleven aircraft of 453 Squadron were on stand-by specifically to provide air cover to ‘Z Force’ if advised they were returning near Singapore. When Tennant’s message was received Tim Vigors was airborne with the Squadron six minutes later, heading out to a position 80 km east of Kuantan.

The Buffaloes arrived over the scene of the disaster at 1318 and the last Japanese reconnaissance aircraft were able to make an escape. Vigors and his Australians were in time to see the Prince of Wales roll over and sink, less than an hour after the Repulse had gone down. Tim Vigors gave a well-publicised report:

I passed over thousands who had been through an ordeal, the greatness of which they alone can understand . . . It was obvious that the three destroyers were going to take hours to pick up those hundreds of men clinging to bits of wreckage and swimming around in the filthy oily water . . . Yet every man waved and put his thumb up as I flew over him . . . Here was something above human nature.

Phillips died in the sinking of the Prince of Wales. Before the war he had shared a flat in London with John Slessor, the expounder of air power who was to become Marshal of the RAF. Knowing their differences on the effectiveness of air power, Sir Arthur ‘Bomber’ Harris proposed a toast at Phillips’ farewell party:

Tom, when the first bomb hits, you’ll say ‘My God, what a hell of a mine’!

How prophetic. No single incident did more to wound the defenders’ morale and to exhilarate the Japanese. As the Buffalo pilots returned to debrief, the C-in-C was in the Operations Room at Sembawang to meet them. There Brooke-Popham first received the news of this world-shaking disaster. 840 lives had been lost.

Had Phillips notified his change in plans, Air Headquarters could have moved 453 up to Kuantan and some effective cover could have been provided. As it was, timely intervention from Singapore had been impossible. The defence of Singapore had depended on air power to repel attacks until the arrival of the British fleet. The army’s role was ancillary—holding beaches, protecting airfields, concentrating around the naval base and Singapore island. In the first two days of the war, the basis of this defence was destroyed. In addition, Japan now had undisputed command of the sea in Malaya.

After mounting patrols for the next few days the Squadron received instructions on 12 December to move to Ipoh and assist No.21 Squadron.

17. Richards and Saunders, op cit, p.29.
The War began for 453 on 13 December. The sixteen aircraft of the Squadron were programmed to proceed to Ipoh in four flights: two flights of three aircraft, and two of five aircraft. First off at 0600 hours was the ‘A’ flight commander Vanderfield, with wingmen Sergeants Viv Collyer and Mal Read. While refuelling at their advanced landing ground at Butterworth in northern Malaya, an enemy air raid commenced over nearby Penang. The trio took off to intercept the bombers, and although Vanderfield was unable to retract his wheels, he was still able to shoot down two Mitsubishi Army Type 97 bombers. Read and Collyer shot down three dive bombers, which they described as Junkers 87s. These were most probably Army Type 99 dive bombers, later identified by the Allies as the ‘Sonia’. Vanderfield then returned to Ipoh for maintenance to repair his undercarriage, while Read and Collier refuelled again at Butterworth. They then set off for the north and engaged enemy road transport and troops near Alor Star, then returned to Ipoh.

By this stage the second and third formations from 453 had arrived. One five-ship had been led up from Sembawang by ‘B’ flight commander Mick Grace, followed by a second five led by CO Tim Vigors. They refuelled at Ipoh then flew on to Butterworth where on landing warning was given of the approach of enemy aircraft. All available Buffaloes leapt airborne to engage more than forty enemy fighters. Vigors was locked in furious combat with fighters when his fuel tank exploded and the aircraft caught fire. He bailed out over Penang, and residents reported seeing three Japanese aircraft crash into the sea near the island. Though there was no confirmation of them having been shot down by Vigors, he was believed to have been the only Buffalo in this engagement. While in his chute, a Japanese fighter made repeated attacks on Vigors. By collapsing his canopy he was able to successfully land on Penang Mountain, from where he was rescued and carried to hospital. He had been badly burned on the legs, hands and arms, and wounded in the thigh. For Vigors, this was the end of his flying in this campaign.


of enemy numbers drove him to the safety of clouds to make a getaway. Angus wasn't so lucky; he was shot down and crash-landed in a paddy field one mile from Butterworth. Sergeant Matthew O'Mara forced-landed with wheels up at Kuala Kangsar.27 Lost during this fighting was Sergeant Ron Oelrich, who was believed shot down by enemy fighters.28 He twice drew enemy fighters across airfield defence Bofors guns and for this gallantry was posthumously Mentioned in Dispatches.29

The last formation from Sembawang was to be led by Pilot Officer Tom Livesey,30 Wing Commander Neale, an RAF officer who was to take command of the base at Ipoh, although unfamiliar with the Buffalo, offered to ferry an aircraft northwards due to the lack of pilots.31 Tom Livesey provided a cockpit briefing and emergency drills, and watched Neale fly a circuit at Sembawang. Neale was briefed that in the event of emergency to use the parachute, and not to attempt a forced-landing. Pilot for the third aircraft was a New Zealander from 488 Squadron, Pilot Officer David Brown.32 Livesey led his formation up the coast until they encountered heavy electrical storms. As they zigzagged around and under the weather, only a few hundred feet above the sea, they soon became lost. Running low on fuel, they found a coastline, and Livesey decided to attempt a landing on what appeared to be a field. As he touched down he realised it was a paddy swamp and the Buffalo somersaulted. Extricating himself, he tried to warn the others not to attempt to land. But both approached with wheels up and flaps down, and both crashed in flames. Livesey was unable to reach either Neale and Brown, who were both killed instantly.33

They had crashed at Pangean, on Sumatra, and Tom Livesey was able to make his way back to Singapore two days later.

A total of seven Buffaloes that set out that morning from Sembawang had been lost. This first day of action for 453 had been a bloody one.

27. Flt Lt M.D. O'Mara, 402876; 453, 76 and 82 Sqns. Salesman of Marrickville, NSW; b. Newtown, NSW, 29 Apr 1921.
No.453 Squadron's ten remaining Buffaloes, operating from Ipoh, were serviced by 21 Squadron ground personnel and were at the disposal of Norgroup. Norgroup had been established in northern Malaya to provide air support for III Indian Corps, and was to participate in the offensive into Thailand to seize the airfields at Patani and Singora, forestalling any Japanese incursion. This bold plan, *Operation Matador*, had been cancelled by Brooke-Popham immediately before the enemy invasion for fear of provoking a Japanese reaction. But now the Japanese Army held these strategic airfields, and this proved crucial to the lightning enemy push southwards.

That first day's battle was a taste of the bitter struggle to come in defence of Malaya. The following day, 14 December, the priority was to halt the Japanese advance extending down from the Thai border. Five Buffaloes, led by Flight Lieutenant Max White of 21 Squadron, were tasked to strafe enemy convoys north of Alor Star. Two aircraft were forced to return, but Sergeants Geoff Seagoe and Greg Board pressed on with White. Enemy aircraft were encountered during the flight, and when White attacked a dive bomber he was shot down and killed by the rear-gunner. Board shot down a Navy
Type 96 ‘Claude’ fighter, and Seagoe damaged another. Seagoe took return fire from the convoy he attacked and had his shoulder shattered by an explosive round, but he was able to return to Ipoh.

Aircraft attrition meant that on the following day the two squadrons could field only three Buffaloes fit for combat. These aircraft, flown by Vanderfield, Board and O’Mara, took off and intercepted three unescorted Mitsubishi Army Type 97 ‘Sally’ bombers over Ipoh. But the fury of battle was having its effect on the Buffaloes’ 0.5 inch guns. Of these twelve guns airborne in the three aircraft, only four functioned. One enemy bomber was accounted for by Board, the others escaped. When Harper arrived that afternoon with more pilots and six replacement aircraft from Sembawang, he arranged for Sergeant Eric Haines and a party of 453 armourers to come up from Singapore. Haines and his men repaired the guns, and were rewarded when, on the next flight, all weapons functioned perfectly. Meanwhile ground strafing sorties were flown by Pilot Officer Leigh Bowes and Sergeant Jim Austin on the enemy advance north of Alor Star. Only the few serviceable aircraft could be sent, which meant the fighters retained at Ipoh for airfield defence were not strictly operational. Such was the desperation.

On 16 December, Norgroup directed that the few serviceable aircraft should be retained for the defence of Ipoh. An airborne standing patrol was effective in keeping the airfield free of enemy attack for the day. Other pilots sat alert in their cockpits which, in the tropical heat, were like infernos. To make the situation worse, the domestic arrangements remained far from satisfactory as Ipoh had limited support facilities. At night the pilots were boarded out at hotels in town, to try to ensure proper rest and a meal at the end of the day.

Stand-by patrols continued the next day, and when three enemy fighters approached they were engaged by the defending Buffaloes. The superior manoeuvrability of the Zero was shown in this dogfight, but two of the enemy were damaged. Soon afterwards warning was given of the approach of further enemy aircraft. Four Buffaloes on alert were scrambled to join the four airborne on the standing patrol. These eight defenders were drawn away from the airfield to climb on a hopeless chase after ten Zeros, which eluded the Buffaloes at will. Meanwhile, five Japanese bombers, attacking at 1500 feet, bombed parked aircraft. Three Buffaloes and buildings at the field were destroyed. As the defenders returned to base, another bombing wave attacked, destroying two of the landing aircraft. Fortunately, no pilots were lost. This ruse had been used to good effect by the Japanese.

The following day, 18 December, a similar feint was orchestrated. Six Buffaloes took off, again failing to intercept the enemy. On landing the last two Buffaloes were caught by a raid of 15 Japanese bombers. The pilots were able to leap from their cockpits to the safety of slit trenches as their aircraft were blown apart. Again the pilots were uninjured but, unfortunately, the equipment officer of 21 Squadron was mortally wounded when a bomb burst beside his car.

At midday three Zeros strafed the airfield. Three Buffaloes were damaged, but due to the efforts of the groundcrew, the aircraft were made serviceable by nightfall. The success of these enemy attacks at catching the base unaware had been puzzling. As the Japanese had been pushing south, advanced warning from forward observation posts was being lost. Then an enemy agent was discovered on a hilltop overlooking the airfield. By radio he had been able to call in enemy attacks to achieve maximum damage.

That evening Air Headquarters directed that all non-operational Buffaloes be returned to Singapore. The next morning six aircraft had been repaired to the extent of being flyable for the trip south. This left seven combat-worthy Buffaloes from the two units, five from 453 and two from 21. Then another alarm, followed by another bombing attack. Three ‘Sally’ bombers flew in low over the field and destroyed the last two 21 Squadron aircraft. There now remained five Australian combat aircraft in Malaya, subject to enemy attack at will, persevering under conditions which were

5. 453 Squadron Operations Record Book, 15 Dec 1941, RAAF Historical Section, Canberra.
10. Gillison, op cit, p.278.
11. 453 Sqn ORB, 19 Dec 1941.
making operations impossible. Refuelling of aircraft, for instance, was being done by buckets and funnels. But spirits were still high. The Japanese observed that 'the fighting spirit of the enemy air force had not yet degenerated'.

Enemy ground forces had now reached Taiping, within forty miles of Ipoh, and with the imminent threat to the airfield, Air Headquarters ordered its evacuation. 21 Squadron was withdrawn to Singapore, 453 Squadron to Kuala Lumpur:

SIGNAL
IMMEDIATE
TO: OC SEMBAWANG = 453 SQN = AOC = 21 SQN
FROM: AHQFE
AOC/22 19/12/41
4016/ADC 21 SQN AFTER IPOH TO RETURN COMPLETE WITH EQUIPMENT DIRECT SEMBAWANG TO BE REORGANISED. ALL OPERATIONALLY SERVICEABLE AIRCRAFT TO BE HANDED OVER TO 453. NUMBERS TO BE FORWARDED TO THIS HQS. 453 AFTER IPOH TO PROCEED DIRECT TO K.L. 453 TO COLLECT FROM SEMBAWANG FOUR AIRCRAFT HELD IN RESERVE. FOR 21 THESE AIRCRAFT TO FLY TO K.L. AIRCRAFT LEAVE FIRST LIGHT 20TH WEATHER PERMITTING. OC SEMBAWANG TO BRING 453 SQUADRON UP TO SIXTEEN MACHINES. TOTAL STRENGTH OF 453 IN ACCORDANCE WITH THESE ORDERS WOULD BE 13 AIRCRAFT IMMEDIATELY. PERSONNEL DEALT WITH UNDER SEPARATE SIGNAL

= 1600

Establishing their new base on the evening of 19 December at the site of the Kuala Lumpur Flying Club at Sungei Besi, the five Buffaloes were reinforced the next afternoon by six replacements flown up from Singapore. With the dispatch of 21 Squadron's groundcrew from Ipoh to Singapore, 453 Squadron ground personnel were sent by train from Sembawang to Kuala Lumpur. Their arrival at Sungei Besi enabled 453 to operate again as a unit, transforming the Flying Club site into a forward battle station that could mount operations to again slow the enemy advance southwards.

However, accommodation here in Kuala Lumpur was, for a change, reasonable. The pilots took over the comfortable mansion of a wealthy Chinese, who had made a hurried departure south with his fourteen wives. Not only was the house luxurious, it had well-filled storerooms. The large stocks of vintage wines were appreciated by the pilots. These comforts were only to be enjoyed for two nights.

The first day of operations from Kuala Lumpur was 21 December. From early morning reconnaissance, airfield protection and intercept sorties were launched. Two aircraft, flown by Sergeants Eric Peterson and Ross Leys, were flying airfield defence when they encountered a force of 14 dive-bombers escorted by 15 Zero fighters. Leys attacked the fighters and damaged one before he was shot down. He was attacked by at least three fighters while parachuting down. Peterson attacked the dive-bombers, believed to be Navy Type 96 ‘Claudes’, shot one down, claimed another as a probable, and damaged a third. He returned safely, to see the airfield had been bombed. Fortunately, by widely dispersing the Buffaloes around the airfield, none had been damaged. Three more replacement aircraft were flown in from Sembawang during the afternoon, as stand-by was maintained in waiting for the next assault. All remained quiet for the rest of the day.

453 Squadron was ready again early on the morning of 22 December. Six pilots took off at 0800 on airfield defence, landing at 0950. Twenty minutes later 12 Buffaloes were scrambled, led by Doug Vanderfield. Over 15 Zeros were encountered, escorting an attacking force of bombers flying towards Kuala Lumpur from the north. A widespread dogfight developed—the savage battle for Kuala Lumpur was on.

Pilot Officer Tom Livesey lost his undercarriage on take-off when he hit the sandbagged revetment of a Bofors gun position. He continued flying into combat against the Zeros, and was badly shot up and

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12. Tsuji, op cit, p.149.
13. AHQFE Signal AOC/22 dated 19 Dec 1941, file reference S/20/5/Air(19A), RAAF Historical Section.
15. Report on RAAF Operations in Malaya, Singapore, Sumatra and Java 1941/22, para 140, RAAF Historical Section, Canberra.
453 Squadron Buffalo coded G-TD was named ‘Shirley’ after Sergeant Harry Griffith’s wife. This aircraft was evacuated to Sembawang by Sergeant Keith Gorringe after the main withdrawal from Kuala Lumpur.

Sergeant Mai’ Read who was later killed in action over Kuala Lumpur.

Pilot Officer Bob Drury’s aircraft was damaged during the fight, causing him to crash-land back at Kuala Lumpur. He was seriously injured and died that night. Sergeant George Scrimgeour was shot down in flames. He sustained burns to his hands and face, and while descending by parachute was continually attacked by the enemy—this was becoming a standard Japanese practice. Though he had 25 bullet holes in his parachute canopy, he landed safely. Sergeant Mal Read was also shot down in flames but successfully bailed out. Sergeant Mal Read was killed when he rammed an enemy Zero, which then crashed. Sergeant Viv Collyer was wounded in the right foot, but was able to fly to Sembawang with over 50 bullet holes in his badly damaged Buffalo for repairs. Sergeant Harry Griffiths, though wounded in the hands, was able to land his bullet-riddled machine back at Kuala Lumpur. The other five pilots were also able to return, although some aircraft were now operationally un-serviceable.

In this engagement, seven enemy aircraft were claimed destroyed, but from reports received by Military Operations at Kuala Lumpur, wreckage revealed eleven enemy aircraft were destroyed. The urgency of battle precluded pilots from observing the effects of their fire: they would fire a burst at a target and, in the melee, move their aircraft on to the next available enemy. (The most complete results for ‘kills’ that can be assembled from this fight are listed in Appendix 6.)

Two hours after this scramble, another approach of enemy aircraft was detected. Only one aircraft, flown by Sergeant Eric Peterson, was able to get airborne before a force of Zeros strafed the field from a lightning low-level attack. Peterson was shot down as his Buffalo was clawing for height; he was killed when his plane spun into the ground and burst into flames. Stand-by was maintained by the four serviceable Buffaloes, and reconnaissance sorties throughout the afternoon revealed no further enemy activity near Kuala Lumpur. They were now down to three flyable Buffaloes and the

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lost aircraft could no longer be replaced. The running battle had come to a stop.\textsuperscript{22}

The following day No.453 Squadron was ordered to withdraw to Sembawang. Seven aircraft could be made flyable during the morning and flown south. Tom Livesey set off by car to take the wounded—George Scrimgeour, Ross Leys and Harry Griffiths—to Singapore.\textsuperscript{23}

A small maintenance party was left at Kuala Lumpur to man a forward operating base, and the remainder of 453’s personnel departed that evening. On Christmas Eve, they arrived safely in Singapore. In these closing days before Christmas, 453 had been the only allied squadron operating in Malaya. Even their tenacity had now given way to the might of the Japanese onslaught, and they lost their foothold on the peninsula. Their last ditch stand, chased down from Ipoh and Kuala Lumpur, would now be fought from Singapore.

\textsuperscript{22} War Without Glory, J.D. Balfe, MacMillan, Melbourne, 1984, p.113.
\textsuperscript{23} Hall, op cit, p.289.

\textbf{CHAPTER SIX}

\textbf{Final Defeat}

At this juncture, with the army stumbling back through the Malayan jungle and unable to mount a prolonged stand, Brooke-Popham was replaced as C-in-C by Lieutenant General Sir Henry Roydes Pownall.\textsuperscript{1} The new Chief fared no better than his predecessor. The situation was growing worse, and any reinforcements available were inadequate.

The loss of fighter aircraft and the lack of replacements prompted Air Headquarters to merge the two Australian fighter squadrons at Sembawang on 24 December. The amalgamated unit was known provisionally as No.21/453 Squadron, under the command of Harper, operating as two flights of eight aircraft each. This reorganisation was to be only a temporary measure until such time as the Squadrons could be brought back up to their full establishment of pilots and aircraft. The Squadron was now tasked with carrying out reconnaissance as ordered by III Indian Corps in Malaya, and providing cover for the bombing of enemy airfields.\textsuperscript{2} A maintenance detachment from 453 had remained behind at Kuala Lumpur which, with Port Swettenham, served as an advanced landing ground.

From Christmas Day until early into the New Year, 21/453 carried out only a few tactical reconnaissance flights. This reprise provided the opportunity to modify the Buffaloes, resulting in their reduction in weight and marginal improvement in performance.

\textsuperscript{1} Richards and Saunders, op cit, p.33.
\textsuperscript{2} Gillison, op cit, p.280.
On 3 January 1942, flights of six Buffaloes flew escorting patrols for a convoy from Batavia (Jakarta) to reinforce Singapore. Also, two aircraft were detached to Kuala Lumpur for reconnaissance south of Ipoh. They found enemy convoys moving south, and by strafing attacks were able to inflict substantial casualties in the vain attempt of slowing the Japanese advance. As they circled the airfield at Kuala Lumpur to refuel, the ground erupted as sticks of bombs burst down the runway. The Buffaloes were caught by the turbulence, but recovered to return to Sembawang with their limited remaining fuel. The Japanese bombers, striking from the captured airfield at Ipoh, had now rendered Kuala Lumpur inoperable as a forward operating base. The 453 Squadron ground party was withdrawn to Sembawang.4 En route they destroyed any facilities at Port Swettenham that could be of use to the enemy.

Over the next two days reconnaissance sorties were continued over Kuala Lumpur, Perak River, Selangor, Port Swettenham, Mersing and Port Dickson areas. Interspersed with these were defence patrols over Singapore and further convoy protection duties. In a last minute attempt to provide overall leadership, Field Marshal Sir Archibald Wavell was appointed Supreme Commander in the Far East, over British, American, Australian and Dutch forces. Wavell took over on 7 January.5

With the Japanese aircraft build-up at Kuantan, a dawn strike was planned for 9 January. At dusk on the previous evening, fourteen Buffaloes landed at Kluang to prepare for the offensive sweep. In the darkness during landing, two aircraft were damaged taxying into bomb craters. This left twelve aircraft to carry out the operation. Unfortunately take-off the next morning was delayed by low cloud and fog. As the success of the operation depended entirely upon the element of surprise, it was abandoned and the twelve aircraft patrolled the Johore/Mersing area instead. An enemy reconnaissance aircraft was sighted, but the Buffaloes were unsuccessful in intercepting because Harper, as leader, had left his flaps down.6

For a further two days reconnaissance was carried out around Port Swettenham, Kuala Lumpur and Ipoh. Another attempt was made

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5. Turnbull, op cit, p.170.
to strafe enemy aircraft on the ground at Kuantan, but this too was aborted.

On 12 January, six 453 Squadron aircraft patrolled over Singapore in readiness to intercept enemy raiders. No enemy were engaged, although large numbers were seen at high-level heading north. During the morning 488 Squadron had been able to engage the attackers, but lost two Buffaloes for no results.7 This period was one of concentrated enemy bombing of Singapore. Most attempts to engage Japanese attackers were thwarted by the enemy’s greater height and speed. The Buffaloes were hard-pressed climbing to 20,000 feet, while enemy bombers flew at 25,000 feet with a fighter escort at 28,000 feet. When the enemy could be intercepted, the Buffaloes were outnumbered, outmanoeuvred, outdistanced and outgunned. The superior speed of enemy bombers caused one pilot to say with disgust: ‘Bombers outpacing fighters, you’ve got to... well laugh!’

Installations on all sides of Sembawang were attacked, particularly the RAF stations at Seletar and Tengah, the Naval base and Army positions, but the Australian airfield remained unscathed. Enemy radio broadcasts from Tokyo and Penang made mention of this. The propaganda purported that Australians were held in high regard by the Japanese, and their version of ‘Lord Haw-Haw’ advised that Australians had been badly let down by the British High Command. Australia should depart Malaya, and then Japan would leave Australia unmolested in return for cooperation and trade. The disdain that such propaganda provoked was sometimes humorous. The Australians were advised that paratroops would be landed on Sembawang the following day, but they were not to worry as the first lot of paratroops would be Geisha Girls. On another occasion the Japanese scoffed at how they weren’t worried by Australians, as they thought the Aussies were drinking themselves to death.8

During the afternoon of the 12th, while four Buffaloes were flying an offensive sweep near Mersing on Malaya’s east coast, two aircraft collided. Sergeant Grannt Hsarrison flying W8202 had his airscrew knocked off and, as he was too low to bail out, plunged into the dense jungle.10 Miraculously he was uninjured, and after an eight-days’ trek through the jungle, he was found by an Australian army patrol near Mersing. The other aircraft, AN171, flown by Flying Officer Wallace, was ditched in the sea ten miles east of Jembaluang.11 He was found injured by the army after a two-day ordeal, and was then faced with a five day trek through the dense jungle to the AIF base three km away.12

January 13 saw all available fourteen Buffaloes tasked to provide air protection for the most important convoy to reach Singapore. Carrying large reinforcements of troops, imperative for the air defence of Singapore, was a consignment of 51 Hurricane mark II fighters. While the Hurricanes were being readied for operations, the air defence of Singapore was maintained by the Buffaloes. On 15 January a successful interception was carried out by Vanderfield and Kinninmont, who shot down two enemy bombers and probably destroyed another.13

The much vaunted heralding of the arrival of the Hurricanes had created an atmosphere that these would be the saviour for Singapore. In addition to the arrival on the 13th, a further 48 Hurricanes were expected on HMS Indomitable in late January and an additional 39 were crated and en route at sea.14 But it was too little, too late. No.232 Squadron began Hurricane operations almost immediately. Their first attack against unescorted bombers was successful, and consequently all further Japanese raids had fighter escort. As a result, over 20–22 January, nine Hurricane pilots were lost. One of those to fly Hurricanes with 232 was RAAF Pilot Officer John Gorton, who crash-landed in this first week on the Dutch island of Bintan, 80 km south of Singapore. He was later to become Australian Prime Minister.

On the west coast of Malaya the Japanese were exploiting their command of the sea to land their forces behind Army positions. Between 16 and 18 January there were a succession of landings on

7. W8200 (Sgt Honan) and W8186 (Sgt MacMillan) of 488 Sqn both shot down attacking Army Type 97 bombers. Woodhall, op cit, p.6.
the Johore coast between Muar and Batu Pahat. On the 17th, reconnaissance was flown around Malacca, and further Buffaloes escorted Vildebeeste bombers to attack landing barges. The Buffaloes also joined in the attack by strafing enemy shipping. While escorting the bombers back to Singapore, three Japanese Navy 96 fighters were encountered. Grace and Vanderfield probably destroyed all three, but definite results could not be confirmed as they had to continue onwards to protect the bombers.

At 1100 hours on the 17th, Sembawang had its first attack. Large formations of high-level bombers were successful in extensively damaging buildings, aircraft and the aerodrome. Three Buffaloes were totally destroyed, five others were badly damaged, others slightly damaged. Several casualties suffered minor wounds from shrapnel. Before the raiders were out of sight, groundcrew were endeavouring to salvage aircraft and equipment.

Hangars and Buffalo fighters at Sembawang burn fiercely after a Japanese bomber raid on 17 January.

From mid-January, Nos 243 and 488 Squadrons were responsible for the defence of Singapore, and 21/453 Squadron was primarily used for Army cooperation and escorts to bombers operating by day on the west coast. All squadrons were now part of No.224 (Fighter) Group, and by 18 January, to counter the estimated Japanese force of 150 fighters and 250 bombers, the strength of the Group was a total of 28 Buffaloes.

On 19 January the situation at Muar was reported to be serious. Flight Lieutenant Kongo Kinninmont and Pilot Officer Tom Livesey reconnoitred south of Malacca where they encountered an enemy two-seat reconnaissance aircraft. Kinninmont shot it down. Eight Buffaloes were then tasked to escort five Wirraways of Y Squadron and three Dutch Glenn Martin bombers to attack enemy concentrations near Malacca.

Y Squadron was an unusual unit. When 21 Squadron had replaced its Wirraways with Buffaloes, the Wirraways were formed into an advanced operational training unit at Kluang, later moving up to Kahang. The five aircraft were commanded by an RAF pilot, Flight Lieutenant Park-Thompson, primarily with New Zealand pilots and RAAF observers, and with the outbreak of war were given a dive bomber role. The Wirraways were loaded with 20 and 40 lb anti-personnel bombs and a local fixture of twin rear-mounted Vickers guns. The aircraft were also fitted with a soup-plate siren, about a metre in diameter, which caused a deafening screaming sound over the target. The Wirraways had taken a page from the book of Luftwaffe ‘Stuka’ dive bombers and their Blitzkrieg tactics.

The Wirraways led the attack against barges of troops crossing the Muar River. Three Japanese fighters attacked the force, but all were promptly destroyed by the escorting Buffaloes. A Japanese dive bomber and a two-seat fighter were also destroyed. One Wirraway was hit by ground fire and crashed, but the crew was rescued. One of the Buffaloes of the 21 Squadron flight was shot down and the pilot, Sergeant Parsons, was killed.

During the afternoon, 488 Squadron also took part in these offensive operations. While engaged in strafing one mile north of

15. Maltby, Dispatch, para 314.
16. ibid, para 322.
17. File reference 180/2/65 dated 4 Aug 1944, RAAF Historical Section, Canberra.
Muar township, the Buffaloes were attacked by Japanese fighters, with the loss of two New Zealanders.¹⁹

The following day reconnaissance and attack missions were continued north of Batu Pahat. Sembawang was heavily bombed again, destroying 21 Squadron Buffaloes and Hudsons from the two RAAF bomber units, Nos 1 and 8 Squadrons. Six Buffaloes operating in the Muar Gemas area met a formation of six Army Type 97 bombers. One of the enemy was destroyed, and the others forced to jettison their loads.²⁰ On the 21st and 22nd, escort missions with Albacore bombers were flown in support of the desperate Australian ground action near Gemas. It was in this battle that the Australian commander, Lieutenant Colonel Anderson, was posthumously awarded the Victoria Cross.

Air defence and convoy protection sorties were mounted in addition to offensive sweeps. On the 25th, a joint force of twelve Buffaloes from 21/453 and 488 Squadrons attacked enemy road transport near Batu Pahat. Several aircraft were hit by ground fire. The expected Japanese invasion on the east coast took place on 26 January at Endau. Six Buffaloes escorted nine Hudsons to bomb the invading forces. A force of over fifty enemy aircraft was encountered, and in the ensuing fray four Japanese fighters were shot down.²¹ Flying Officer Sheppard shot down an Army Type 97, while Grace and Leys were also credited with kills.²² Hurricanes of 232 Squadron also joined the fight, and enjoyed success as did the Hudsons, which bombed shipping and enemy troop concentrations and accounted for a number of enemy fighters. Although all the Australian aircraft left the scene of the battle safely, nearly all had been extensively damaged by enemy fire, and one Hudson crashed near Sembawang with the loss of the crew.

It was now decided that aircraft, equipment and spares would all be retained by 453 Squadron, 21 Squadron would return to Australia, and as the RAF considered their original eighteen Buffaloes had been a gift to the RAAF, any further equipment was the sole responsibility of the Air Board in Melbourne.²³ Several pilots were to stay with 453, and on 29 January 21 Squadron sailed for Palembang on Sumatra. The plan was then changed that 21 Squadron groundcrew would remain in Sumatra supporting RAF Blenheim operations, but this was subsequently amended again and having then moved on to Java, 21 Squadron embarked for Australia in February. With the arrival of Hurricanes, sufficient aircraft had become available to re-equip Nos 243 and 488 Squadrons and all remaining Buffaloes were handed over to 453 on 30 January.²⁴ Some RNZAF pilots also made the transition to 453, including Sergeant Geoff Fisken, who by the end of 1943 had destroyed eleven Japanese aircraft, the highest score against the Japanese of any Commonwealth pilot.²⁵

The Japanese advance continued and so did the bombing of the airfields. On 28 January, the Buffaloes flew a sweep over the Batu Pahat area to cover the evacuation of the troops cut off by the Japanese advance.²⁶ On the night of 30 January, the landforces completed their withdrawal to the island of Singapore, and on 1 February the Causeway with Malaya was demolished. 453 also maintained defensive patrols, shooting down an enemy fighter and damagng others on 1 February, and repeating this three days later. But the enemy had advanced to within shelling range of Sembawang. Shelling had commenced on the night of 3 February and then had become so intense that aircraft were being hit, making operations impossible. Sembawang now lay beneath the artillery barrage being put up by both sides and pilots were having to swing the aircraft around craters when taking off and landing. A standing patrol of enemy fighters was now maintained over the aerodrome and the Straits of Johore. When the AIF Commander, Major-General Gordon Bennett, visited the airfield, he looked around and said: 'This is the

19. AN189 (Sgt Charters) and W8171 (Plt Off McAneny) both shot down and missing in action. Woodhall, op cit, p.7.
20. Maltby, Dispatch, para 337.
21. 453 Sqn ORB, 26 Jan 1942.
24. AHQFE Signal A326 from the AOC, dated 26 Jan 1942 gave the following instructions: ‘On arrival 48 opponent Hurricanes and pilots [27 January] am rearming 488 and 243 Squadrons with Hurricanes making with 232 Sqn total 3 Hurricane Squadrons. All remaining Buffaloes with sufficient Buffalo pilots are being concentrated in 453 Sqn. No aircraft available now or near future for 21 RAAF Sqn. All Sqns have been much depleted in action and since 21 Sqn was originally on Wirraways it has numerous air observers and newly arrived pilots trained on Wirraways only who cannot be employed or trained on fighters here. No object in 21 Sqn remaining Singapore without aircraft and am therefore shipping it at once to Australia to rearm as it can do so better there than here.’
26. Maltby, Dispatch, para 396.
first time I have known a squadron to be asked to operate from no-man's-land.27

On 5 February, 453 was instructed to deploy all flyable aircraft to Tengah. Six aircraft attempted to take off, but one was destroyed. When the five landed at nearby Tengah, enemy shelling commenced and a further aircraft was damaged. The aircraft were then ordered south to Kallang. Kallang too was in a bad state from enemy bombing raids, and the inevitable decision was made to evacuate the island for Sumatra. Four worn-out Buffaloes escorted two No.1 Squadron Hudsons to Palembang, where shortly after arriving, high-level Japanese bombers attacked the airfield destroying two more 453 Squadron aircraft.

The following day, 6 February, two further Buffaloes were made serviceable in Sembawang for the flight to Sumatra. Flight Lieutenant Kinninmont arrived safely in Palembang, but Sergeant Clare was forced to return to Singapore with engine trouble. 453 was now the only squadron left on the island. With no operational aircraft, this marked the end of 453’s active participation in the Malayan Campaign.

Perhaps the most graphic account of fighting that RAAF pilots had seen with the Buffalo against the Japanese is in Kinninmont’s own words:

The sky seemed full of red circles—the red rondelles on Japanese aircraft—and the Japs all tried to shoot us down at once. I pulled up to meet one as he dived down . . . I was in such a hurry to shoot something that I didn’t even use my gun sight. I simply sprayed bullets in his general direction.

Somebody was on my tail and tracers were whipping past my wings. Chapman was turning and shooting with four Japs. I decided to get out. I yelled to him over the radio ‘Return to base! Return to base!’

I went into a vertical dive and as I went down, glimpsed the sergeant diving straight for the ground with three Japs on his tail, shooting. Then I lost sight of him.

At 1000 metres I had a quick shot at a four-engined Kawanishi Jap flying boat and missed. Of the three Japs that followed us down in that dive one stuck, and he stuck like a leech . . . As I watched him, my neck screwed around, I saw his guns smoke and I whipped into a tight turn to the left. It was too late. A burst of his bullets spattered into the Buffalo . . . I opened the throttle and the motor took it without a murmur.

It was then that I felt the first real fear in my life . . . It struck me in a flash. This Jap was out to kill me. I broke into a cold sweat and it ran down into my eyes.

A noise throbbed in my head and I suddenly felt loose and weak. My feet kept jumping on the rudder pedals. My mouth was stone dry. I couldn’t swallow. My mouth was open and I was panting as though I had just finished a hundred yards dash. I felt cold.

Then I was jibbering . . . ‘Watch those trees! . . .’ ‘That was close! . . .’ ‘He’ll get you the next burst! . . .’ ‘You’ll flame into the trees! . . .’ ‘No! He can’t get you . . .’ ‘Jesus, he mustn’t get you! . . .’ ‘You’re too smart . . .’ ‘He’ll get you next time! . . .’ ‘Watch him! . . .’ ‘Watch those trees! . . .’ ‘Christ it’s cold! . . .’

My feet were still jumping on the pedals. I couldn’t control them. Then I saw his attacks were missing me. I was watching his guns. Each time they smoked I slammed into a right turn. And then my whole body tightened up and I could think.

I flew low and straight, only turning in when he attacked. The Jap couldn’t hit me again. We raced down a valley to the Thai border and he quit.28

27. Courier Mail, Brisbane, Wednesday 11 Feb 1942.

CHAPTER SEVEN

No Suitable Australian

SIGNAL

TO: AIR BOARD MELBOURNE 1346/Z
FROM: RAAFALO KINGSWAY, LONDON
AL.476 14/8/41

AIR MINISTRY ADVISE THAT EXTENSIVE ENQUIRIES FAIL TO FIND SUITABLE AUSTRALIAN OFFICER TO COMMAND 453 SQUADRON. UNDER THESE CIRCUMSTANCES MOST SUITABLE OFFICER AVAILABLE IS FLIGHT LT (ACTING S/LDR) W.J. HARPER RAF WHO HAS HAD CONSIDERABLE OPERATIONAL FIGHTER EXPERIENCE AT PRESENT POSTED 57 O.T.U. WILL PROCEED FAR EAST APPROXIMATELY 20/8 CLIPPER. NOS AUS402053 PILOT OFFICER B.A. GRACE AND AUS402068 P/O R.D. VANDERFIELD POSTED TO 453 SQUADRON AS FLIGHT COMMANDERS AND WILL PROCEED BY SEA APPROXIMATELY 20/8. THESE ARE FLIGHT LT POSTS AND OFFICERS WILL BE ACTING FLIGHT LIEUTENANTS.

Mick Grace and Doug Vanderfield were men who ‘led from the front’, inspiring the members of 453 Squadron as their flight commanders. They were promoted to Flying Officers on arrival in Singapore. Both these officers had served a tour in the UK before joining 453, and both were later awarded the DFC for their service in fighter squadrons in New Guinea. In both citations, reference was made to their operational service in Malaya.

Such cannot be said of Squadron Leader Harper. On arrival in Singapore, Harper had six swastikas painted below his Buffalo’s cockpit to indicate his six German ‘kills’. A tally of this magnitude would normally warrant the award of a Distinguished Flying Cross. Harper was never granted the DFC. These six alleged kills have never been verified.

Harper’s seclusion from the other members of 453 Squadron did not endear him to the Australians. His mission to Australia two months after joining 453 equally disenchanted members. Harper was not satisfied with the pilots that were posted from EATS to 453 Squadron from a flying standpoint.1 He disapproved of the training and selection of EATS pilots,2 he felt some were too old and ‘steady’ to be in a fighter unit, and he endeavoured to get more pilots of ‘good officer type’.3 Harper unsuccessfully argued that the standard of his pilots was below his expectations, and he wanted pilots of higher calibre. It was these ‘low calibre’ pilots who bore the initial brunt of the Japanese assault while Harper was in Australia during December 1941. His journey was ill-conceived and did not get the

1. File reference HQ No.1 Training Group 72/1/352 dated 30 March 1942, p.3.
2. ibid, p.23.
3. ibid, p.76.
support of the RAAF Chief of Air Staff. On his return to Malaya, Harper led reinforcements up to Ipoh, where he immediately informed the 21 Squadron CO that he had arrived 'to stop the rot'. He used this 'stop the rot' boast on several occasions.

When Harper had tried to seek replacement pilots it was because he was not particularly satisfied with his sergeant pilots. Perhaps this was his class consciousness. Allshorn, as CO of 453, had tried to get commissions for some of the sergeant pilots to fill the vacancies in the officer ranks, but this action was subsequently stopped by Harper.

A particularly galling example of Harper's poor leadership was his letters of condolence. The next of kin of Pilot Officer Drury, and of Sergeants Oelrich, Peterson and Read all complained bitterly of the way in which Harper's letters were phrased. Harper stated Sergeant Peterson had been killed through his own negligence, when in fact he was shot down by Japanese fighters while taking off to intercept them at Kuala Lumpur.

A subsequent inquiry into the Singapore debacle showed that Harper exhibited a lack of leadership and his conduct was unsatisfactory in that he was very rarely available when required, and failed to show proper interest in the welfare of the officers and men of the Squadron. Harper was always a very hard man to locate, as he was seldom at the base. At Singapore he lived off the station, at the Island Golf Club, about ten kilometres away, with which there was no communication by telephone after the first bombing attack. At Kuala Lumpur on most occasions when the Japanese raided Harper was absent from the aerodrome. After the first raid at Sembawang it was evident he was afraid, and he showed his fear more than the men.

This naturally did not inspire the confidence of the personnel of 453 Squadron, who felt their CO was letting them down. Squadron members soon lost faith and respect for Harper, and eventually he did not have the confidence of anyone in 453. This was finally exemplified during the evacuation of aircraft from Sembawang, when Harper was to fly a Hurricane across to Tengah. He had arranged to take off when the aerodrome was being shelled. He sheltered in a trench and ordered the groundcrew to go out into the open to start up his aircraft. He remained in the trench while the crew started his Hurricane, and as shelling was still in progress he signalled to them to cut off the engine. Five other aircraft had taken off from the aerodrome during this shelling, but Harper did not fly his aircraft until after the bombardment had ceased. At this stage Harper had stated he was fed up with 453 Squadron and when he did depart, he said that the Squadron should look after itself. He was later located by the Station Commander, and ordered back to the Squadron.

Why was Harper so apparently highly regarded by the RAF for this command? Was this in line with the other appointments of Brooke-Popham and Percival? It seems consistent with the British approach to the defence of Singapore, that the Far East theatre be afforded the lowest priority. Not only was this in scale of effort, but also in equipment and personnel.

What must be addressed was the RAF approach to the command of EATS squadrons at this stage of the war. Could it possibly be considered that there were no Australians serving on fighter squadrons in the Middle East or the UK who could have commanded an Australian squadron? Caldwell, for instance, in August 1941 was already an ace with eight victories with 250 Squadron, and was soon to be given command of 112 Squadron. No.3 Squadron RAAF, a fighter squadron in the Middle East, at this stage had any number of Australians suitable for this command. Names like Turnbull, Steege, Arthur, Rawlinson, Jackson, Jeffrey and Perrin were to become well known. By August 1941, these seven RAAF officers had over forty confirmed victories between them.

But the RAF wanted EATS, or Article XV, squadrons led by RAF commanders. Again suitable numbers of Australians serving with the RAF were available. Flight Lieutenant John Cock DFC, a South
Australian instructor with the RAF, had nine kills while flying Hurricanes with 87 Squadron. He was later to join 453 as a flight commander in the UK in June 1942. Flight Lieutenant 'Tony' Gaze DFC, of Melbourne, was then serving as flight commander with 616 Squadron. He had already had six victories confirmed. Squadron Leader 'Clive' Mayers DFC, a Battle of Britain ace from Sydney with seven kills in Hurricanes, was CO of 94 Squadron.

Some Article XV squadrons were already forming with Australian commanders. Wing Commander Gordon Olive DFC had formed 456 Squadron as a night fighter unit in the UK in June 1941, and that month Squadron Leader Bob Bungey had taken command of 452 Squadron, the first Australian Spitfire squadron in Fighter Command. Although there was agreement that Article XV squadrons would be commanded by RAF officers until Australians became available, this tended to be ignored by the RAF. Bungey's appointment had only occurred after the personal intervention of Acting Prime Minister Fadden. But for this Far East unit the RAF failed to find a suitable Australian officer to command 453 Squadron.

Air Marshal Sir Richard Williams believed that Australia should have rejected the Empire Air Training Scheme. Indeed, in the form in which it was implemented, EATS involved the loss of RAAF aircrew to the RAF. Prime Minister Menzies considered this as 'their surrender to the RAF for general operations and control'. As a result, quite often those in dominion EATS squadrons were ignored by the RAF and neglected by the RAAF.

Harper failed lamentably to set the example expected of him by leading the Squadron into battle. Led by pilots like Vanderfield, Grace, Vigors and Kinninmont, undoubtedly 453 fared better than if they'd had poor leadership in combat. And, perhaps fortunately, he did not fly often in combat. The operational flying hours for 453 Squadron for December 1941 revealed that Harper flew for only ten hours. Fifteen other pilots in the Squadron flew more than this, truly an unusual occurrence. Harper didn't fly at Kuala Lumpur. Harper was the only pilot in the Squadron not to see action with Japanese aircraft. It was believed by members of the Squadron that he would only fly the easy missions—the 'milk runs' not the 'meat runs'.

He explained away his lack of leadership in the air in different ways. He said to the ex-CO, Squadron Leader Allshorn, that he would not fly the Buffalo because it was not good enough against the enemy. He would generally excuse himself by being too busy organising the operational control of the Squadron or arranging accommodation and transport. However, he had taken credit for making 453 operational. Having arrived in Singapore in mid-October, Harper then spent a week in hospital. As 453 was declared operational on 19 November, most of this work-up period had in fact been under Allshorn as CO, and Flight Lieutenants Jackson and Williams as Flight Commanders.

His unusual behaviour was put down to his highly nervous state. He appeared to be very jumpy and this nervous temperament was most probably due to his previous service in England. His hospitalisation on arrival in Singapore and his previous resting period on an OTU away from operational flying could be acknowledgment that his nervous state had been recognised.

Harper was temperamentally unsuited and insufficiently experienced to command an EATS Squadron. He was unable to understand Australian personnel, and made aspersions about the RAAF. He made comments like: 'You Australians are all the same, when the pressure is turned on, you want to run out', 'the RAAF are a dead beat bunch', and that 'Australians could not take it'. He stated that Australian pilots in his Squadron 'would not fight'.

22. File S/20/S/Air dated 6/1/42, RAAF Historical Section. A total of 325.10 operational hours were flown by 453 Squadron in December.
23. File HQ No.1 Training Group 72/1/352, pp.38, 41, 52, 58, 61.
24. ibid, p.38.
27. ibid, p.4.
28. ibid, pp.77, 81.
29. ibid, p.23.
30. ibid, p.44.
31. ibid, pp.92, 85.
32. ibid, p.120.
33. ibid, pp.42, 88.
34. ibid, p.5.
35. ibid, p.6.
36. ibid, p.77.
37. ibid, p.38.
and to a senior Australian officer: 'I won’t take orders from you, you are RAAF.' His lack of understanding and the facts that he did not fly with them in action and that he did not have much time for members of his unit (or for Australians in general), were definite factors in the feeling of disillusionment by members of the Squadron. In spite of the difficulties they had faced, morale was not a problem. It was a case of being 'browned off' at the entire RAF administration and disappointment in the performance of the Buffaloes.

With the evacuation of the Buffaloes to Palembang, it was never seriously considered that their operation could be continued from Sumatra. They had landed at the civil Palembang aerodrome, known as P.I, while forty kilometres to the south was a secret military airfield, P.II. P.II was a huge natural field about twenty kilometres in perimeter with good natural cover for aircraft. It was invisible from the road and its construction had been successfully kept secret from the Japanese. Similar clearings in the neighbourhood made it difficult to locate from the air, even by Allied pilots briefed as to its location. Great care was taken to preserve its secrecy and, although at one time more than a hundred aircraft were based on it, Japanese reconnaissance, which frequently flew over it by day and night, never located it. If only similar preparations had been made for the airfields in Malaya! P.II had been under the command of Group Captain McCauley, RAAF, since 29 January. But the handful of battle-damaged Buffaloes were no longer supportable as newly arrived RAF Hurricanes were prepared for battle. On 10 February the remaining Buffaloes were flown to Batavia, only to be destroyed there in a Japanese strafing attack.

Without their aircraft, the rest of 453 Squadron prepared to take part in the siege of Singapore. An enemy paratroop assault was expected, so groundcrew armed with rifles and machine guns stripped from wrecked Buffaloes, were organised into ground defence sections. At the last minute they were saved from playing the role of soldiers, and most ground staff were evacuated to Java. They departed on 6 February on the cruiser HMS Danae and the SS City of Canterbury, arriving at Batavia four days later.

38. ibid, p.16.
39. ibid, p.120.
40. Maltby, Dispatch, para 424.
41. Mall, op cit, p.324.

Meanwhile, a detachment of the Squadron stayed behind at Sembawang to undertake salvage and denial work, and to treat casualties. This brave group of 453 airmen, who had already been subject to so much enemy bombardment in Malaya and Singapore, methodically destroyed communications facilities, stores, fuel, bombs and classified records. By this time the enemy had reached the western side of the aerodrome, and as the group was about to abandon the doomed base, they removed the tattered RAAF flag from the Station flag-pole.

Battle-weary, they made their way to Singapore where they embarked on a small Norwegian ship bound for Java. 453 Squadron had fought day in day out against impossible odds, with incompetent leadership where every conceivable blunder had been committed, with no confidence in their Commanding Officer, and with obsolete machines. So ended the saga of the air defence of Singapore Island, and the British garrison finally capitulated on 15 February. This is what Churchill described as 'the worst disaster and the largest capitulation in British history'. But the final tragedy for Singapore was that the Japanese assault was now a bluff—a bluff that worked. The defenders had a numerical advantage, as there were 30,000 troops left to launch

S A V E D  F R O M  S I N G A P O R E

Corporal A.L. Bartley, Brisbane, with a tattered RAAF flag which he rescued from Singapore. The fighter squadron to which he was attached was the last to leave before the fall of the island and Corporal Bartley, eager to get a worthwhile souvenir, took down the flag. He intends presenting it to the Returned Soldiers’ League.

But the Japanese bluff for obtaining an immediate unconditional surrender succeeded. Percival had no idea of the numerical inferiority of the Japanese or of their supply difficulties.

On arrival at Batavia on 10 February, squadron personnel were quartered in an RAF transit camp at Buitenzorg. On 18 February, 453 Squadron was informed that there was a possibility of rearming with Hurricanes in Java.45 But this was not to eventuate, and with no aircraft, 453 Squadron departed Tanjong Priok, Batavia, on 22 February aboard SS Orcades for Australia, via Columbo. During this period in Java Harper had shown very little interest in the welfare of 453 Squadron, and was frequently absent.46 During the voyage to Ceylon, he dissociated himself completely from the officers and men of the Squadron, and the pilots avoided personal contact with him as much as possible.47 In Ceylon RAF personnel attached to 453 disembarked. Harper wanted all RAAF personnel of the Squadron to disembark also, but the senior Australian officer on board, Wing Commander Frank Wright, was requested to intervene, and Harper was overruled.48 Harper was incensed and disembarked without a ‘bon voyage’, and no RAAF member said goodbye to him.49 Events had reached the stage that Prime Minister Curtin described as ‘the fall of Singapore opens the Battle for Australia’, and the RAAF members were keen to return to Australia to continue the struggle against the enemy in defence of their homeland, which was in imminent danger of invasion.50 Harper had stated: ‘The Squadron won’t go back to Australia if I have got anything to do with it.’51 But 453 did return.

Members of 453 Squadron disembarked at Adelaide on 15 March 1942. The Squadron was disbanded and members were dispersed to other units throughout Australia. Some went to Townsville to join a new fighter squadron being formed — No.76 Squadron. They soon would be seeing battle at Milne Bay in New Guinea, where they would be successful in turning the tide against the Japanese in the Pacific War for the first time.

43. Turnbull, op cit, p.176.
44. ibid, p.182.
45. Maltby, Dispatch, para 507.
46. File HQ No.1 Training Group 72/1/352, pp.19, 21, 39, 84.
47. ibid, pp.21, 92.
48. Hall, op cit, p.325.
49. File HQ No.1 Training Group 72/1/352, p.12.
50. Robertson, op cit, p.93.
51. File HQ No.1 Training Group 72/1/352, p.15.
PART TWO

VICTORY
CHAPTER EIGHT

Spitfire Squadron

To assist in the defence of Australia against the Japanese thrust southwards, British Prime Minister Churchill promised the provision of three fighter squadrons of Spitfires. Two of these squadrons were Australian EATS units serving in Fighter Command, Nos 452 and 457 Squadrons. The two RAAF Squadrons, together with No.54 Squadron RAF, sailed from the UK on 19 June 1942, and on arrival in Australia became known as the ‘Churchill Wing’.

The previous day a new RAAF Spitfire squadron for Fighter Command had begun forming. This was to still provide an RAAF EATS fighter squadron presence in the UK, while releasing the combat-experienced pilots to Australia. The third Australian Spitfire squadron was given the numberplate from the unit that had put up the courageous defence in Singapore—No.453. The Squadron was placed under the command of another RAF officer, Squadron Leader F. Morello, who had previously commanded No.112 Squadron RAF, as part of the Desert Air Force. He had several RAAF pilots on 112 Squadron, including Clive Caldwell, to whom he had handed over command of the Squadron in January 1942.

1. No.452 Squadron RAAF had formed in the UK at Kirton-Lindsey on 8 April 1941, and had begun operations the following month. No.457 Squadron groundcrew had begun forming at Williamstown, NSW on 10 July 1941, while pilots began working up at Baginton in the UK, then began operations from Jurby, on the Isle of Man, a month later.

453 Squadron was initially based in Drem, near Edinburgh on the south bank of the Firth of Forth, as part of No.13 Group. The first eight aircraft, mark VB versions of the legendary Spitfire, were delivered on 23 June, and after acceptance inspection had been carried out, flying training commenced three days later.

The pilots of the new 453 were in the main Australian EATS graduates, with two British pilots (including the CO), a Canadian, three Poles, and an Australian pilot serving in the RAF, Flight Lieutenant John Cock DFC.3 Cock had already shot down nine Germans during 1940 while flying Hurricanes, so he provided experience as the 'A' Flight commander for 453. Like other EATS squadrons forming in the UK, all the groundcrew at this stage were RAF.4

Pilots of 453 Squadron at Drem in August 1992. The Spitfire mark VB still has the squadron code 'FN' of No.331 Squadron, before being changed to 453's code 'FU'.

The three Polish pilots and the Canadian were to stay on 453 for only several months to pass their experience on to the novices.5 One of the Poles had joined the Polish Air Force three years before the War. After the Polish upheaval, he escaped into Romania, but was imprisoned. He escaped, travelled to Beirut, and thence to Marseilles. He served with the Polish forces in France, and after the collapse of that country, reached a Spanish port and sailed to north-east Africa. Then he journeyed to a West African port, caught a ship to the UK, and began flying with an RAF Polish squadron in sweeps over France.6

453 had a hard act to follow in the footsteps of 452 Squadron. Names like Paddy Finucane and Bluey Truscott had helped 452 become the top scoring unit in Fighter Command for four consecutive months in late 1941.7 Now the Australian pilots in 453 were training to become combat-ready, honing their skills in formation-flying, fighter-on-fighter attacks, cine gun exercises and air-to-air firing. Bad weather days were spent in the Link Trainer, practising instrument-flying, or in lectures on Spitfire systems and fighter tactics.

On 10 July, 453 Squadron was in a position to provide some pilots for readiness. By 15 July, six pilots were day/night operational, and a further fifteen were day operational. The following week 453, with its eighteen Spitfires, was sharing equally with No.242 Squadron the readiness for Drem. As usual, however, carrying out such advanced training was not without mishaps. On 20 July, Sergeant Whiteford, flying in a formation of four Spitfires, experienced engine trouble and forced-landed in a field at Spittal, five kilometres south-west of Drem. The aircraft was considerably damaged (classified as Category B), while the pilot was uninjured. But the first casualty was not far off. On 1 August, Pilot Officer Charles Riley was killed when his Spitfire spun in from about 15 000 feet, and crashed into a farm house near Crail Kinross.8

The command of 'A' Flight was passed on 4 August from John

4. 453 eventually built up the Australian proportion of groundcrew to 66%, which was high for the RAAF EATS squadrons. For most of its time in Europe, the aircrew were mainly RAAF, and through 1944 and 1945, 453 was the only EATS squadron in Europe with 100% RAAF aircrew. Herington, op cit, p.16.
5. The three Poles were Flg Off O. Sobiecki (P.0549), Flg Off G. Schmidt (P.0660) and Sgt T. Janowski (P.780386). The Canadian was Flt Lt G.U. Hill (C.1075).
Cock to Flight Lieutenant Johnny Ratten. Ratten had already destroyed a German Focke-Wulf FW-190, the latest enemy fighter confronting the RAF, and ultimately was to shoot down a total of five of these fighters.

Ratten’s arrival coincided with the first Australian groundcrew, and several days later, on 8 August, the AOC-in-C Fighter Command, ACM Sir William Sholto Douglas, inspected the Squadron. He was able to see at first hand how the vagaries of the Scottish weather—continuous rain and low cloud, or fog and mist—was hampering Squadron training.

The evening of 12 August provided the first excitement for 453. The first operational sorties were flown when two sections were sent to intercept two enemy aircraft. Under the guidance of the local Ground Controlled Intercept (GCI) radar, the Spitfires were vectored towards one enemy aircraft, which was able to turn away and disappear in thick cloud. As one Spitfire returned with radio problems, it was observed from the airfield to be followed by a Beaufighter. However, as this second aircraft approached, it became apparent that it was no Beaufighter, but a German Junkers Ju-88 bomber. The raider dropped eight bombs on the airfield, which fortunately caused no injuries and little damage, but welcomed 453 to the war in the UK.

The next weeks remained quiet, continuing the working up of pilots to full day/night operational status. This was made difficult by having to lend a large number of the Squadron’s Spitfires to No.242 Squadron for use at Dieppe. Another handicap was the posting away of experienced pilots, but by the end of August there was satisfaction in that readiness had been maintained, operational patrols had been flown, and solid progress had been achieved with the newer pilots. But another loss occurred: Sergeant David Steele was killed when he crashed near the base on 28 August.

September saw plans for the relocation of 453 into the front line, south to Gravesend in Kent. Pilot Officer John Yarra joined the


Squadron and took over ‘B’ Flight as Acting Flight Lieutenant. Slim Yarra, who had just turned 21, came to 453 with a wealth of experience flying Hurricanes and Spitfires in the UK and Malta, where he had been credited with twelve enemy aircraft.

The destination for the unit was subsequently changed to Hornchurch, and on 25 September, No. 453 Squadron deployed south, bad weather delaying the Spitfires’ arrival by a day. As part of the Hornchurch Wing, 453 flew convoy protection and standing patrols over the Thames Estuary. Command of the Squadron was temporarily assumed by Ratten, as the CO was ill with bronchitis, and he led 453 on its first sweep over German-occupied France on the afternoon of 2 October. The eleven Spitfires flew over Ostend, Ypres and Dunkirk at 28,000 feet, and the sorties proved uneventful. Four days later, Ratten led twelve aircraft on a low-level fighter sweep (under 500 feet) over Boulogne, Dieppe and Cap Gris Nez. No enemy shipping was seen, nor enemy aircraft engaged.

Convoy patrols continued until 11 October when Ratten led 453 with other squadrons of the Hornchurch and North Weald Wings in a sweep over the Continent. On the return leg approaching Deal in Kent, two of the 453 Spitfires crashed in mid-air. Both aircraft were weaving to check for enemy aircraft when Sergeant Alan Menzies in aircraft AR79212 and Sergeant Ben Nossiter in AD298 collided; Nossiter’s tail and Menzies’ wing were ripped off and both crashed into the sea. No parachutes were observed.

Over the summer of 1942 a revision of Fighter Command tactics had been necessary. The large-scale Circuses, sweeps of up to twenty squadrons to lure enemy fighters into battle, had precipitated no widespread air battles. While this tactic had been successful in forcing the Germans to maintain their best fighters—the FW-190—in north-west Europe, it became imprudent to goad the enemy into combat for the sake of it while his aircraft was superior to current models of Spitfire. The Circus, therefore, gave way to the


Flight Lieutenant John Richard Ratten, ‘A’ flight commander, who became the first RAAF CO of 453 Squadron in the UK, with his Spitfire ‘Tikkie’.
Ramrod, similar in size to a Circus with large numbers of bombers, the main objective being the destruction of a worthwhile ground target. The role of the Spitfire in the Ramrod became more defensive in the protection of the bombers. However, the fighter offensive was also maintained by smaller fleeting sweeps of fighters attacking ground targets of opportunity. These were known as Rhubarbs.

Flying briefly with the Squadron over this period was Sergeant Lawrie Cronin. After leaving 453, Cronin was posted to 81 Squadron RAF and went to North Africa. During 1943, he shot down three German fighters, and damaged a further two. He was then posted with his squadron to Burma, and in 1944 he destroyed two Japanese aircraft and was awarded the DFC.

Weather prevented other offensive sorties during October. An escort of Bostons to Le Havre on 17 October was recalled, and a Rhubarb on 27 October was aborted. Similarly defensive flights were uneventful until the last day of the month.

31 October began with routine standing patrols off the north coast of Kent. One Spitfire of Yellow section on patrol during mid-afternoon, flown by Sergeant Jim Furlong, developed engine trouble. As he was diverting into Manston, his Spitfire dived into the sea. The Air-Sea Rescue (ASR) launch could subsequently only find two small pieces of wreckage, and the pilot was posted as 'missing believed killed'. An hour later, Pilot Officer J. Barrien, leading Red section with Flying Officer G. Galwey, spotted ten FW-190s at about 3000 feet. As the Spitfires climbed to engage the targets were lost in cloud, but immediately another twenty FWs at zero feet were spotted heading east. Another staffel of ten FWs were then seen at 2000 feet between Deal and Dover.

19. Luftwaffe formations, although varying, were made up as follows:
   Geschwader = Group, 100-120 aircraft
   Gruppe = Wing, 30-36 aircraft
   Staffel = Squadron, 9-12 aircraft
   Schwarm = Section, 3 or 4 aircraft
The basic operational unit was not the staffel (or Squadron in the RAF) but the gruppe. The Luftwaffe War Diaries, C. Bekker, Macdonald, London, 1967, pp.9-10.
climbed to engage an aircraft head on, while Galwey attacked a *schwarm* of four FWs. During the engagement his Spitfire was destroyed. He was thrown clear of the cockpit, and was able to pull his ripcord. Barrien landed his Spitfire safely at Manston, and Galwey spent the night in his dinghy waiting for the ASR launch. (He eventually reached a buoy which he boarded in an attempt to get warm; he was rescued early the next morning and returned to Hawkinge. He made it back to Hornchurch on 2 November.)

Meanwhile Green section had spotted forty FW-190s and Ju-88s crossing the coast near Deal and heading west to bomb Canterbury. The immortal radio transmission from 453 to alert the sector went out:

> There are hundreds of the bastards coming. For Christ’s sake send somebody out!

During the confused dog-fight Green 2, Sergeant Norm Swift, damaged a Ju-88 and together with Black section, chased FWs out across the Channel. The Squadron was unable to claim any other enemy, but over the half hour from the 453 call for assistance, nine German aircraft were destroyed by British fighters, and many more damaged.

453 had now been in action. They had been blooded and their balance sheet had been opened. The following day, the first day of November, Ratten was promoted and took over as CO of 453 due to Morello’s continued ill-health.

For the first time the full complement of pilots on 453 was Australian, and it was to virtually remain that way for the remainder of the War. Replacing Ratten as ‘A’ Flight Commander was Flight Lieutenant Kel Barclay, and this set the pattern for 453 whereby Australian EATS pilots would work their way up through a flight commander’s position and then take command. This was to prove a happy arrangement for the future of 453.

The Squadron spent a quiet November, in inconsistently bad weather, flying two aborted Rhubarbs and two uneventful sweeps over France in the St Omer and Dunkirk area, while the rest of the Squadron’s operational effort was devoted to defensive convoy and standing patrols. During this period of hopeless weather the members took full advantage of London being only 45 minutes away.

An improvement in the weather on 16 November allowed some night flying practice. Pilot Officer D. Reid was making his first night approaches and made what the Squadron Operations Record Book described as: ‘a perfect landing, but unfortunately he was 30 feet from the ground.’ The damaged Spitfire was testimony to ‘the duty pilot winding down the aerodrome at the vital moment’, Reid insisted! The night-landing lighting system was subsequently changed.

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Spitfire VB MA229, one of Flight Lieutenant Don Andrews' Spitfires coded FU-7 in 1943.

On 24 November, the Squadron’s aircrew with half of the groundcrew moved to Martlesham for an air-firing course. 453 achieved the highest average squadron score since the inception of this specialised training, and Sergeant Swift broke the previous individual record for hits on the target. When they returned from the course, it was not back to Hornchurch, but to Southend, in Essex, where they reunited on 7 December. 453 was destined to spend nearly four months at this east coast station until finally returning to Hornchurch.

Bad weather persisted at Southend, but an uneventful sweep was led over France by Ratten on 9 December. The following day Slim Yarra led six Spitfires on shipping reconnaissance to Flushing (now Vlissingen) in Holland. Four heavily armed merchant ships and a flak ship were attacked, leaving one merchantman on fire and many anti-aircraft guns silenced. However, Pilot Officer ‘Bill’ de Cosier and Slim Yarra were both shot down and killed. De Cosier was seen to dive into the sea, while Yarra attempted to bale out but became caught in the tailplane. Pilot Officer Ernie Esau led the rest of the formation back to base.

The rest of December was spent primarily continuing on defensive patrols with an occasional sweep over France in conjunction with Circuses. The highlight of the month was a spectacular ‘weather test’ flown by Barclay on Christmas Day for the enjoyment of the Squadron.

1943 began for 453 with a wing-strength sweep with Nos 122 and 350 Squadrons, but no enemy activity was encountered. These sweeps were repeated, and on 13 January heavy flak was encountered at Dunkirk holing the aircraft of the new Flight Commander, Flight Lieutenant Don Andrews. This was much to Andrews’ disgust, as the damage put his aircraft unserviceable for a considerable period. His aircraft, AD383, carried his favourite squadron code letters, FU-7, which he retained for his whole time on 453. (Later as the Wing Leader, his Spitfire mark XVI carried his initials DGA.)

5. Wg Cdr D.G. Andrews DFC, 404795; 615, 245 and 175 Sqs RAF, 453 (command 1943–44). Wg Cdr (Flying) RAF Colnshill 1945. Bank clerk of Southport, Qld; b. Southport, 5 Sep 1921.
Ratten was sent on a fighter tactics course from mid-month for three weeks, and temporary command of 453 passed to Wing Commander J.H. Slater AFC of the RAF. Slater led patrols occasionally, and by 3 February Ratten was back in the saddle leading a fighter escort for Ventura bombers over Abbeville. Defensive patrols remained the primary tasking for 453 through February, apart from an uneventful fighter sweep (Rodeo) and a further escort, until the 17th, and then for the rest of the month only Circus missions were flown.

The first half of March was taken up with the Squadron engaged in Exercise Spartan, a realistic training program in which 453 flew nearly 200 sorties, until being released and flying a Rodeo sweep and a Ramrod escort on 14 March. A first successful squadron Rhubarb ground attack mission was flown on the 26th, with a pair of Spitfires (Flight Sergeant 'Rusty' Leith and Sergeant 'Bill' Morath) damaging locomotives and a barge. Bill Morath's logbook recorded:

With Rusty Leith struck coast at Blankenburg at 0 feet. Attacked barges, two locos, signal box, some anti-m.g. fire. Landed with one cannon shell left. 453 first Rhubarb.

The following day the Squadron returned to Hornchurch.

By early April, 453 had received its first Spitfire mark IX, a great improvement over their mark Vs. They were to continue operating both variants for the next three months. The mark IX Spitfire was a development of the mark V to counter the FW-190. So serious was the FW-190 threat that the Air Staff had issued a directive in November 1941 to halt all but essential RAF operations over Northern Europe. The Spitfire V airframe was married with the powerful Merlin 60 engine, and the resultant Spitfire IX was ready

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7. Flg Off F.A. Morath, 413000, 453 Sqn, 116 Sqn RAF. Bank clerk of Narrabri, NSW; b. Narrabri, 27 Dec 1919. Bill Morath was to lose an eye in an accident on 1 June 43, but later was to regain his flying category, becoming one of the only uni-ocular pilots during the war. He flew Oxford twin-engined trainers over 1943-44 and on several occasions, much to his joy, was called upon to ferry Spitfires. He continued to fly postwar.
for trials in early 1942. First deliveries were made to RAF squadrons in June that year.9

Now armed with this latest Spitfire, activity picked up for 453 with Ramrods and Rodeos over France. On 8 April, Ratten was leading the Hornchurch Wing on a Circus over Abbeville when ground control warned of the approach of enemy aircraft. Six FW-190s were spotted, then a further eight. Ratten dived out of the sun to attack and in the brief encounter both he and Andrews claimed an FW-190 as damaged. Both were flying the new mark IXs, which in a matter of days had changed their fortunes after so many quiet months.

Hornchurch, April 1943: (from left) RAF Chief Technician Fred McCann, Geoff Galwey, Bill Morath, John Barrien.

9. A comparison of performance of these three aircraft is given in Royal Air Force 1939-1945, vol.II, Richards and Saunders, pp.374-76:

<table>
<thead>
<tr>
<th>Aircraft</th>
<th>Max Speed</th>
<th>Time to Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spitfire VB</td>
<td>374 mph at 13000 feet</td>
<td>7.5 minutes to 20000 feet</td>
</tr>
<tr>
<td>Spitfire IX</td>
<td>408 mph at 25000 feet</td>
<td>6.7 minutes to 20000 feet</td>
</tr>
<tr>
<td>FW-190A3</td>
<td>385 mph at 19000 feet</td>
<td>6.5 minutes to 18000 feet</td>
</tr>
</tbody>
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Perhaps a better comparison is provided for the Spitfire VB by Spitfire in Action, J. Scutts, Squadron/Signal Pubs, Carrollton, Texas, 1980, p.18:

Max Speed 369 mph at 19500 feet.
Ramrods and Circuses continued throughout April, with Ratten invariably leading the Hornchurch Wing, made up of 453 with 122 and 222 (‘Treble Two’) Squadrons. On 11 May he was promoted to Wing Commander Flying at Hornchurch—the first RAAF pilot to lead a wing of Fighter Command.\(^\text{10}\) He was succeeded as CO of 453 by Barclay, who in turn was replaced as ‘A’ Flight Commander by Esau. They were also joined in the Squadron by Slim Yarra’s young brother, Sergeant Bob Yarra, following in his elder brother’s footsteps as a Spitfire pilot on 453.\(^\text{11}\) Bob had wanted a posting to 453 since arriving in England, when he had visited Slim and met the Squadron pilots. Unfortunately, as were the dangers of war on a fighter squadron, he too was to be lost on operations over Europe.

\(^\text{10}\) Herington, op cit, p.508.

CHAPTER TEN

A First Encounter

"On June 1st I had my first encounter with the enemy."\(^\text{1}\) Until then I hadn’t even seen a Hun aircraft in the air. While the experience was very harrowing at the time, I was very glad that it happened as I could see that it would be of great value to me in future operations.

We were on readiness when we were suddenly called to briefing. Nobody knew anything about the operation or what it was to be. There had been no preliminary warnings, so, as we piled into the truck—into which, incidentally, we were crammed like sardines, the big truck being temporarily out of commission—there was some speculation as to what sort of trip had been planned for us.

We had not been expecting anything today as there was some sort of Command or Group conference, which was attended by all the Wing Commanders of the area. Consequently we were briefed by Squadron Leader Kel Barclay (our CO) who was to lead the Wing in the absence of Wing Commander Ratten.

He didn’t waste much time as we had only about 1/4 of an hour to get back to our dispersals, prepare for the flip and get off the ground.

On the surface it looked pretty harmless. It was a Rodeo—Fighter Sweep—which type of operation usually didn’t stir up any opposition to worry about from the Hun. In fact, I made some remark to the effect that we probably wouldn’t even see anything. Jack Stansfield looked at me and retorted: ‘Famous last words, Bob!’

\(^\text{1}\) From Flt Sgt Bob Yarra’s diary of 1 June 1943, reproduced with permission of the Yarra family.
I was flying Blue 2 to Russ Ewins, the Deputy Flight Commander—my normal position, being still very much of a 'Sprog'.

We took off and formed up pretty smartly and made a wide circuit, coming across the 'drome before setting out for the coast at 'zero feet'.

Afterwards, when we'd landed, I found that Bill Morath's engine had cut when he changed over from his main tank to his auxiliary tank. He force-landed, narrowly missing some houses. It was typical of Bill that when he stepped out of the completely destroyed kite, with a smashed knee and other injuries that resulted in the loss of sight in one eye, he said with a grin: 'I'm OK. Make mine a "Brown".'

We did not know anything of this, however, as we started climbing towards France.

This was my third sweep, not including my first effort, when we turned back because of the weather, so all my time was taken up with keeping in formation. The climb up was a hard, swift one, so I didn't have much time to look about. I knew, however, that there were nine other chaps, all looking about them, and I had great faith in their eyesight, particularly that of the CO and the Section Leaders.

We jettisoned our auxiliary tanks as we reached the French coast and went in over the attractive, patchwork countryside. In fact we went in quite far, which raised hopes in me that we might have a crack at something after all.

For some time we were vectored about by Ground Control in search of Huns, but always they were too low or we could not get in a position to engage them. I was rather disappointed, and yet a little relieved, when we turned for home without having a crack at anything, although nine times out of ten this happened.

I didn't know what I'd have done if we did go down on anything, as I had a full-time job keeping up with Russ. I had already found that in a flat-out climb I was very close to being left behind as my kite was not one of the best.

We were coming out directly out of sun when some 'bandits' were reported near us. The CO was watching some vapour trails behind and above us and he called up Squadron Leader Harrington—leader of the other Squadron in the Wing—and asked him if he was making trails. He answered in the negative, but I surmised that they would probably be another Wing on the same sweep. About this time I had some trouble staying in formation, so I didn't do much looking about.

Then someone said: 'Watch these aircraft behind us; I think they're Huns.'

Suddenly the CO's voice came over the R/T, excited for once, but still in the same quiet drawl: 'Cripes, they are, chaps. They're 190s. Break hard left!'

Russ pulled round hard and I went with him, trying to stay with him and watch the Huns at the same time, my heart beating nineteen to the dozen. The CO's voice came again as we turned: 'Balls out, chaps.'

I already had moved my pitch into fully fine and advanced my throttle to the gate. Even so, Russ left me behind as he dived and turned, trying to get on the tail of a 190. Blue Section had been below the others, so the Huns came right onto us.

2. Flt Sgt Bob Yarra was flying Spitfire IX BR601 (FU-S) as Blue 2 to Fig Off Russ Ewins (FU-V). Fig Off Fred Thornley was Blue 3 (FU-V), Fig Off Len Hansell was Blue 4 (FU-W). The formation was airborne at 1130, and landed at 1235.

3. After hospitalisation Bill Morath sought out his crash site and asked a local schoolboy if a Spitty had come down there. The boy replied: 'Yes Sir, he was a Canadian and he got killed'.


5. Radio Telephony, the radio in VHF—Very High Frequency—band.
I felt quite at home as I dragged the Spit round, trying to get a bead on an aircraft that Russ was chasing. The plane was shuddering all the way round, nearly stalling due to the tightness of the turn.

I lost this one and continued my turn onto another. I tried to get a deflection shot on him but he was diving and turning toward me. I saw the squarish wing-tips and, as, in my excitement I had thought the CO said 109s, I thought they must be the older 109Es.

I turned here and there, manouevring for a position from which I could get a shot. I had my gun button on 'fire' and my thumb on the button ready.

I could not get a shot at anything and I was down to 22,000 feet when I realized I was alone. I had thought the boys were 'mixing it' and had stayed, instead of sticking with the section and going out with them.

At this moment the CO's voice came over: 'OK Chaps—get out as best you can!' I needed no encouragement to get out. I didn't feel particularly healthy, mixing it with four or five Huns over Boulogne. I pulled the nose up and climbed in the direction of home, weaving like hell to watch the Huns on my tail, turning into them now and then if they came too close.

It was then that I realized that there were some 190s about, as I saw two of them in a section coming straight up at me. I could easily distinguish the radial engines and the cannon bulges under the wings. At least I thought at the time they were cannon bulges, although they looked pretty big. Afterwards I came to the conclusion that they were bomb racks.

Until this moment I had always considered that the most sinister thing to be seen anywhere was a shark about twenty yards away in the surf back in Australia. The sight of these 190s however, with their noses up in the air, coming up after a lone Spitfire, changed my ideas on that subject.

I don't suppose I'll ever forget those next five minutes. I was over France, one single lonely Spitfire, with at least four 190s after me. I never before had experienced such an overwhelming feeling of loneliness.

It brought home to me the full realization of my inexperience and for a while, as I climbed with 'everything forward', battling for height and weaving madly, with those 190s coming straight up behind me, I was almost resigned to the thought that I'd eaten my last meal in the Sergeants' Mess.

I began to think hard of all the tricks of dog-fighting I had ever been told and at the same time of what I should do if I baled out. Strangely enough, I had no thought that I'd be shot down without a chance to bale out. It wasn't a very pleasant period.

All this time I had adhered to our policy of keeping the R/T clear but as the other chaps didn't seem to be doing anything I called up and asked the CO if he could help me. I tried, without much success, to keep my voice calm as I told him that I was a bit worried as I had four Jerries behind me. He asked me if I was weaving and I replied, forgetting for the moment that I was addressing the Wing Leader and not Kel Barclay, Flight Lieutenant, as I had known him until a week or two before: 'Yes, Kel—weaving like Hell, at angels 28.'

Harrington, the other Squadron Leader, asked my position but I couldn't tell him, owing to my lack of knowledge of the French coastline.

By this time we were making vapour trails and the Huns looked doubly frightening with their white streamers going out behind them. I also knew I was very conspicuous, with a great white zig-zag marking my path.

The CO called up several times to ascertain whether I was still in circulation.

By the time I reached 33,000 feet I could no longer see the Huns and I levelled out, still with everything forward and made for home. Halfway across the Channel I stopped weaving as my gravy was getting a little low and I thought I had shaken them.

As I approached the English coast I became very apprehensive as my compass was swirling and I appeared to be going West. I overlooked in my excitement a very elementary check—that of noting the position of the sun.

As I overcame the fear that I was once more over enemy territory I suddenly saw some eight or ten planes coming in behind me, coming fast, with great 'smoke trails' marking their path. I was sure they were not Spits as their camouflage looked much darker and their props seemed to be spinning very slowly, a characteristic of the 109. I held my course for a while, watching them come after me. I thought of my fuel shortage and my heart dropped into the bottom of the cockpit. I sang out over the R/T: 'King Kong,7 this is Blue 2. There's about ten of them behind me.' I fairly yelled this as I was feeling pretty scared.

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6. Angels—altitude expressed in thousands of feet.
7. Radio call sign of the Ground Control Intercept radar, based in England providing intercept information over the Continent.
I then broke right and climbed above them and at that moment one of the planes banked slightly and afforded me the most welcome sight I’ve ever seen—the elliptical wings of a Spitfire. I called Kel and apologised sheepishly for panicking and kicked myself for not restraining my excitement a little longer.

I called up for a homing so as to get back to base as quickly as possible as I was worried about my fuel. When I passed ‘Middle Box’ I changed my mind, deciding to play safe, and landed there. There were two Norwegian pilots there in the same flight as myself, one of whom had been in the course ahead of me at OTU.

I refuelled and returned to base. The chaps on readiness were out to meet me as I stepped out and I was still so excited I couldn’t keep still. Everybody was firing questions and I was trying to answer them and take off my Mae West at the same time. I lit a cigarette and then tried to light it again.

I was very disappointed when they told me we hadn’t knocked any down. I was sure I had seen a kite go spinning down with some grey smoke coming from it after doing a lazy slow roll. Russ had had a squirt but did not make a claim. Blue 3—Fred Thornley—had also had a short squirt without result."

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**CHAPTER ELEVEN**

**Ramrods, Rodeos and Circuses**

On assuming command, Squadron Leader Kel Barclay led the Squadron on virtually every day for the rest of May on Ramrod and Circus escorts and Rodeo sweeps. The bomber escort missions ranged from Flushing in Holland to the north, to the Cherbourg Peninsula in the south, often escorting USAAF B-17 Fortresses. Typical targets for the bombers were the benzol plant at Zeebrugge, the Dornier aircraft factory at Flushing and the airfield at Caen. The Rodeo sweeps were flown over the St Omer area in France.

The first day of June saw the award of the DFC to Wing Commander Ratten, primarily for his leadership of 453. This was duly celebrated three days later when he led a wing Rodeo over Abbeville. Over thirty FW-190s were spotted, and Ratten took 453 down to attack. Ratten destroyed one aircraft which burst into flames and crashed near Abbeville, while Barclay damaged another.

Ramrods continued through June. On the 17th the Squadron operated over northern Belgium with a Circus in the morning and a Rodeo in the afternoon. On the second sortie, near Antwerp, twenty FWs were seen about 10,000 feet below, and the Wing Leader took 453 down to engage. The enemy aircraft broke and in the ensuing melee Andrews, leading Blue section, severely damaged a FW-190,

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8. The diversion airfield, possibly Redhill, in Surrey.
9. Inflatable life preserver, worn as a jacket, which when inflated bore a resemblance to the figure of a legendary Hollywood actress.

1. The signal advising of Ratten’s award read: ‘This officer completed large number sorties and has led squadron and often the wing with great skill. He has rendered excellent service setting most praiseworthy example. Ratten has destroyed one and shared in destruction of another enemy aircraft. Will be gazetted 15 June 1943.’ RAAF HQ File 1101/8/P.1 Signal PL-181 dated 10 June 1943.
which disappeared in a vertical dive. As it was not observed crashing, Andrews was credited with an enemy aircraft probably destroyed. Five days later near Rotterdam, Barclay opened fire on a 190 and saw strikes on the port wing. He claimed one enemy aircraft as damaged, but Flying Officer Noel Gray was seen spinning down and did not return. He was considered to be the first pilot to be lost in combat for over six months, but unbeknown to members of the flight, he had been able to bale out, was captured within two minutes, and became a POW in Stalag Luft 3.

Ramrod operations continued over the next week until 27 June when Barclay led a Rodeo over France, crossing the coast at Boulogne. Near Bethune four Me-109 fighters were seen below, and Barclay led Blue section behind the enemy rear pair and closed to nearly 300 metres firing at the starboard aircraft. The Me-109 began streaming smoke, turned on its back and entered a vertical dive. Meanwhile the rear port aircraft was attacked by Pilot Officer Jim Ferguson, and a burst of flame and clouds of black smoke were emitted from it as it skidded away in a dive. The official claims credited Barclay with an aircraft damaged, and ‘Fergy’ with one destroyed. This was a fitting culmination to 453’s tour of operations in 11 Group. The following day the Squadron moved to Ibsley to join 10 Group. This move also meant 453 lost its Spitfire mark IXs; to the chagrin of the pilots and the groundcrew alike, they were relegated to the older mark V again.

453 Squadron Spitfires provided fighter escort for USAAF B-17 Fortress missions over Europe.

The beginning of July saw the arrival of some new pilots for 453. Two Americans of the USAAF, the first of several to arrive to gain operational flying experience, were attached to 453, and another Aussie arrived, Pilot Officer Pat McDade, on posting from No.322 Squadron, one of the RAF’s Dutch fighter units. The new pilots were able to see the Allied assault on Hitler’s European fortress


4. Arriving on 1 July were 1st Lts R.D. Weast (O-660311) and J.T. Riggins (O-439646). Later arrivals on 1 Aug were Capt R.P. Swanng (O-424561) and 1st Lt C.E. Louden (O-660279).
gather momentum. 453 found itself almost daily escorting formations of bombers over France and the Low Countries, frequently through extremely hazardous enemy anti-aircraft (ack-ack) fire.

During a rest from operations on 17 July, two sections of ‘B’ Flight flew sorties to exercise some British armoured units on Salisbury Plain. After making dummy attacks down the road lined with tanks and fighting vehicles, it was necessary to pull up at the end to clear hills. Unfortunately, there was a line of telephone wires stretching between two hills, and the leader Don Andrews flew under the wires, clipping off the top of his rudder. Warrant Officer Ross Currie was flying as No.2 and also sustained wire and debris damage. Andrews staggered up to gain some height, turned on his back and fell out of the cockpit, making a safe parachute descent. The Spit hit the ground and burst into flames, and within fifteen seconds all that remained was a few wisps of black oily smoke and some spasmodic bursts of exploding ammunition. The damage to Ross Currie’s aircraft had resulted in the loss of the pitot head, freezing the airspeed indicator, making it useless. To avoid stalling, it was necessary to formate on another aircraft, which enabled him to land safely.

On the afternoon of 25 July, Barclay led 453 and 165 Squadrons, which with 616 Squadron comprised the Ibsley Wing, escorting Marauder bombers on a Ramrod over Ghent, in Belgium. After coasting in at Zeebrugge, several enemy aircraft were engaged. Pilot Officers Russ Ewins and Jim Ferguson each claimed a FW-190 damaged. The Ramrod escort against St Omer airfield the following day was a preliminary to large-scale American attacks in north-western Germany. Ramrods were flown for the rest of July, and 453 completed 91 sorties for 10, 11 and 12 Groups in a week of operations from four bases.

The target for USAAF Bostons on 8 August were enemy U-boat stores at Rennes, with withdrawal cover provided by 453. Then after a week of patrols and scrambles, the Squadron escorted Marauders to bomb Woensdrecht airfield. Unsuitable weather forced the large formation back over Belgium, at which moment they were bounced from above by more than a dozen FW-190s. Barclay called for all pilots to stick to the bombers and withdraw, but Blue section, being behind in the turn, bore the brunt. Blue 1, Don Andrews, was seen going down in a screaming dive immediately after being bounced, but as the enemy had concentrated on him, he was encircled and only able to gradually creep towards the coast. FWs attacked him from ahead, beam and astern down to ground level, and by the time he had fought his way ten miles off the coast, only two attackers remained. He was finally able to get a shot at one of his pursuers, which crashed into the sea, and the last aircraft flew off to the east while Andrews limped into Manston. In his own words:

The combat occurred just out to sea off Flushing when I found myself all alone with twelve FW-190s on my hands. I fought them from 16000 feet down to sea level, but I couldn’t shake them off and get home. Suddenly, for some reason, the Hun detached four of these 190s, and yet another four after they had been beating the daylight out of me for a time. Then he detached another two, which left me with only two. I turned into one of these and got in a shot which put a shell into his cockpit. He went head first into the sea. By this time the other one had gone and I was able to make for home.

Andrews was able to land without brakes and with his aircraft riddled with cannon and machine gun holes. He was holed in the propeller, both main planes, engine, elevators, rudder and one of the undercarriage legs. A bullet had also holed the glycol tank and when he landed his engine was ‘just about boiling’. However, another 453 aircraft didn’t make it home. Flying Officer Fred Thornley had been shot down and killed in the initial attack.

18 August saw another squadron move, this time to Perranporth in Cornwall. 453 remained in 10 Group, carrying out patrols and scrambles for the rest of the month. One interesting task on 24 August was the escorting of a FW-190 by two Spitfires. This was a ‘friendly’ FW, one that had been captured and was required for examination and assessment by the RAF. 453 led the captured

7. Flt Sgt Bob Yarra’s Diary, 17 July 1943.
A Focke-Wulf FW-190, captured by the RAF and used for evaluation against the Spitfire.

September saw 453 on a short detachment to Kenley, where Ramrods were flown over France on 8 September as part of the Kenley Wing in support of USAAF bombers. An additional task from Kenley was participation in Operation Starkey. The Squadron, led by Flight Lieutenant Esau, was airborne at 0544 on 9 September to provide air cover for an east-bound convoy travelling towards France. This was a dummy run for the D-Day invasion fleet. The Spitfires even had black and white striped identification markings. After refuelling at Friston, in East Sussex, 453 was airborne again at 0816 to cover the assault convoy, and when relieved returned to Kenley. These sorties had been intended to test enemy reaction to an invasion fleet, but proved uneventful. Perhaps the Germans realised it was only an exercise!

The award of the DFC to Don Andrews was announced on 10
September, mentioning his determination and efficiency, plus his recent outnumbered engagement.  

Back at Perranporth uneventful scrambles and convoy patrols continued in deteriorating weather during September. Flight Sergeant Merv Nolan, a recent arrival, was attempting to land back at base when he overshot, crashing onto nearby houses and was killed.  

Ramrods and a Circus ended the month, which culminated in Andrews' elevation to Squadron Leader and taking over command of 453 from Barclay.  

On 8 October, five days after Flying Officer Len Hansell had damaged a FW–190 during a Ramrod near Oisemont in France, the Squadron was to celebrate its most successful operation. Seven Spitfires led by Andrews, on an early morning patrol over the English Channel, encountered a formation of eight Me–110s. The 110 was twin-engined, designed by the Germans as a long-range escort fighter. They knew it as the ‘Zerstoerer’—the Destroyer. The enemy staffel were flying at 200 feet in two vics of four, 300 metres apart, west of Brest on a mission to hunt and destroy RAF Sunderland flying patrols who were patrolling for German U-boats in the Bay of Biscay. 

The Australians were flying against II/ZG 1, led by its Kommandeur, the 24-year-old Hauptman Karl-Heinrich Mattern, an ace with twelve victories and holder of the Knight's Cross. Mattern was flying Messerschmitt Me–110G2 serialled W/Nr 120010 (coded S9 + RP), and he was soon to perish under 453's guns. 

In the ensuing dog-fight Flying Officer McDade shot down two aircraft, Pilot Officer 'Rusty' Leith bagged another two, and Flight Lieutenant Ewins destroyed a fifth. But for these five victories, 

12. RAAFHQ signal 1101/8/P.1 (77A) PL.303 dated 10 Sep 1943: 'Notification following immediate awards has been received. Distinguished Flying Cross Flight Lieutenant Donald George Andrews (404795).’ RAAFHQ signal 1101/8/P.1 (87A): 'Further my PL.303 10 Sept following immediate award Distinguished Flying Cross will be gazetted 24 September 1943. Flight Lieutenant Donald George Andrews (404895) [sic] No.453 (RAAF) Squadron. This officer has participated in numerous attacks on shipping during which obtained hits on four vessels. His work, executed in face of heavy anti-aircraft fire, was of a very determined order. Since joining present squadron F/Lt Andrews has undertaken large number of sorties and has displayed high degree of efficiency. In recent engagement against force 12 enemy fighters, Andrews led his formation with great skill. During fight he shot down one enemy aircraft.'  
14. Luftwaffe designation of the 2nd Group (II Gruppe) of Zerstoerergeschwader 1 (ZG 1).  
Flying Officer Harold Parker was shot down and seen by Ross Currie to crash straight into the sea at a 70 degree angle.\textsuperscript{16} (Postwar research of Luftwaffe records has suggested there were six German losses from this engagement.) Ewins baled out with his engine trailing smoke. He entered his dinghy and about an hour later he witnessed another dog-fight between Spitfires and Me-110s. He saw a Me-110 shot down by a Spitfire and watched a German bale out from it before the aircraft belly-landed on the water a kilometre away.\textsuperscript{17} Soon after that Ewins was picked up by a destroyer and taken to England. He returned to the Squadron the next day, none the worse for his experience.

The following week instructions were received for the move of the Squadron to Skeabrae. 453 was replaced at Perranporth by a Free French unit of the RAF, No.341 Squadron, and having swapped aircraft, departed for the Orkneys on 15 October. These Spitfires had modified turbochargers for low-level work and were officially known as the mark LF.VB. Unofficially, they were known as 'cropped'. In addition, for better low-level manoeuvrability, they had shortened wings, known as the 'clipped' wing. These aircraft had indeed seen better days, and were considered as 'clapped'!

The Spitfire pilots overnighted at Colerne on the way north, as the weather was 'clamping'—and as No.456, an Australian Mosquito squadron based there, was holding a dance that night! As was the norm for the squadron manning this northern 14 Group Station, a flight was detached to Sumburgh, in the Shetlands. The Squadron was, therefore, destined to be split for the next three months, with 'A' Flight at Sumburgh, and 'B' Flight at Skeabrae.

While at Skeabrae, 453 was able to operate three Spitfire mark VII aircraft which belonged to the Station Flight. For pilots, the difference was that the mark VII—the 'Strato Spit'—had a pressurised cockpit to allow high altitude interception of high-flying German reconnaissance aircraft. The external differences were that the newer aircraft had a rectangular air intake under each wing, changing the previous asymmetrical appearance, and it featured a retractable tailwheel.

Advice was received on 13 November of the award of Kel Barclay's DFC. As was the case with the previous award to Johnny Ratten, the citation mentioned the CO's leadership of 453 Squadron.\textsuperscript{18} Uneventful scrambles and patrols occupied the Squadron's

\textsuperscript{16} Fig Off H.M. Parker, 403763, 453 Sqn. Of Inverell, NSW; b. Inverell, 30 Mar 1918. Killed in action 8 Oct 1943.

\textsuperscript{17} Johnson, op cit, p.36.

\textsuperscript{18} RAAFHQ File 1101/8/P.1 Signal PL.381 dated 13 Nov 1943 stated: 'Acting Squadron Leader Kelvin Milne Barclay (407662) No.453 (RAAF) Squadron. Barclay has been engaged in operational duties since February 1942. He participated in Dieppe combined operation, and has on more than one occasion sustained damage to his aircraft from anti-aircraft fire. This officer has led his squadron well, and, whilst on escort duties, has given conscientious support to bombers, frequently driving off attacking aircraft. On other occasions, has assisted in air/sea rescue services and in protecting damaged bombers. Besides damaging 5 enemy aircraft, this officer has inflicted damage on several enemy 'E' boats.'
time during this rest period in the north. The only action occurred on 2 December when a twin-engined Ju-88 was intercepted by Flight Lieutenant Esau and Flying Officer McAuliffe, and they shared in its destruction.19

The New Year saw a change of location as the Squadron returned south to Kent. Once again 453 received the mark IX Spitfire as the role of the Squadron was changing. The Allied Expeditionary Air Force (AEAF) had come into being on 15 November 1943, and Fighter Command squadrons were being readied for the new Tactical Air Force for the forthcoming offensive. The Squadron would not only be called on to provide fighter cover, but as the War entered this next phase, more emphasis would be placed on ground attack.


CHAPTER TWELVE

D-Day

The move to Detling in January 1944 established 453 Squadron as part of 125 Airfield of the Second Tactical Air Force (2nd TAF), the RAF's close support element of the Allied Expeditionary Air Force. The intention of having squadrons forming these mobile airfields, which became Wings, was to enable deployment close to the front line for the eventual move into Europe.

The 2nd TAF (the 1st TAF having formed in North Africa and now involved in operations in Italy) comprised four RAF groups. Nos 83 and 84 Groups were the spearhead of the strike squadrons, flying mainly Spitfires and Typhoons. No.85 Group was for the defence of the Allied armies and air forces on the Continent, and 2 Group, drawn from Bomber Command, was made up of light bomber squadrons. Fighter Command, therefore, was reduced to a third of its size, and renamed Air Defence of Great Britain (ADGB), but reverted to the former title in October 1944. 125 Wing was part of 83 Group.

Now equipped with the Spitfire mark IXB, the pilots of 453 were loud in their praises of this newer, more powerful version. The ‘B’ designation for this variant of the mark IX signified the standard Spitfire ‘B’ wing, which featured mixed armament of 20 mm cannon and 0.303 inch machine guns.1

1. 453 used the ‘B’ wing version of the mark V and IX Spitfire, and also for 4 months in 1943 the mark VC. ‘C’ wing denoted 4 cannon, 2 cannon plus 4 MGs, or 8 MGs. To improve low-level handling, some aircraft had the wingspan shortened by about 4 feet — ‘clipped’ wings. Later the mark IX E, XVI E and XIV E were operated. ‘E’ universal wing had four 20 mm cannon or two cannon and two 0.5 inch machine guns.
453 was now back to Ramrods, concentrating on opening up France for the invasion. On the afternoon of 20 February, while covering the withdrawal of Fortress and Liberator bombers, 453 made its deepest penetration into Europe. Andrews led the Detling Wing, now comprising 132 and 453 Squadrons, on this mission to Lille. On 2 March, now with 45-gallon fuselage ‘slipper’ fuel tanks and with longer range, the Spitfires escorted Fortresses as far as St Quentin. These 453 sorties were now of about two hours’ duration and being flown at such high level that electrically heated flying clothing was necessary to avoid suffering from the cold. The pilots were happy with these heated jackets, gloves and boots, but on one occasion Flying Officer McDade had a badly blistered toe owing to a short circuit. He switched the heated equipment off only then to suffer frost-bite on his thumb.

On Thursday 9 March, the Squadron was visited by HRH The Duke of Gloucester. The Squadron and aircraft lined up for inspection. The Duke was served tea, chatted with personnel and lunched in the Officers’ Mess. While pictures were being taken at the obligatory photographic call, one pilot was heard to inquire: ‘Don’t you get fed up with this, Duke?’ To which he replied: ‘Yes—as far as having my photograph taken is concerned.’ He left Detling that afternoon.

Most pilots of the Squadron were then attached to Peterhead in Scotland for air firing and bombing practice, as bombing was a new skill to be learnt. On 18 March, while on this armament training at
Peterhead, Flight Sergeant Brian Gorman was unfortunately killed in a flying accident. He was practising dog-fighting with another Spitfire, and was seen to spiral in.

Back at Detling, practice dive bombing continued, together with uneventful Ramrods. By the following month the Squadron was ready for offensive operations. On 14 April, the Squadron took off just before lunch on a Noball attack against a V1 rocket site near Abbeville, in France. The Spitfires dived in from 8000 feet, releasing their 500 lb bombs at 4000 feet. The flak was very intense and accurate over the target, and the aircraft flown by Pilot Officer Bob Yarra was hit by 37 mm anti-aircraft fire. His wings tore off and his aircraft immediately disintegrated.

125 Airfield deployed to Ford, on the English Channel coast on 16 April. The three Spitfire squadrons (132, 602 and 453) pitched tents and organised for the arrival of the Spitfires, which flew down when the weather allowed two days later. Ford was a busy airfield, with Spitfires and Mustangs operating by day, and Mosquitoes by night, the latter flown by No.456 Squadron RAAF. Throughout April, Noball bombing was interspersed with bomber escort work, and on the 27th three waves of 453 Spitfires, at squadron strength, pounded road and rail bridges in Normandy.

Squadron Leader Don Smith arrived on 2 May to assume command of 453 Squadron from Don Andrews. The new CO was a veteran of the Battle of Malta and had won the Soviet Medal for Valour. He was followed the next week by a new flight commander, Flight Lieutenant Henry Smith.

With 90-gallon slipper long-range fuel tanks now available, Ranger sorties were conducted in the Falaise area against rail targets. On one of these sorties on 21 May, Flight Sergeant John Olsson’s aircraft was hit by flak when flying at 25 feet, caught fire and crash-landed near Bernay. Olsson escaped injury, but was captured at once.

Squadron Leader Donald H. Smith DFC, CO of 453 in Normandy.
There is no doubt that the offensive conducted by the Allied squadrons and the fighter defence led to an almost complete failure of German reconnaissance in the months preceding the invasion. The Luftwaffe flew only 125 reconnaissance sorties in the Channel area during March, with no overland penetrations. This failure in gathering intelligence contributed to the dispersal of German defences along the European coastline. Also adding to the blindness of the German defenders was the denial of the enemy radar network. Radar installations were the focus of 453's attention in late May and early June. Attacks were carried out along the French coast, from the Normandy beaches up to Cap Gris Nez near Calais.

By the beginning of June there was anticipation that increased operations were about to begin. This intensified on 4 June when the Wing's aircraft received a new colour scheme. This was the painting of three white and two black bands around the rear fuselage and wings to aid better identification in the coming 'big show'.


The next day everyone was feeling the tension of the approaching invasion. The groundcrew put the finishing touches to the new aircraft markings, and the pilots attended briefings. That evening ten Spitfires patrolled at 4000 feet over the convoy moving steadily south.

453's Spitfire IXB MK355 FU-H has D-Day invasion stripe identification markings applied at Ford on 4 June 1944.

On 6 June 1944, all of the pilots were out of bed by 4 am for dawn readiness. The whole of the previous night and D-Day were accompanied by the roar of bombers overhead flying to France, and the 453 Squadron Diary recorded: 'We are glad we are not Germans'. The first sorties for Operation Neptune were airborne at 8 am to fly over the Normandy beachhead and provide cover for the invading forces. Four waves were flown by 453 throughout the day for a total of 43 sorties. A gun position was destroyed, but all were uneventful with no enemy aircraft seen. The pattern continued the following day with another 47 sorties being flown. Some FW-190s were seen diving through cloud at Points de la Raze, but these couldn't be caught. Three waves of patrols over the invasion beaches continued on the 8th, but still the Luftwaffe were not in the sky.

Patrolling continued, with 453's first unscheduled arrival on French soil on 10 June when Warrant Officer Keith Daff, who was over Utah Beach, had engine problems and landed on a strip at
Vierville. He was soon in the air again and returned to Ford. The following day the CO led twelve aircraft on a sweep over the battle area and landed near St Creix sur Mer to spend their first night in France. Unfortunately, on a night patrol over the invasion beaches, the ‘A’ Flight Commander, Henry Smith, was hit by flak near Ouistrehain and forced-landed in a canal. Smith was killed when his aircraft hit the canal and turned over.

The eleven pilots returned to the UK early the next morning. They were tired and hungry after their first taste of hard rations, and the discomfort of sleeping in slit trenches with the Royal Engineers, who were constructing the airstrip, while enemy shells whistled overhead. Flying Officer Vern Lancaster was chosen to take Smith’s place as flight commander as the first party of groundcrew set off on their journey to France, preparing for the Wing’s move to Normandy.9

Four pilots departed the next day, 13 June, to take Spitfires over to Redhill and receive replacements. Flight Sergeant Doug Saunders crashed on this ferry trip and was killed.10 Flight Sergeant Merv Watson was posted in by 83 Group Service Unit to fill the vacancy in 453’s ranks.11 It was the responsibility of 83 GSU to ensure that 453 Squadron was maintained at a strength of 25 pilots over this period of intense activity.

Beachhead patrolling continued and on the evening of 16 June a 12-strong patrol over Caen discovered a similar number of Me-109s below them. The fight which followed ended with 453 being unscathed, but two Germans went down in flames, shared credit going to Flying Officer Lawrence12 and Warrant Officer Seeney,13 and to Flight Lieutenant Lancaster and Warrant Officer Rice.14 In addition two Me-109s were probably destroyed by the CO and Flight Lieutenant McDade, and a further one damaged by Flying Officer Murray.15

The expected move to France on 19 June was delayed until the 25th, when 453 moved across the Channel and 125 Wing became established at Advanced Landing Ground B.11 (ALG B.11) at Longues. The pilots continued heavy operations that day, flying 35 sorties. While staging through ALG B.9 at Lantheuil, Warrant Officer Seeney struck a soft patch on landing and his aircraft overturned, leaving him with minor injuries. The dusty landing strip also accounted for Flying Officer Murray tipping his aircraft on its nose. The dust of Normandy was becoming another hazard and nuisance to contend with.

A further 46 sorties patrolling all the invasion beaches were flown the following day. On the 27th, Warrant Officer Daff was flying over the estuary north of Caen when he collected a piece of heavy flak in his radiator. He successfully put his aircraft down on ALG B.10 at Plumetot with a dead engine. Later in the morning some enemy motor transport escaped when a section of Spitfires’ guns jammed. Dust was now being picked up on the take-off run on the dirt strips and was proving too much for the guns.

But this did not hinder another section, led by Vern Lancaster, when eight FW-190s were encountered. He claimed one as a probable and another damaged, while Flying Officer Olver,16 Warrant Officer Rice and Flight Sergeant Peters each claimed an aircraft damaged.17 In an afternoon flight another patrol led by Lancaster was bounced by six FW-190s. One FW with a successful burst wrecked Lancaster’s canopy, wounding him with shrapnel and perspex. He took his revenge, however, by getting in a good burst on another, which was seen to burst into flames and dive vertically into cloud. The rest of the enemy then made off.

Life in the Tactical Air Force had become exciting for 453. It was different from some of the quiet outposts that had served as their bases. 453 was now in the front line of the largest invasion in history. During June, over 700 operational sorties had been achieved, amounting to over 1100 operational hours being flown.

453 Squadron’s ground strafing was exacting a toll on enemy motor transport and tanks over the end of June and into July 1944, claiming a quantity as ‘flamers’, ‘smokers’ or damaged. On one sortie on 30 June, Flight Sergeant Peters, a new arrival and flying as No.2 to the CO on an armed reconnaissance, received flak which blew away the entire perspex of his hood. This gave him serious head wounds, but he was able to fly his aircraft back and made a good landing. He was immediately taken to the military field hospital, but was unable to rejoin 453.

During a front line patrol on the evening of 2 July, a flight led by Flight Lieutenant McDade encountered five FW-190s over Falaise. In the fight chasing them at ground-level to Chartres, two were shot down in flames. Flying Officers Olver and Roberts shared one, and Olver, with McDade and Flight Sergeant Dowding, shared the other.

Enemy motor transport was becoming ‘Spitfire conscious’, as day by day they were more adept at dodging under cover and being more difficult to catch. On one of these ground attack sorties on 6 July, Flying Officer Norm Baker’s Spitfire was hit by flak, but he safely belly-landed behind enemy lines. He was able to evade the enemy for six weeks before returning to the Squadron.

Three days later, on an afternoon armed recce, the CO was leading a twelve-ship when he spotted a force of over forty enemy aircraft, 2000 feet above. ‘Look up above you and you’ll see something very interesting’, he casually called to the Squadron. Then leading them up in a head-on attack, the ensuing fight near Lisieux left all of 453 still in the air, but cleared the area of Germans. The CO scored a Me–109 destroyed and a FW–190 damaged, Warrant Officer Steward and Warrant Officer Boulton each one FW destroyed, Warrant Officer Daff a Me–109 destroyed, Warrant Officer Seeney a FW probable and one damaged, and Flight Lieutenant Roberts, Pilot Officer Kinross and Flight Sergeant...
Dowding each with one enemy fighter damaged. This was a record bag of German aircraft for 453.

Bad weather slowed down operations, but cleared sufficiently for afternoon missions on the 12th. On an armed recce Warrant Officer ‘Froggie’ Lyall was shot down by flak, forcing him to belly-land behind enemy lines east of Falaise. He clambered out of the cockpit and sprinted for the cover of nearby woods. (He was able to evade enemy troops until capture by the SS, but he subsequently escaped from prison camp and lay low until the arrival of the US Army on 6 August. He rejoined the Squadron five days later and reported he had seen another 453 pilot in the prison camp, Flight Sergeant Dowding, who had been injured and was recovering well.) Later on the evening of the 12th, another flight escorting B-25 Mitchell bombers striking Chartres, encountered enemy fighters and Warrant Officer Cowpe and Wing Commander Page, the 125 Wing Leader, downed a FW-190.

During an armed recce the next evening, Flight Lieutenant Pat McDade’s Spitfire was badly shot up near Villers Bocage, but he was able to bring it back safely and belly-land at Longues. This left him with a stiff neck, which was soon relieved by the Squadron receiving its first supply of beer.

On the 17th, four pilots set off for England to pick up four of 453’s new Spitfire LF.IXEs. With the fire power of 20 mm cannon and 0.50 inch Browning machine guns, the Squadron was sure the Germans were not going to be pleased with the news!

A record number of sixty sorties were flown the next day, 18 July, as the 2nd British Army launched a large scale attack near Caen. Bad weather then turned the Normandy dust into a sea of mud, but flying was possible on the 24th and enemy aircraft were found between Caen and Cabourg. Flight Lieutenant McDade pounced on an Me-109 and Flight Lieutenant Roberts bagged a FW-190. Adding to these two destroyed aircraft, Pilot Officer Scott damaged a further two FW-190s. This squared the books for an unfortunate incident earlier in the day, when Pilot Officer Kinross was mis-identified by a USAF P-47 Thunderbolt, and shot down and killed. On another patrol, Flight Sergeant Lynch was hit by flak and carried out a safe crash-landing in a small field. He was soon back flying.

The following day, the 25th, was the beginning of the break-out by the Allied forces—Operation Cobra—and began with armed recce in the Falaise area. While attacking enemy motor transport, Warrant Officer Clarrie Seeney was hit by ground fire. He went straight down, crashing into the road in the midst of the convoy he had attacked. On the next mission the Squadron took its revenge. Flight Lieutenant Roberts and Warrant Officer Cowpe found a FW-190, and shared in its destruction. A patrol then in the afternoon encountered a dozen enemy fighters between Lisieux and Falaise. Warrant Officer Daff destroyed a Me-109, and Flying Officer

Rusty Leith and Warrant Officer Allan Harris shared another. Harris also scored a probable, as did Flying Officer Olver. But all this was not without loss as from this mission Leith and Flight Sergeant Dowding were missing. However, as it transpired, both were safe. Leith had crash-landed near St Philbert des Champs and hid until Canadian forces arrived on 22 August enabling him to return to 453. Allan Dowding's aircraft had been damaged by a 109, then hit by flak. With the Spitfire on fire, he baled out at 800 feet, but broke his hip and jarred a shoulder on the tailplane. He parachuted into a German anti-aircraft position and spent the rest of the War as a POW, returning to the Squadron on 19 May 1945.

The next afternoon Flight Lieutenant Pat McDade was leading twelve Spitfires in an attack on enemy transport in the Juillibeuf Fecamp area. He was hit by flak, and forced-landed on the enemy side of the lines. He ran from his aircraft into neighbouring trees, but was captured and he too became a POW.

Bad luck continued into the next morning when Warrant Officer Harris was shot down by flak over Lisieux and crashed in flames. Warrant Officer Boulton's aircraft was badly hit, but he was able to nurse it over the lines and safely crash-land near some Allied artillery. That afternoon Flight Sergeant Ralph Dutneall was lost when hit by flak south of Caen.

453 Squadron had lost seven pilots over the past few days, so, with the cooperation of the nearby 9th British General Hospital, a party was arranged for the evening to help break the gloom that everyone was feeling.

On the following afternoon, 28 July, Pilot Officer Athol 'Ack' Rice attacked a FW-190 between Caen and Bayeux. Strikes were observed all over the enemy fighter, and Rice was credited with one FW damaged.

In the first month of operations on the Continent, rain had fallen on 21 days, and only one day had been assessed by the weather men as suitable for flying. Despite the weather, 453 had flown over 700 operational sorties in support of the invading forces, shooting down a dozen enemy fighters, probably destroying three more, and damaging a further eight. Over a hundred enemy transport and armoured vehicles had been destroyed or damaged.

August 2nd saw Flying Officer Jim Ferguson damaging a Me-109 near Tincherebray, south of Caen. Armed recce continued to yield enemy motor transport, and the next evening Marshal of the Royal Air Force Lord Trenchard visited the Squadron. His timing was impeccable: 453 had just scored a record tally of enemy vehicles. The CO had led the attack with twelve Spitfires and had claimed ten flamers, two smokers and seven vehicles damaged.
airfields. The new airfield inhabited on 13 August was ALG B.19, near Lingevres.

During the following evening a sole enemy attacker dropped three anti-personnel bombs on the Squadron domestic site. One exploded a few metres from the CO's tent, who fortunately had just departed on leave. However, three pilots were injured in the attack, and Warrant Officer Merv Watson was killed. He would have been 21 the next day.

On a sortie on 16 August, Warrant Officer Fred Cowpe received ground fire which hit near the cockpit, and he was wounded in the thigh. His dinghy, stored in the cockpit, caught fire and he was lucky to throw his aircraft on the ground at ALG B.17 near Carpiquet. He suffered second degree burns, which prevented his return to flying on 453. (Cowpe was subsequently awarded the DFC in January 1945 for his service on No.453 Squadron.) His diary vividly described his experience:

Back at B.19 Smithy asked: 'Fergie is off colour, would you mind taking his place?' Had a premonition—'don't go!'. Tell him you are sick, instead said: 'Yes it will be alright'—taxied out, 3 sections of 4 a/c, weather still bad, up goes a red Verey light, sigh of relief as recalled, about 30 minutes later we are airborne, that strange feeling still persisting. Saw 3 trucks and called Dauphin Blue 1 and 2 going down to stop a couple, about to fire when 'bung' and aircraft going up vertically, lot of back pressure on stick, thought will trim it a bit forward, quite surprised, there was no trimming wheel, but instead a great big hole. Under control again and heading for emergency strip, looked down, had been shot both legs and thighs, wondered if legs would work, pressed rudder bar and grateful to see it moved but no pain whatsoever. Slid hood back and cocked door, noticed seat and most likely chute was riddled with flak fragments, coming up front to right old German drome, Carpiquet, wondered who owned it now, as briefed two days back Germans on one side and British other. Suddenly I'm on fire, it pouring up and out through open canopy, shoved the nose down and headed for drome.

Thought, have got to get this on the deck and I've got seconds to do it in, shoved on power, pain excruciating, trying to beat off flames with left hand, suddenly everything going dark, like turning off a dimmer switch, thought I'm gone, all this for nothing, suddenly all pain gone (found out later, when nerves burnt through, pain ceases) and back to

square one, ASI reading 240, flaps down and just off ground hit with a mighty crash and thought would hit wrecked hangars. Got out and trying to beat out clothing, British soldiers helped me and carried away from aircraft. Laying on ground surrounded by soldiers looked at my left flying gauntlet, it was charred and burnt black. Thought, only got it yesterday, its no good now so pulled it off, but in so doing skin and flesh came off with it. A voice 'I'm a Doctor, I will help you', 'Thanks Doc, give me something for my hand', 'I'm not concerned with your hand but with your side'—do not remember anymore.15

By 18 August the retreating German army was caught between the Seine and the sea, and 39 sorties were flown destroying enemy transport. 43 sorties were flown on 23 August, and that afternoon 453 and 132 Squadrons overflew liberated Paris in a Cross of Lorraine formation. However, the Germans had not been informed that the city was liberated, and responded with intense anti-aircraft fire as a welcome to the pilots. The Cross of Lorraine regrouped at a safer altitude.

An armed recce north of Paris on 26 August sighted over twenty Me-109s, and the CO led 453 in for the attack. The CO, Flying Officer Bill Carter and Warrant Officer Keith Daff each scored a probable.16 Bad weather and little flying then led to the next Squadron move on 2 September to the new strip at ALG B.40 near Beauvais. This was only temporary as three days later the Squadron moved to ALG B.52 at Douai.

The Allied armies were now advancing so quickly that despite these moves 453 felt the War was leaving them behind. The broken German armies were quickly driven out of France and Belgium, until the Allies were brought to a halt on the Belgian-Dutch border. After a period of little flying the next move on 17 September was to ALG B.70 at Deurne, near the Belgian city of Antwerp. Here 125 Wing joined the Typhoons of 121 Wing and the sortie rate became more intensive. But these remained largely uneventful patrols now extending over Holland in support of the 2nd British Army which was attempting to link up with embattled airborne forces at Arnhem.17

15. Fred Cowpe's diary of the events of 16 August 1944.
During a quiet period on 23 September, Flight Lieutenant W.R. Bennett took off on an air test, only to be fired at by enemy flak. As he landed the airfield came under an artillery barrage. (Bennett had only joined 453 five weeks previously. He served as a flight commander and went on to command 77 Squadron in Korea. He subsequently became known as an author of paperbacks about flying adventures—undoubtedly including escapades of test flying under enemy fire.)

On a patrol north-east of Arnhem on the morning of 27 September, Warrant Officer Lyall shot down a Me-109. Three hours later another patrol led by Flight Lieutenant Bennett was able to engage in what was to be 453’s final dog-fight of the War. Near Arnhem over fifty Me-109s were attacked, with Bennett destroying one and damaging two and Warrant Officer Taylor opening his score by destroying one and damaging two others. In the melee Warrant Officer Digby Johns was shot down, but parachuted to safety and was smartly returned to the Squadron courtesy of an army jeep. Earlier, Flying Officer Ken Wilson had taken ground fire and belly-landed on the front line. His Spitfire turned over twice on impact, but Wilson climbed clear and ran towards a Dutch village.

Orders had come through for 453 to swap its Spitfire IXEs with 126 Wing, in exchange for IXBs, so later that day ten aircraft were flown down to Le Culot for No.412 Canadian Squadron. The replacements returned the following day to the news that 453 was returning to the UK on 29 September. Their new base would be the RAF Station at Coltishall, in Norfolk, to swap roles with No.80 Squadron.

Squadron Leader Esau had rejoined 453 to take command for the move back from 2nd TAF to Air Defence of Great Britain (ADGB). Squadron Leader Don Smith and his flight commander Vern Lancaster had both been gazetted for the immediate award of the DFC for their services in 453. The 2nd TAF, in support of the Allied armies, had pushed the enemy back from the Normandy beachhead into Holland in under four months.

On 29 September the Spitfires departed Deurne and were routed out over Dunkirk by 125 Wing Intelligence. When overflying that city intense flak opened up, and Flying Officer Jim Ferguson’s aircraft received a direct hit. He turned around to head inland, but a few seconds later his aircraft was seen to explode. Fortunately for ‘Fergy’ it wasn’t the fatal ending it appeared. Unbeknown to the other members of the formation, he was able to stay with the aircraft, streaming black smoke, and succeeded in a credible crash-landing. He was captured immediately, held as a POW, and was able to return to 453 on 1 May 1945.

Another aircraft flown by Warrant Officer Carmichael had just been picked up from the Canadians at Le Culot, only to have the engine cut out over Dungerness. He belly-landed near Old Romney, in Kent. The rest of the formation had overnighted at Bradwell Bay, in Essex, and arrived at Coltishall on the 30th.

22. W Off J.D. Carmichael, 414991, 453 Sqn. Labourer of Brisbane; b. 11 July 1923.
CHAPTER FOURTEEN

House in the Wood

The switch from TAF to ADGB brought with it excellent living conditions at Coltishall, near the market town of Norwich, and 453 found Norfolk to be a delightful spot. But they were afraid life back in the UK may again become mundane, and would have preferred to face a winter under canvas for the action on the Continent.

But life in ADGB was not to be dull, as the operations planned for the Squadron were to take the offensive to the enemy. A Ranger intrusion into northern Holland was flown on 3 October with the CO leading eight Spitfires, and the following day another planned into Germany was forced back by the weather at Amsterdam. This operation was repeated on the 5th, and with favourable weather 453 struck Germany for the first time. Ten Spitfires flew in the western Germany area, and at Meppen, halfway along their patrol area between Lingen and Lathen, they destroyed a 30-truck goods train by strafing attacks.

Ranger sorties to Holland then became interspersed with a new mission, the ‘Big Ben’ patrol. The Germans had deployed their new reprisal weapon, the V2, to Holland to launch against London. A 453 saw their first on 7 October near Leeuwarden, with a vertical condensation trail (contrail) passing 24,000 feet, and heading up to an estimated 50,000 feet. Flight Lieutenant Bennett then led a formation out to the Dutch islands of Vlieland and Terschelling following reports of suspected launching sites, but no activity was seen.

The first V2s, known initially by the Germans as the A4, had fallen on England on 8 September at Chiswick in London, and Epping, Essex. The slower V1 flying bombs could be heard coming and could be detected by radar, so their approach could be warned by sirens. But there was no such warning of the arrival of the supersonic V2. 1115 V2 rockets were ultimately to fall on England.

The V2 had been developed at the German experimental station at Peenemünde, and when a trial rocket exploded over Sweden in June 1944, the Allies were able to recover the wreckage and piece together this latest weapon. The V2 overcame the shortcomings of the V1. It could be freely launched in any direction with little difficulty by a mobile unit, and once fired there was no defence against it. It was more accurate, and with its high velocity on

1. Reprisal weapon literally Vergeltungswaffe: the V1 was the flying bomb which had been attacking London, the V2 was a rocket-powered ballistic missile.
2. In fact, the height at peak of trajectory of the V2 was 50–60 miles.

V2 rocket on a Vidalwagen road transporter in 1944.
impact, its effects were more devastating. The launching sites were virtually impossible to locate and identify from the air, so attacks were restricted to the supply system. These sites selected by the Germans were along the Dutch coast near The Hague and were operational by Autumn 1944.

The Germans had not succeeded in developing long-range bombers to attack the UK, and after 1941 their chances of survival over England would not have been high. In the V2, with its 220-mile range and 1-ton warhead, lay the German strategic offensive.

By 18 September a further 25 V2s had reached eastern England. It was established that these had come from the area of Wassenaar, a region of pine woods and sand dunes near Leiden, from the racecourse north of The Hague, and from Walcheren Island. Also some launched from Oudermirdum, north of Amsterdam, struck 453’s new home of Norwich during late September and into October. The only defence was the attack of these possible launching sites, and the bombing of suspected supply routes and supply depots. One of the sites to store and fill the V2s with their liquid oxygen fuel was the historic ‘House in the Wood’—Huis den Bosch—in a wooded park in the administrative centre of Holland, The Hague.

Huis den Bosch had been built in 1645 as a palace for the Consort of the Prince of Orange, and had hosted the first International Peace Conference in 1899. It was treasured by the Dutch, but had now been put to military purposes by the enemy. Here was the prime target of V2 storage and preparation, and its surroundings could only be attacked without taking Dutch lives and destroying or damaging historic Dutch property.

The task of seeking and destroying Germany’s V2 sites was assigned to the fighters, and it was 453 which made the first reconnaissance flights and the first attacks. ADGB was now re-titled Fighter Command, and No.12 Group’s squadrons of the Coltishall sector—Nos 229, 453 and 602 Squadrons—were tasked in this role. (A fourth squadron, No.303, also flew these missions occasionally, and from January 1945 Nos 124 and 451 were also assigned.)

The success in these operations was the effectiveness of the Spitfire as an accurate dive bomber, with accuracy being of prime importance.

Throughout October and November, 453 practised dive bombing near its new base at the satellite strip at Matlaske, and continued patrols to pinpoint V2 sites and any rocket activity. On 11 October, 453 began re-equipment with the Spitfire mark XVI, to all intents a Spitfire IX with an American-built Packard Merlin engine and racks to carry a 250 lb bomb under each wing. The first attacks by the anti-V2 wing were carried out by 453 Squadron, now operating from Swannington in Norfolk, on 21 November. The field at Matlaske had become waterlogged and the Wing had to operate from Swannington until the surface improved.

The first wave of four Spitfires led by Squadron Leader Esau attacked rocket storage at Rust-en-Vreugd near The Hague. The Spitfires dived from 8000 feet, releasing their bombs at 4000 feet. All bombs fell in the target area, which was then strafed. Two hours later Flight Lieutenant Bennett led another wave in to attack a rocket storage and firing site at Huis-Te-Werve, again with all bombs in target area. Two kilometres to the east a target that appeared to be a stationary V2 was strafed. The CO then led another successful strike onto a rocket storage at Waasenaar-Raaphorst.

These sorties continued throughout November and on 1 December a strike planned with 602 Squadron to bomb at Haagsche Bosch was aborted due to weather. This mission was successfully carried out on 6 December when Bennett led the Spitfires to bomb near Huis den Bosch. Four bombs were right on the pinpoint and the rest in the target area without apparent damage (apart from some broken windows) to the historic building.

Sorties continued through December and Christmas Eve was the beginning of a new tactic. This was doubling the weapon load to 1000 lb (two 250 lb bombs on the wings and a 500 lb bomb under the fuselage), which then necessitated refuelling in Belgium on the return leg. This new staging base for 453 was ALG B.67 at Ursel.

This Christmas Eve assault was the heaviest attack that had yet been mounted, with 33 Spitfires from the Wing. The first of these

6. ibid, p.96.
7. Rocket, ACM Sir Philip Joubert de la Ferte, Hutchinson, London, 1957, p.120.
sorties departed in the morning from Swannington for a new V2 target in The Hague area at Hague Marlot, a block of flats near Huis den Bosch which headquartered the rocket-firing troops. The CO led the twelve 453 Spitfires, and in his attack on the target through intense flak, Flight Lieutenant Bennett's aircraft was hit, and seen to burst into flames and disintegrate. Bennett baled out at 1000 feet, and his parachute landed him between the target and the racecourse. (He was subsequently captured, was a POW for the remainder of the War and returned to 453 on 17 May 1945.)

Targets at Huis den Bosch and Rust-en-Vreugd were attacked during January whenever weather permitted, but on most days flying was impossible. The highlight of the month for 453 was on the 27th when it was announced three pilots had been awarded DFCs. These were to the flight commander Flight Lieutenant Rusty Leith, Flight Lieutenant Pat McDade who was 'B' flight commander in Normandy before becoming a POW, and Flying Officer Fred Cowpe, who was wounded on 16 August and evacuated to the UK.

At the end of January 1945, Pilot Officer 'Froggie' Lyall and Warrant Officer Jack ('Stew') Stewart were on leave in London when a V2 landed 150 metres from their hotel and blasted them out of their beds. They sent a telegram the next day to 453:

Pull your hooks out, chaps. They nearly woofed us last night.

Flight Lieutenant Raymond Baxter, later a well known BBC television commentator, was 'A' flight commander on 602 Squadron, and described the dive-bombing technique used in these attacks:

Running in at between 6000 and 8000 feet we would throttle back to just below 200 mph, and aim to place the target so that it passed under the wing just inboard of the roundel. As it emerged from under the trailing edge we would roll over and pull the aircraft into a 70 degree dive—which felt vertical. At this stage one concentrated entirely on bringing the graticule on the gyro gunsight on to the target, ignoring the cockpit instruments and trying to ignore the Flak. Accurate bombing was dependent upon accurate flying during the dive and once the target was reached, the aircraft was split to place the target in the field of fire of the gunsight. The target was then released and the aircraft brought back to level flight.

was in the sight it was important to avoid side-slipping, skidding or
turning for these would have induced errors. The Spitfires would go
down in loose line astern, with 30 to 40 yards between aircraft and each
pilot aiming and bombing individually. In a dive the speed would build
up quite rapidly, to a maximum of about 360 mph before the release.
When he judged the altitude to be about 3000 feet each pilot let go of
his bombs in a salvo, then did a 5G pull-up to bring the nose up to the
horizontal; by the time we had levelled out we were pretty low and the
drill was to make a high-speed getaway using the ground for cover.16

After the bad weather of January, the attacks on The Hague area
were intensified during February, and only forty sorties out of the
286 planned for the wing in the first two weeks were cancelled or
proved abortive.17

The most difficult target attempted was the liquid oxygen factory
at Loosduinen, surrounded by dwellings on three sides.18 To avoid
causing civilian casualties, the target was attacked from the fourth
side and trickled up towards the factory. Squadron Leader Esau led
twelve aircraft in on the morning of 3 February and after striking the
target the Squadron refuelled and rearmed at Ursel and hit the same
target on the way back to England.

Meanwhile the attacks on the wooded areas of The Hague and
Staalduinsche Bosch near the Hook of Holland continued. It was
not all one-sided for 453, as two aircraft were lost on 21 February.
Warrant Officer John Carmichael was hit by flak and baled out
twenty kilometres north of Leyden. He was hidden by Dutch
farmers in the villages of Oudewetering and then Roelofarendsveen
until liberated by Canadians on 11 May 1945. Warrant Officer Bill
Gadd was also shot down and belly-landed at Rijswijk, near
Gouda.19 Gadd, too, was hidden by the Dutch at Boskoop, then
Leidmuiden and Roelofarendsveen. On the capitulation of Holland,
he returned to Leidmuiden and contacted the Canadians on 8 May.

On 18 March, Flying Officer Ernest Tonkin was attacking a rail
junction west of Gouda.20 Pulling off target his aircraft began
emitting smoke and he forced-landed, crashing into a ditch. He had
trouble extricating himself from the cockpit which had filled with
water. Soon afterwards he made contact with the Dutch underground
who hid him in Lekkerkerk and then in Ouderkerk aan der Ijssel. He
waited there for six weeks until the arrival of Allied forces, returning
to 453 on 16 May.

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to 453 on 16 May.

Three days after Tonkin was shot down, Flying Officer Marsh
was No.2 to the Wing Leader, Wing Commander Don Andrews,
attacking rail targets near Noordwijk when his engine lost oil
pressure. He was forced to bale out about ten kilometres off the
coast from The Hague. He climbed aboard his dinghy, and the
following day the Squadron spotted him south-west of Zandvoort.
The Spitfires provided top cover while an air-sea rescue Catalina
tried to land, but this was aborted due to high seas. Finally he was

16. 'Spitfire Dive-Bomber', R. Baxter, in *Spitfire—A Complete Fighting History*, A. Price,
18. ibid.
19. Flt Lt W.C. Gadd, 416946, (later O4532), 453 Sqn, 391 Base Sqn Korea. Accounts clerk
of Crystal Brook, SA; b. Crystal Brook, 29 Sep 1923.
20. Flg Off E.W. Tonkin, 436014, 453 Sqn. Property clerk of West Footscray, Vic; b. 12 Apr
1921.
picked up by a German Red Cross boat a kilometre off Ijmuiden Harbour, and waved to the Spitfires as they returned to England. He was to be a POW for only a few weeks, and returned to the Squadron on 16 May.

The last rocket, the 1115th to fall on England, landed at Orpington, Kent on 27 March 1945. The final anti-V2 sorties were flown by 453 on 30 March against V2 transporters in Katwijk, and the following day on the railways transporting the rockets back to Germany. If the V2 had come into operation at the time it had been planned the whole course of the War might have been altered. The use of the V2 may be aptly summed up for Germany as 'too late'.

CHAPTER FIFTEEN

The Taste of Victory

The final days of operations for 453 Squadron in late March and early April 1945 were devoted to attacking rail targets in Holland as the enemy withdrew into Germany. It had been planned for 453 to move to Lympne, in Kent, to then deploy forward west of the Rhine and escort bombers flying deep into what remained of the Third Reich. The other squadron to form this Wing was No.451 Squadron RAAF which had moved from the southern front to assist 453 against the V2 earlier in the year. The two RAAF squadrons moved to Lympne on 6 April.

Three days later the Wing took off for the airfield at Petit Brugel (ALG B.90) in Belgium. The first bomber escort was led by the Wing Leader, Wing Commander Don Andrews, on 11 April escorting a hundred Halifaxes of No.4 Group to attack the railway yards at Bayreuth, north of Nuremberg. Another penetration escort on 13 April was aborted when the Lancasters, bound for Swinemunde harbour, did not appear at the rendezvous. The next mission on the 18th was flown out of Helmond (ALG B.86) in Holland and the accurate bombing against the airfield and naval base on Heligoland Island had a devastating effect. Nearly a thousand bombers flew on this attack, the last 1000-bomber raid against Germany. A week later the Squadron led by Flight Lieutenant 'Rusty' Leith escorted Lancasters and Halifaxes bombing the seaplane base on the Frisian island of Wangerooge, again with successful results...


On 2 May the Wing, as part of 84 Group, moved to the RAF Station at Hawkinge, a famous Battle of Britain airfield overlooking Folkestone. But these last days of the War for 453 were quiet. The final wartime mission for the Squadron was led by Flight Lieutenant Bob Clemesha on 3 May escorting a Dakota to Gilze Rijen in Holland. On board was Queen Wilhelmina of the Netherlands returning home. Four days later the Germans surrendered at the Allied Headquarters in Reims.

But peace did not mean immediate demobilisation for the personnel and disbandment of the Squadron. No.451 Squadron moved north to the Orkneys for its stint at Skeabrae on 14 May, and 453 was to move to RAF Acklington in Northumberland, but this was subsequently cancelled. With the end of operations, the intention of Fighter Command was to send young pilots from their Spitfire OTU to 453 to continue their operational training. Under this policy, 453 would build up to about fifty pilots on strength.

Peace also brought the return of the old members, returning from their escapades and captivity on the Continent. Flying Officer Ferguson had been the first to return on 1 May, as he had been held as a POW at Dunkirk. Flying Officers Marsh and Tonkin returned on the 16th, and Flight Lieutenant Bennett the next day. Warrant Officer Dowding visited on the 19th and Warrant Officer Carmichael on the 26th. The happy reunions were marred, however, when the Squadron was informed that on 26 May it would return to Skeabrae. To the joy of everyone this move was cancelled and 453 remained in the comfort of Hawkinge.

Sunday was now a rest day and the six days of flying were taken up by practice dive-bombing, strafing, air-to-air cine gun training, and some fighter affiliation with the USAAF. On 14 June the Squadron move finally eventuated, this time to Lasham in Hampshire. After Hawkinge, Lasham did not appear inviting, housed in tents with no water, no heat, no light and no sewers. Just as well it was summer. But if these discomforts were not bad enough, the Squadron also had to hand over the aircraft to the Group. The Spitfire XVIs were flown for the last time on 15 June, with the intention that 453 could borrow Spitfire XIVs from the Station until their new aircraft arrived.

451 Squadron also had arrived at Lasham, and the Australian Spitfire Wing was now preparing for the next move. When equipped with Spitfire XIVs, 451 and 453 would move to Germany as part of the occupation force. Unavailability of aircraft meant little flying in
June, but the new aeroplanes began appearing from 18 July. While ferrying one of the new Spitfires on the 20th, Flight Sergeant Doug Trevoragh experienced engine trouble and was forced to bale out.³

Re-equipment continued during August with the Spitfire XIV. This variant had finally replaced the famous Rolls-Royce Merlin powerplant, and was the first of the Griffon-engined Spitfires to enter large scale production. These aircraft featured five bladed propellers, a broad chord fin, and a cut-down rear fuselage with bubble canopy. The 453 Squadron aircraft had the ‘E’ universal wing, and were the FR version with the F.24 oblique camera for reconnaissance.

On 27 August, Squadron Leader Esau DFC relinquished command of 453. He had been the longest serving CO for the Squadron, having held the reins since September 1944, and had pioneered the dive-bombing operations against the V2 sites in Holland. The new CO was Squadron Leader Douglas Davidson DFC, a flight commander on 451.⁴ The following day the Squadron ground party set out for its new home in Fassberg, Germany, now as part of No.145 Wing.

Arriving on 1 August, 453 found that in addition to 451 Squadron, the Wing also consisted of two French squadrons, Nos 340 and 341. The Spitfires arrived at Fassberg on 4 September, and the following week deployed to Gilze Rijen for a flypast over The Hague on 14 September, celebrating Battle of Britain Day. With this came the news that 453 would move to Berlin for a month as part of the occupation force for the city.

The move to Berlin on 16 September was an honour for 453, for it became the first British squadron to be based in the German capital. The move through the Russian occupied territory went without incident, and 453 took up residence at the airfield at Gatow. Berlin was a mass of ruins from the Allied bombing, in contrast to the airfield buildings at Gatow which were in good condition.

However, little flying was able to be done in Berlin as the Russians objected to aircraft flying over their sector. These restrictions on flying meant that the Squadron could not achieve its training program required for the occupational units. On one sortie, however, Warrant Officer J. Fulton had a narrow escape; during take-off the canopy flew off, striking him on the head.⁵ Although being dazed and with severe lacerations to the scalp, he was able to make a perfect landing.

On 18 October, 453 left Berlin for its new base at Wunstorf near Hannover to form No.123 Wing with 451 Squadron and 349 and 350 Belgian Squadrons. On the 27th both flight commanders, Flight Lieutenants Bob Clemesha DFC and Jack Stansfield, were posted to England, continuing the drain of experience as new pilots joined the Squadron.⁶ Both had been with 453’s early days when it reformed at Drem in June 1942. Flight Lieutenant Neil Funston arrived from No.3 Squadron to take over ‘B’ Flight,⁷ and on 6 November Flight Lieutenant Michael West returned to 453 to take ‘A’ Flight.⁸ He had completed an operational tour on 453 in 1944.

During November volunteers were requested to serve in the Air Force of Occupation for a further twelve months. As the response was meagre with only a small percentage wishing to remain, it was now apparent the days of the two RAAF squadrons were numbered. The two Belgian squadrons withdrew and on 28 November, 451 left for its month in Berlin, arriving back at Wunstorf on 30 December.

On 4 January 1946, Headquarters 84 Group advised that both the Australian squadrons would disband on the 21st of the month. Two days later, 6 January, 453 Squadron received its final tragedy. The CO, Squadron Leader Doug Davidson, flying back to England in his Spitfire TZ106, crashed at Wichling in Kent and was killed. Wing Commander Tod Hilton DFC, who had been the Liaison Officer at RAAF Headquarters since November 1943 and had visited the Squadron on numerous occasions, assumed command of 453 on 7 January.⁹ He asked for two minutes’ silence out of respect for a popular CO, who after two operational tours, had died so near

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Many men had given their lives in Malaya and Singapore, over Britain, in France and in Holland. The Squadron had fought in the Far East until it had no aircraft left. In Europe it had fought and seen victory from the D-Day landings, the liberation of Paris, pioneering the counter attack to Hitler's ultimate weapon, and finally 453 was the first British squadron to be based in the conquered capital. In the memory of those men who had been lost, 453 had witnessed their victory.

to the cessation of flying. Squadron Leader Davidson was buried in the Brookwood War Cemetery in Woking, Surrey.

The last sorties were flown on 14 January. A week later No.453 Squadron RAAF was disbanded.

Captured Ju-88 in RAF markings.

Dornier 217 bomber (captured Luftwaffe).
My dear Mother,

By the time you receive this letter you will have officially been informed of my death. This is just to let you know that I am quite satisfied with my life and the way it has ended.

I entered this war with the knowledge that I had a rather small chance of coming out of it alive. I was under no false impressions—I knew I had to kill—and perhaps be killed. Since I commenced flying I have spent probably the happiest time of my life. I loved flying more than most things, and, if I had come through the war alive, I should probably have killed myself in civil flying. I am not just being fatalistic—I honestly think I would rather have ten years of action and thrills than 50 years of security in some stuffy office.

Since I’ve been in the Service I have met more real friends than I could hope to meet in a lifetime of peace. Not just self-styled friends who talk platitudes to one’s face, and, when it is conducive to their own well-being are quite prepared to disown your friendship; but men who daily risk their lives to save yours. There is nothing like the element of danger to seal a friendship.

I have seen a lot of men killed and have often wondered how I managed to escape alive from some shows, but I know that when the time comes I am quite prepared to face it.

Do not grieve too much, Mother. My life was not wasted. To date I have destroyed 11 enemy aircraft, which squares the account to the nation for my training. I am not sorry it happened this way. If I could live my life over again I would certainly have made lots of changes, but I should still have flown in the war, and tried to accomplish what I have. What better way to die than fighting against odds in the service of one’s country.

Above all, Mother dear, I have proved to my satisfaction that I was, at least, a man.

God Bless you

John


This letter was written by Slim Yarra while serving on Malta. He subsequently became ‘B’ flight commander on 453 Squadron, and was shot down and killed by anti-aircraft fire off Holland on 10 December 1942. His younger brother, Bob, joined 453 and was lost in action in France on 14 April 1944. Both the Yarra brothers died shortly after their 21st birthdays. This letter is reproduced with permission of the Yarra family.
1945 (from left): Russell Leith, Jack Stansfield, Norman Marsh.

1990 (as facing).
APPENDIX ONE

No. 453 Squadron RAAF Honour Roll

**FAR EAST**
- Pilot Officer D.R.L. Brown RNZAF
- Pilot Officer R.W. Drury
- Pilot Officer M. Irvine-Brown
- Sergeant R.R. Oelrich
- Sergeant E.A. Peterson
- Sergeant M.N. Read

Killed in Action 13.12.41
Killed in Accident 08.10.41
Killed in Action 13.12.41
Killed in Action 22.12.41
Killed in Action 22.12.41

**EUROPE**
- Squadron Leader D.M. Davidson DFC
- Pilot Officer M.H.I. de Cosier
- Flight Sergeant R.A. Dutneall
- Sergeant J.R. Furlong
- Flying Officer E.C. Gates
- LAC W. Gibbs
- Warrant Officer B.W. Gorman
- Warrant Officer A.H.J. Harris
- Pilot Officer K.G. Kinross
- Pilot Officer A.R. Menzies
- LAC J.W. Murray
- Flight Sergeant M.F. Nolan
- Pilot Officer B.T. Nossiter
- Flying Officer H.M. Parker
- Pilot Officer C.G. Riley
- Flight Sergeant D.G. Saunders
- Warrant Officer C.A. Seeney
- Flight Lieutenant H.L. Smith
- Sergeant D.H. Steele
- Flying Officer F.T. Thornley
- Warrant Officer M.J. Watson
- Flight Lieutenant J.W. Yarra DFM
- Pilot Officer R.E. Yarra

Killed in Action 10.12.42
Killed in Action 08.10.42
Killed in Action 13.06.42
Killed in Action 27.07.44
Killed in Action 11.06.44
Killed in Accident 01.08.42
Killed in Accident 13.06.44
Killed in Action 25.07.44
Killed in Action 11.06.44
Killed in Accident 28.08.42
Killed in Accident 15.08.43
Killed in Action 14.08.44
Killed in Action 10.12.42
Killed in Action 14.04.44

Died of Injuries 22.12.41
Died 27.12.45
Died from Injuries 01.01.46
## APPENDIX TWO

### No. 453 Squadron RAAF Battle Honours

<table>
<thead>
<tr>
<th>Date</th>
<th>Commanding Officer</th>
<th>Base</th>
<th>Aircraft</th>
</tr>
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<tbody>
<tr>
<td>23.05.41</td>
<td>Flt Lt W.K. Wells (Temp)</td>
<td>Bankstown</td>
<td></td>
</tr>
<tr>
<td>29.07.41</td>
<td>Sqn Ldr W.F. Allshorn</td>
<td>enroute Singapore</td>
<td></td>
</tr>
<tr>
<td>17.07.41</td>
<td>Sqn Ldr W.J. Harper (RAF)</td>
<td>Sembawang</td>
<td>Buffalo</td>
</tr>
<tr>
<td>09.10.41</td>
<td>Sqn Ldr W.J. Harper (RAF)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>02.12.41</td>
<td>Flt Lt T. Vigors DFC (RAF) (Temp)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.12.41</td>
<td></td>
<td>Ipoh</td>
<td></td>
</tr>
<tr>
<td>14.12.41</td>
<td>Sqn Ldr W.J. Harper (RAF)</td>
<td>Kuala Lumpur</td>
<td></td>
</tr>
<tr>
<td>19.12.41</td>
<td></td>
<td>Sembawang</td>
<td></td>
</tr>
<tr>
<td>22.12.41</td>
<td></td>
<td>Palembang</td>
<td></td>
</tr>
<tr>
<td>05.02.42</td>
<td></td>
<td>Batavia</td>
<td></td>
</tr>
<tr>
<td>10.02.42</td>
<td></td>
<td>enroute Adelaide</td>
<td></td>
</tr>
<tr>
<td>15.03.42</td>
<td>SQUADRON DISBANDED</td>
<td>Drem</td>
<td>Spitfire VB</td>
</tr>
<tr>
<td>18.06.42</td>
<td>Sqn Ldr F.V. Morello (RAF)</td>
<td>Hornchurch</td>
<td></td>
</tr>
<tr>
<td>26.09.42</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>01.11.42</td>
<td>Sqn Ldr J.R. Ratten</td>
<td>Southend</td>
<td></td>
</tr>
<tr>
<td>07.12.42</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.01.43</td>
<td>Wg Cdr J.H. Slater AFC (RAF) (Temp)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>03.02.43</td>
<td>Sqn Ldr J.R. Ratten</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27.03.43</td>
<td></td>
<td>Hornchurch</td>
<td>Spitfire VB/IX</td>
</tr>
<tr>
<td>02.04.43</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.05.43</td>
<td>Sqn Ldr K.M. Barclay</td>
<td>Ibsley</td>
<td>Spitfire VB/VC</td>
</tr>
<tr>
<td>28.06.43</td>
<td></td>
<td>Perranporth</td>
<td></td>
</tr>
<tr>
<td>21.07.43</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28.09.43</td>
<td>Sqn Ldr D.G. Andrews DFC</td>
<td>Skeabae</td>
<td></td>
</tr>
<tr>
<td>16.10.43</td>
<td></td>
<td>Skeabae/Sumburgh</td>
<td></td>
</tr>
<tr>
<td>20.10.43</td>
<td></td>
<td>Detling</td>
<td>Spitfire IXB</td>
</tr>
<tr>
<td>20.01.44</td>
<td></td>
<td>Ford</td>
<td></td>
</tr>
<tr>
<td>16.04.44</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>02.05.44</td>
<td>Sqn Ldr D.H. Smith DFC</td>
<td>B.11/Longues</td>
<td>Spitfire IXE</td>
</tr>
<tr>
<td>25.06.44</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18.08.44</td>
<td></td>
<td>B.19/Lingevres</td>
<td></td>
</tr>
<tr>
<td>13.07.44</td>
<td></td>
<td>B.40/Beauvais/Nivillers</td>
<td></td>
</tr>
<tr>
<td>02.09.44</td>
<td></td>
<td>B.52/Douai</td>
<td></td>
</tr>
<tr>
<td>05.09.44</td>
<td></td>
<td>B.70/Deurne</td>
<td></td>
</tr>
<tr>
<td>17.09.44</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28.09.44</td>
<td>Sqn Ldr E.A.R. Esau DFC</td>
<td>B.19/Longues</td>
<td>Spitfire IXB</td>
</tr>
<tr>
<td>30.09.44</td>
<td></td>
<td>Coltishall</td>
<td></td>
</tr>
<tr>
<td>18.10.44</td>
<td></td>
<td>Matlaske</td>
<td></td>
</tr>
<tr>
<td>11.11.44</td>
<td></td>
<td></td>
<td>Spitfire XVI</td>
</tr>
<tr>
<td>20.11.44</td>
<td></td>
<td>Swannington</td>
<td></td>
</tr>
<tr>
<td>07.01.46</td>
<td>Sqn Ldr T.E. Hilton DFC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21.01.46</td>
<td>SQUADRON DISBANDED</td>
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</table>
### APPENDIX THREE

**RAF Order of Battle Malaya—7 December 1941**

<table>
<thead>
<tr>
<th>Unit</th>
<th>Station</th>
<th>Aircraft</th>
<th>Role</th>
<th>No. Serviceable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Sqn RAAF</td>
<td>Kota Bahru</td>
<td>Hudson</td>
<td>Reconnaissance</td>
<td>10</td>
</tr>
<tr>
<td>8 Sqn RAAF</td>
<td>Kuantan</td>
<td>Hudson</td>
<td>Reconnaissance</td>
<td>12</td>
</tr>
<tr>
<td>21 Sqn RAAF</td>
<td>Sungei Patani</td>
<td>Buffalo</td>
<td>Fighter</td>
<td>12</td>
</tr>
<tr>
<td>27 Sqn RAF</td>
<td>Sungei Patani</td>
<td>Blenheim</td>
<td>Fighter</td>
<td>12</td>
</tr>
<tr>
<td>34 Sqn RAF</td>
<td>Tengah</td>
<td>Blenheim</td>
<td>Light Bomber</td>
<td>17</td>
</tr>
<tr>
<td>36 Sqn RAF</td>
<td>Seletar</td>
<td>Vildebeeste</td>
<td>Torpedo Bomber</td>
<td>15</td>
</tr>
<tr>
<td>62 Sqn RAF</td>
<td>Alor Star</td>
<td>Blenheim</td>
<td>Light Bomber</td>
<td>18</td>
</tr>
<tr>
<td>100 Sqn RAF</td>
<td>Seletar</td>
<td>Vildebeeste</td>
<td>Torpedo Bomber</td>
<td>14</td>
</tr>
<tr>
<td>205 Sqn RAF</td>
<td>Seletar</td>
<td>Singapore III</td>
<td>Reconnaissance</td>
<td>5</td>
</tr>
<tr>
<td>243 Sqn RAAF</td>
<td>Kallang</td>
<td>Buffalo</td>
<td>Fighter</td>
<td>17</td>
</tr>
<tr>
<td>453 Sqn RAAF</td>
<td>Sembawang</td>
<td>Buffalo</td>
<td>Fighter</td>
<td>18</td>
</tr>
<tr>
<td>488 Sqn RNZAF</td>
<td>Kallang</td>
<td>Buffalo</td>
<td>Fighter</td>
<td>17</td>
</tr>
</tbody>
</table>

Summary—Total number of aircraft serviceable for operations: 167

### APPENDIX FOUR

**No.453 Squadron Buffaloes August 1941–February 1942**

120 Brewster 339E Buffalo mark I aircraft were ordered by the RAF serialled W8131 to W8250. Most of these were delivered to Malaya and Singapore between February and May 1941. A further order of fifty aircraft, serialled AN168 to AN217, was delivered March–August 1941.

On 26 August 1941, eighteen Buffalo aircraft were allotted from the RAF Maintenance Unit at Seletar, 151 MU, to No.453 Squadron at Sembawang.

Nos 453 and 21 Squadrons combined on 24 December 1941, with all their aircraft pooled into a composite unit known as No.21/453 Squadron until 27 January 1942. On 30 January 1942 all remaining operational Buffaloes in Singapore were transferred to 453 Squadron.

<table>
<thead>
<tr>
<th>Serial Number</th>
<th>Squadron Code</th>
<th>Date on 453</th>
<th>Date off 453</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>W8151</td>
<td></td>
<td>26.8.41</td>
<td>9.12.41</td>
<td>crashed on take-off Sembawang (Collyer)</td>
</tr>
<tr>
<td>W8152</td>
<td></td>
<td>26.8.41</td>
<td>13.12.41</td>
<td>shot down at Butterworth, Malaya (Angus)</td>
</tr>
<tr>
<td>W8153</td>
<td></td>
<td>24.12.41</td>
<td>2.42</td>
<td>21/453 Sqn, coded GA-P, to Sumatra</td>
</tr>
<tr>
<td>W8156</td>
<td></td>
<td>15.12.41</td>
<td>1.42</td>
<td>67 Sqn damaged Johore 8.8.41, 21/453, unknown</td>
</tr>
<tr>
<td>W8157</td>
<td></td>
<td>26.8.41</td>
<td>12.41</td>
<td>believed lost due to enemy action</td>
</tr>
<tr>
<td>W8158</td>
<td>TD-N</td>
<td>26.8.41</td>
<td>13.12.41</td>
<td>forced-landed Pangean, Sumatra (Brown)</td>
</tr>
<tr>
<td>W8159</td>
<td></td>
<td>26.8.41</td>
<td>22.12.41</td>
<td>lost due enemy action Kuala Lumpur</td>
</tr>
<tr>
<td>W8160</td>
<td></td>
<td>15.12.41</td>
<td>22.12.41</td>
<td>lost due enemy action Kuala Lumpur</td>
</tr>
<tr>
<td>W8163</td>
<td></td>
<td>12.41</td>
<td>1.42</td>
<td>21/453 Sqn, unknown</td>
</tr>
<tr>
<td>W8176</td>
<td></td>
<td>26.8.41</td>
<td>13.12.41</td>
<td>forced-landed Pangean (Neale)</td>
</tr>
<tr>
<td>W8180</td>
<td></td>
<td>26.8.41</td>
<td>13.12.41</td>
<td>forced-landed Pangean (Livesey)</td>
</tr>
<tr>
<td>W8185</td>
<td></td>
<td>26.8.41</td>
<td>11.41</td>
<td>to 488 Sqn, shot down Singapore 13.1.42 by G3M</td>
</tr>
<tr>
<td>W8188</td>
<td></td>
<td>26.8.41</td>
<td>15.9.41</td>
<td>landing accident Sembawang (Clare)</td>
</tr>
<tr>
<td>W8192</td>
<td></td>
<td>12.41</td>
<td>13.12.41</td>
<td>forced-landed Kuala Kangsar, Malaya (O’Mara)</td>
</tr>
<tr>
<td>W8197</td>
<td></td>
<td>26.8.41</td>
<td>18.9.41</td>
<td>forced-landed 2 miles N of Sembawang (Griffiths)</td>
</tr>
<tr>
<td>W8202</td>
<td>TD-G</td>
<td>26.8.41</td>
<td>12.1.42</td>
<td>collided with AN171, crashed Mersing (Harrison)</td>
</tr>
<tr>
<td>W8206</td>
<td></td>
<td>12.41</td>
<td>21.12.41</td>
<td>ex-21 Sqn, shot down Kuala Lumpur (Leys)</td>
</tr>
<tr>
<td>W8207</td>
<td></td>
<td>12.41</td>
<td>22.12.41</td>
<td>lost due enemy action Kuala Lumpur</td>
</tr>
<tr>
<td>Serial Number</td>
<td>Squadron Code</td>
<td>Date on 453</td>
<td>Date off 453</td>
<td>Remarks</td>
</tr>
<tr>
<td>---------------</td>
<td>---------------</td>
<td>-------------</td>
<td>-------------</td>
<td>---------</td>
</tr>
<tr>
<td>W8208</td>
<td></td>
<td>26.8.41</td>
<td>8.10.41</td>
<td>forced-landed Buntang Island (Irvine-Brown)</td>
</tr>
<tr>
<td>W8209 TD-F</td>
<td>12.41</td>
<td>22.12.41</td>
<td></td>
<td>lost ramming Jap fighter Kuala Lumpur (Read)</td>
</tr>
<tr>
<td>W8210</td>
<td>26.8.41</td>
<td>9.12.41</td>
<td></td>
<td>crashed on landing Sembawang (Peterson)</td>
</tr>
<tr>
<td>W8211</td>
<td>12.41</td>
<td>19.12.41</td>
<td></td>
<td>crashed on landing Ipoh, Malaya (Collyer)</td>
</tr>
<tr>
<td>W8216</td>
<td>12.41</td>
<td>19.12.41</td>
<td></td>
<td>crashed on take-off Ipoh (Board)</td>
</tr>
<tr>
<td>W8217 TD-B</td>
<td>12.41</td>
<td>13.12.41</td>
<td></td>
<td>crashed-landed Ipoh (Bowes)</td>
</tr>
<tr>
<td>W8219</td>
<td>1.42</td>
<td>10.1.42</td>
<td>21/453</td>
<td>forced-landed Kuala Lumpur (Board)</td>
</tr>
<tr>
<td>W8225</td>
<td>12.41</td>
<td>13.12.41</td>
<td></td>
<td>missing in action near Butterworth (Oelrich)</td>
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<tr>
<td>W8226</td>
<td>26.8.41</td>
<td>5.11.41</td>
<td></td>
<td>overshot landing Sembawang (Gorringe)</td>
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<tr>
<td>W8231</td>
<td>12.41</td>
<td>13.12.41</td>
<td></td>
<td>believed shot down Penang (Vigors)</td>
</tr>
<tr>
<td>W8234</td>
<td>24.12.41</td>
<td>12.1.42</td>
<td>21/453</td>
<td>lost due enemy action</td>
</tr>
<tr>
<td>W8237</td>
<td>15.12.41</td>
<td>2.42</td>
<td>21/453</td>
<td>possibly to Sumatra</td>
</tr>
<tr>
<td>AN170</td>
<td>24.12.41</td>
<td>19.1.42</td>
<td>21/453</td>
<td>shot down Muar (Parsons)</td>
</tr>
<tr>
<td>AN171</td>
<td>12.41</td>
<td>12.1.42</td>
<td></td>
<td>collided with W8202 Mersing (Wallace)</td>
</tr>
<tr>
<td>AN174</td>
<td>24.12.41</td>
<td>19.1.42</td>
<td>21/453</td>
<td>lost due enemy action</td>
</tr>
<tr>
<td>AN175</td>
<td>12.41</td>
<td>22.12.41</td>
<td></td>
<td>lost due enemy action Kuala Lumpur (Griffiths)</td>
</tr>
<tr>
<td>AN176</td>
<td>24.12.41</td>
<td>1.42</td>
<td>21/453</td>
<td>unknown</td>
</tr>
<tr>
<td>AN177</td>
<td>24.12.41</td>
<td>1.42</td>
<td>21/453</td>
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</tr>
<tr>
<td>AN180</td>
<td>12.41</td>
<td>1.42</td>
<td>ex-21 Sqn GA-B, to 21 Sqn</td>
<td></td>
</tr>
<tr>
<td>AN184</td>
<td>12.41</td>
<td>22.12.41</td>
<td>ex-21 Sqn GA-M, lost due enemy action Kuala Lumpur</td>
<td></td>
</tr>
<tr>
<td>AN185 TD-V</td>
<td>11.41</td>
<td>1.42</td>
<td></td>
<td>unknown</td>
</tr>
<tr>
<td>AN189</td>
<td>15.12.41</td>
<td>1.42</td>
<td>to 488 Sqn, lost enemy action 19.1.42</td>
<td></td>
</tr>
<tr>
<td>AN202</td>
<td>24.12.41</td>
<td>1.42</td>
<td>21/453</td>
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</tr>
<tr>
<td>AN206</td>
<td>12.41</td>
<td>1.42</td>
<td>to 21 Sqn</td>
<td></td>
</tr>
<tr>
<td>AN210 TD-J</td>
<td>11.41</td>
<td>1.42</td>
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</tr>
<tr>
<td>AN211</td>
<td>24.12.41</td>
<td>3.1.42</td>
<td>forced-landed Gr Durian Is, near Sumatra (Griffiths)</td>
<td></td>
</tr>
<tr>
<td>AN213</td>
<td>12.41</td>
<td>1.42</td>
<td>to 21 Sqn</td>
<td></td>
</tr>
<tr>
<td>AN215</td>
<td>12.41</td>
<td>1.42</td>
<td>unknown</td>
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</tr>
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</table>

Notes: 1. This list is still incomplete. Most aircraft records of Buffaloes in the Far East were lost in the War, and this list has been compiled from:
   a. No.453 Squadron Operations Record Book,
   b. No.21 Squadron Operations Record Book,
   c. 'The Buffalo in RNZAF Service', D.P. Woodhall, *Air Britain Digest*, Jan 1971,
   d. 'RAF Serials W1000 to W9999', 'RAF Serials AA100 to AA999', *Air Britain.*

2. Aircraft annotated as 21/453 belonged to 21 Squadron until the merging of the Squadrons, and were essentially operated by the 21 Squadron flight of 21/453 during January 1942.
3. Records do not indicate those aircraft lost in late January and early February 1942, and therefore some fates are listed as unknown, and hence the identity of the aircraft evacuated to Sumatra remains a mystery. However, one aircraft was W8153, which was subsequently operated by an NEI Buffalo squadron.
4. Squadron code for 453 Squadron was 'TD', for 21 Squadron 'GA', and when merged as 21/453 aircraft retained their original codings.
APPENDIX FIVE

Japanese Aircraft Designations

The Japanese operated two separate air arms of the Imperial Japanese Army and the Imperial Japanese Navy. Aircraft were supplied in the main by the three Japanese manufacturers Mitsubishi, Nakajima and Kawasaki. They had established their self-sufficiency during the 1930s, and with great secrecy developed aircraft which were to surprise Western powers. The greatest shock was the manoeuvrable Mitsubishi A6M Navy Type 0 carrier fighter, known as the ‘Zero’ and allocated the code name ‘Zeke’, which was built in greater numbers than any other Japanese type.

This table compiles the Japanese aircraft encountered by No.453 Squadron in Malaya, and explains the complicated Japanese designation systems.1

JAPANESE ARMY AIR FORCE

Aircraft types of the JAAF were identified by an airframe, or Kitai (Ki), number. These aircraft also were known by a type number and description, determined by the year the aircraft was accepted into service, and its function. The type number was based on the Japanese year. Prior to the year 2599 (1939 AD) the last two digits were used; in 2600 (1940) the type number was 100; and from 2601 (1941) only the last digit was used. Also the description of the function for each aircraft was important to avoid confusion. For instance, aircraft accepted during the year 2597 (1937) had been the type number 97, and included:

- Army Type 97 Fighter (Nakajima Ki-27)
- Army Type 97 Light Bomber (Mitsubishi Ki–30)
- Army Type 97 Heavy bomber (Mitsubishi Ki-21)
- Army Type 97 Command Reconnaissance Plane (Mitsubishi Ki-15)

JAAF aircraft operated in the Malayan campaign included:

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Short Name</th>
<th>Designation</th>
<th>Type Number</th>
<th>Allied Code Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mitsubishi</td>
<td>A5M4</td>
<td>Type 96 Fighter</td>
<td>100</td>
<td>Claude</td>
</tr>
<tr>
<td>Mitsubishi</td>
<td>G3M2</td>
<td>Type 96 Attack Bomber</td>
<td>100</td>
<td>Nell</td>
</tr>
<tr>
<td>Mitsubishi</td>
<td>C5M2</td>
<td>Type 98 Reconnaissance</td>
<td>100</td>
<td>Babs</td>
</tr>
<tr>
<td>Mitsubishi</td>
<td>A6M2</td>
<td>Type 0 Fighter</td>
<td>100</td>
<td>Zeke</td>
</tr>
<tr>
<td>Mitsubishi</td>
<td>G4M1</td>
<td>Type 1 Attack Bomber</td>
<td>100</td>
<td>Betty</td>
</tr>
</tbody>
</table>

JAPANESE NAVY AIR FORCE

Aircraft types of the JNAF were identified by a short designation system of groups of letters and numbers (e.g. A6M2). The first letter, or type symbol, indicated the primary function of the aircraft, for example:

- A — carrier fighter
- B — carrier attack bomber
- C — reconnaissance plane
- G — attack bomber

The next number indicated a particular model of the aircraft, and minor modifications, not justifying a change in model number, could then be identified by a lower case letter (eg A6M5c).

The JNAF also used a type number system similar to the JAAF based on the last digits of the Japanese year. The exception was the year 2600 (1940), when the JNAF used the designation 0 instead of 100. Hence, the Navy Type 0 carrier fighter, the A6M series built by Mitsubishi, became widely known as the ‘Zero’.

JNAF aircraft operated in the Malayan campaign included:

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Short Name</th>
<th>Designation</th>
<th>Type Number</th>
<th>Allied Code Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mitsubishi</td>
<td>A5M4</td>
<td>Type 96 Fighter</td>
<td>100</td>
<td>Claude</td>
</tr>
<tr>
<td>Mitsubishi</td>
<td>G3M2</td>
<td>Type 96 Attack Bomber</td>
<td>100</td>
<td>Nell</td>
</tr>
<tr>
<td>Mitsubishi</td>
<td>C5M2</td>
<td>Type 98 Reconnaissance</td>
<td>100</td>
<td>Babs</td>
</tr>
<tr>
<td>Mitsubishi</td>
<td>A6M2</td>
<td>Type 0 Fighter</td>
<td>100</td>
<td>Zeke</td>
</tr>
<tr>
<td>Mitsubishi</td>
<td>G4M1</td>
<td>Type 1 Attack Bomber</td>
<td>100</td>
<td>Betty</td>
</tr>
</tbody>
</table>

PACIFIC CODE NAME SYSTEM

The use of colourful names given to Japanese aircraft during World War II began in the second half of 1942. These were allocated by the Air Technical Intelligence Unit of the Allied Air Forces to try to alleviate the confusion of Japanese designations. Air Commodore J.E. Hewitt, Director of Intelligence, with his USAAF and RAAF staff in Melbourne, began assigning these nicknames in July 1942. Thus the system was not in use during 453 Squadron’s period in theatre, but has been provided and used in the text to clarify aircraft types.

This name system was adopted by all allied forces, and in 1944 responsibility for assigning names was transferred to Washington DC. The code names were allotted on the following basis:

- Male first names — fighters
- Female first names — reconnaissance seaplanes
- Tree names — trainers
- Bird names — gliders

The JAAF were assigned responsibility for air operations over extended land areas, e.g. China, Malaya, Burma, NEI and the Philippines. At the outbreak of war the Service had some 1500 aircraft available. The two units to operate in the area were the 3rd and 5th Air Divisions. The 3rd was to carry out operations against Malaya, and the 5th against the Philippines.

**JAAF units were organised as follows:**

- **Air Division** — Hikoshidan
- **Wing** — Hikodan
- **Independent Wing** — Dokuritsu Hikotai

The order of battle for the **3rd Air Division (3rd Hikoshidan)** for its operations in Malaya is given below:

<table>
<thead>
<tr>
<th>Unit</th>
<th>Aircraft</th>
</tr>
</thead>
<tbody>
<tr>
<td>27th Sentai</td>
<td>23 Ki-51</td>
</tr>
<tr>
<td>59th Sentai</td>
<td>24 Ki-43</td>
</tr>
<tr>
<td>75th Sentai</td>
<td>25 Ki-48</td>
</tr>
<tr>
<td>90th Sentai</td>
<td>30 Ki-48 and Ki-30</td>
</tr>
<tr>
<td>12th Sentai</td>
<td>21 Ki-21</td>
</tr>
<tr>
<td>60th Sentai</td>
<td>39 Ki-21</td>
</tr>
<tr>
<td>64th Sentai</td>
<td>35 Ki-43 and 6 Ki-27</td>
</tr>
<tr>
<td>98th Sentai</td>
<td>42 Ki-21</td>
</tr>
<tr>
<td>31st Sentai</td>
<td>24 Ki-30</td>
</tr>
<tr>
<td>62nd Sentai</td>
<td>22 Ki-21</td>
</tr>
<tr>
<td>77th Sentai</td>
<td>27 Ki-27</td>
</tr>
<tr>
<td>70th Chutai</td>
<td>8 Ki-15</td>
</tr>
<tr>
<td>1st Sentai</td>
<td>42 Ki-27</td>
</tr>
<tr>
<td>11th Sentai</td>
<td>39 Ki-27</td>
</tr>
<tr>
<td>50th Chutai</td>
<td>5 Ki-15 and Ki-46</td>
</tr>
<tr>
<td>51st Chutai</td>
<td>6 Ki-15 and Ki-46</td>
</tr>
</tbody>
</table>

The **JNAF** operated both carrier-borne and land-based aircraft. The land-based **JNAF** units involved in the Malayan campaign belonged to the **11th Air Fleet**. **JNAF** units were organised as follows:

- **Air Fleet** — Koku Kantai
- **Air Flotilla** — Koku Sentai
- **Group** — Kokutai

On the eve of the Pacific War, the Japanese Navy had 300 combat aircraft. The order of battle for the **11th Air Fleet (11th Koku Kantai)** for its operations in Malaya was:

<table>
<thead>
<tr>
<th>Unit</th>
<th>Aircraft</th>
</tr>
</thead>
<tbody>
<tr>
<td>21st Koku Sentai</td>
<td>Kanoya Kokutai</td>
</tr>
<tr>
<td></td>
<td>First Kokutai</td>
</tr>
<tr>
<td></td>
<td>Toko Kokutai</td>
</tr>
<tr>
<td>22nd Koku Sentai</td>
<td>Mihoro Kokutai</td>
</tr>
<tr>
<td></td>
<td>Genzan Kokutai</td>
</tr>
<tr>
<td></td>
<td>Kanoya Kokutai</td>
</tr>
<tr>
<td>Special Detachment</td>
<td>6 C5M2, 25 A6M2, 12 A5M4</td>
</tr>
<tr>
<td>23rd Koku Sentai</td>
<td>Takao Kokutai</td>
</tr>
<tr>
<td></td>
<td>Tainan Kokutai</td>
</tr>
<tr>
<td></td>
<td>Third Kokutai</td>
</tr>
<tr>
<td>Special seaplane tender detachment</td>
<td>20 seaplanes</td>
</tr>
<tr>
<td></td>
<td>Mizuho</td>
</tr>
<tr>
<td></td>
<td>Chitose</td>
</tr>
</tbody>
</table>

Note that for the **22nd Air Flotilla** the aircraft details vary from the attacking force against the **Prince of Wales and Repulse** (see Chapter 4), where subsequent Japanese interrogation indicated the **Kanoya Group** flew the G3M2 'Nell' in this attack, and the other Groups flew two types, the G3M2 'Nell' and G4M1 'Betty'.

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1. Francillon, op cit, p.34.
2. ibid, p.42.
### APPENDIX SEVEN

**No.453 Squadron Claims Against Japanese Aircraft**

<table>
<thead>
<tr>
<th>Date</th>
<th>Pilot</th>
<th>Destroyed</th>
<th>Probable</th>
<th>Damaged</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1941</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.12</td>
<td>Vanderfield</td>
<td>2 Army 97 bomber</td>
<td></td>
<td></td>
<td>Buffalo wheels down, Penang</td>
</tr>
<tr>
<td>13.12</td>
<td>Collyer</td>
<td>1½ dive bomber</td>
<td>possible Army Type 99, Penang</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.12</td>
<td>Read</td>
<td>1½ dive bomber</td>
<td>possible Army Type 99, Penang</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.12</td>
<td>Vigors</td>
<td>3 Army 97 ftrs</td>
<td>Vigors shot down, Penang</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.12</td>
<td>Grace</td>
<td>1 fighter</td>
<td>Butterworth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.12</td>
<td>Board</td>
<td>1 Navy 96 fighter</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.12</td>
<td>Seagoe</td>
<td>1 Navy 96 ftr</td>
<td>Seagoe wounded, Alor Star</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.12</td>
<td>Board</td>
<td>1 Army 97 bomber</td>
<td></td>
<td></td>
<td>Ipoh gun jam incident</td>
</tr>
<tr>
<td>17.12</td>
<td>Clare</td>
<td>1 Zero</td>
<td>Ipoh</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17.12</td>
<td>Summerton</td>
<td>1 Zero</td>
<td>Ipoh</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21.12</td>
<td>Leys</td>
<td>1 Zero</td>
<td>Leys shot down, Alor Star</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21.12</td>
<td>Peterson</td>
<td>1 dive bomber</td>
<td>1 dive bomber</td>
<td>possible Army Type 99</td>
<td></td>
</tr>
<tr>
<td>22.12</td>
<td>Read</td>
<td>1 fighter</td>
<td>Read killed ramming, KL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22.12</td>
<td>Griffiths</td>
<td>1 fighter</td>
<td>Griffiths wounded, KL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22.12</td>
<td>Clare</td>
<td>1 fighter</td>
<td>shot down Major Numa, KL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22.12</td>
<td>Vanderfield</td>
<td>1 fighter</td>
<td>KL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22.12</td>
<td>Collyer</td>
<td>1 fighter</td>
<td>Collyer wounded, KL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22.12</td>
<td>Scrimgeour</td>
<td>1 fighter</td>
<td>Scrimgeour shot down, wounded, KL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22.12</td>
<td>Board</td>
<td>1 fighter</td>
<td>Board shot down, KL</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 fighters</td>
<td>not attributed to any pilot</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1942</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.01</td>
<td>Vanderfield</td>
<td>1 Army 97 bomber</td>
<td></td>
<td></td>
<td>Singapore</td>
</tr>
<tr>
<td>15.01</td>
<td>Kinnimont</td>
<td>1 Army 97 bomber</td>
<td></td>
<td></td>
<td>Singapore, forced-landed</td>
</tr>
</tbody>
</table>

### Notes:
1. Many claims from pilots were misleading because of the confusing Japanese aircraft designation system, as this period was before the Allied code name system was introduced.
2. Some aircraft were claimed as Navy '0' fighters—the Zero—but most of these could have been Army Type 1 fighters, later known as the 'Oscar'. Some dive bombers were described as Junkers 87 Stukas, but were most probably the Army Type 99, the 'Sonia'. The description by pilots of combat with Me-109s remains unclear, as the only Japanese in-line engined fighter was the Ki-61 'Tony', which did not see service until 1943.
3. The confused battle of Kuala Lumpur on 22 December 1941 has led to some kills not being accredited to surviving pilots. Livesey, for instance, who was wounded and crash-landed at Kuala Lumpur, was unsure of the number of probables he scored, so perhaps one or two of these could be credited to him. Again, most of these claims were for 'Zeros', but almost certainly were Army Type 1s ('Oscars').
4. KL = Kuala Lumpur.
APPENDIX EIGHT

No.453 Squadron Spitfires

Note: This is the most complete list that can be compiled on No.453 Squadron's Spitfires. Errors do occur in the Squadron's Operations Record Book (ORB) with incorrect serial numbers, such as MK586 written as MK568, or NH357 written as PL357. Often the RAF aircraft status card (AM Form 78), which records an aircraft's movements between units, does not always record when squadrons of a wing swap aircraft, nor does it always record the exact date when an aircraft is received by a squadron or is lost in combat.

SPITFIRE VB June 42–March 43

Eight aircraft delivered 23 June 1942 to Drem, Scotland, to form 453 Squadron as part of No.13 Group. Some early aircraft were new, others delivered from other squadrons, including AA936 (FN–L), AR296 (FN–X) and EN786 (FN–T) from 331 Squadron. At Drem, 453 formed the Wing with No.242 Squadron and from August with 222 Squadron. No.453 deployed with its aircraft to Hornchurch on 26 September 1942 to join 11 Group, later moving to Southend but remaining in the Hornchurch Wing with 122 and 350 Squadrons.

<table>
<thead>
<tr>
<th>Serial Number</th>
<th>Squadron Code</th>
<th>Date on 453</th>
<th>Date off 453</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>W3127</td>
<td>FU–U</td>
<td>2.1.43</td>
<td>31.3.43</td>
<td>to 222 Sqn (ex GW–X 340 Sqn)</td>
</tr>
<tr>
<td>W3574</td>
<td>FU–Q</td>
<td>11.10.42</td>
<td>31.3.43</td>
<td>to 222 Squadron</td>
</tr>
<tr>
<td>AA936</td>
<td>FU–B</td>
<td>8.42</td>
<td>31.3.43</td>
<td>to 222 Sqn (ex FN–L 331 Sqn), collided with AD298 on operations (Menzies)</td>
</tr>
<tr>
<td>AB792</td>
<td>FU–D</td>
<td>13.9.42</td>
<td>11.10.42</td>
<td>to 222 Squadron</td>
</tr>
<tr>
<td>AB814</td>
<td>FU–K</td>
<td>6.11.42</td>
<td>31.3.43</td>
<td>crash-land Southend (Barrien), to AST (ex GW–M of 340 Squadron)</td>
</tr>
<tr>
<td>AD228</td>
<td>FU–T</td>
<td>16.12.42</td>
<td>18.1.43</td>
<td>flying accident Cat E</td>
</tr>
<tr>
<td>AD298</td>
<td></td>
<td>10.9.42</td>
<td>11.10.42</td>
<td>collided with AB792 on operations (Nossiter)</td>
</tr>
<tr>
<td>AD383</td>
<td>FU–R,</td>
<td>23.12.42</td>
<td>31.3.42</td>
<td>damaged by flak 13.1.43; to 222 Squadron</td>
</tr>
<tr>
<td></td>
<td>FU–?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AD386</td>
<td></td>
<td>1.9.42</td>
<td>17.12.42</td>
<td>to Air Service Training</td>
</tr>
<tr>
<td>AD474</td>
<td>FU–C</td>
<td>16.11.42</td>
<td>31.3.43</td>
<td>to 222 Squadron</td>
</tr>
<tr>
<td>AD475</td>
<td>FU–T</td>
<td>29.1.43</td>
<td>31.3.43</td>
<td>to 222 Squadron</td>
</tr>
<tr>
<td>AR296</td>
<td>FU–M</td>
<td>8.42</td>
<td>17.12.42</td>
<td>to Heston A/c Ltd (ex FN–X of 331 Squadron)</td>
</tr>
<tr>
<td>AR340</td>
<td>FU–E</td>
<td>10.42</td>
<td>31.3.43</td>
<td>to 222 Squadron</td>
</tr>
<tr>
<td>AR362</td>
<td>FU–V</td>
<td>12.7.42</td>
<td>31.3.43</td>
<td>to 222 Squadron</td>
</tr>
<tr>
<td>AR373</td>
<td>FU–X</td>
<td>9.12.42</td>
<td>31.3.43</td>
<td>to 222 Squadron</td>
</tr>
<tr>
<td>AR392</td>
<td>FU–J</td>
<td>23.12.42</td>
<td>31.3.43</td>
<td>to 222 Squadron</td>
</tr>
<tr>
<td>AR396</td>
<td>FU–K</td>
<td>31.1.43</td>
<td>31.3.43</td>
<td>to 222 Squadron</td>
</tr>
<tr>
<td>BL233</td>
<td>FU–S</td>
<td>9.12.42</td>
<td>31.3.43</td>
<td>damaged taxying Manston 18.1.43; to 222 Squadron</td>
</tr>
<tr>
<td>BL292</td>
<td></td>
<td>11.7.42</td>
<td>31.3.43</td>
<td>to 222 Squadron</td>
</tr>
<tr>
<td>BL302</td>
<td>FU–W</td>
<td>3.1.43</td>
<td>31.3.43</td>
<td>to 222 Sqn (ex DW–R of 610 Sqn)</td>
</tr>
<tr>
<td>BL434</td>
<td></td>
<td>29.6.42</td>
<td>10.42</td>
<td>to Air Service Training for conversion to Seafire</td>
</tr>
<tr>
<td>BL496</td>
<td></td>
<td>12.10.42</td>
<td>16.11.42</td>
<td>damaged landing Hornchurch</td>
</tr>
<tr>
<td>BL516</td>
<td>FU–F</td>
<td>19.9.42</td>
<td>31.3.43</td>
<td>to 222 Squadron</td>
</tr>
<tr>
<td>BL586</td>
<td></td>
<td>12.7.42</td>
<td>16.12.42</td>
<td>to Air Service Training</td>
</tr>
<tr>
<td>BL593</td>
<td>FU–A</td>
<td>11.7.42</td>
<td>17.12.42</td>
<td>to 222 Squadron</td>
</tr>
<tr>
<td>BL630</td>
<td></td>
<td>23.7.42</td>
<td>16.12.42</td>
<td>to 65 Squadron</td>
</tr>
<tr>
<td>BL638</td>
<td>FU–G</td>
<td>30.12.42</td>
<td>31.3.43</td>
<td>to 222 Squadron</td>
</tr>
<tr>
<td>BL671</td>
<td>FU–H</td>
<td>23.12.42</td>
<td>31.3.43</td>
<td>to 222 Squadron</td>
</tr>
<tr>
<td>BL899</td>
<td>FU–W</td>
<td>11.7.42</td>
<td>10.12.42</td>
<td>shot down near Flushing, Holland (De Cosier)</td>
</tr>
<tr>
<td>BL923</td>
<td></td>
<td>11.10.42</td>
<td>31.10.42</td>
<td>crashed in sea near Manston (Furlong)</td>
</tr>
<tr>
<td>BL983</td>
<td>FU–D</td>
<td>9.42</td>
<td>10.12.42</td>
<td>to AST for conversion to Seafire</td>
</tr>
<tr>
<td>BM113</td>
<td></td>
<td>12.7.42</td>
<td>23.8.42</td>
<td>damaged taxying Drem (Blumer)</td>
</tr>
<tr>
<td>BM152</td>
<td>FU–Z</td>
<td>25.7.42</td>
<td>31.3.43</td>
<td>to 222 Squadron</td>
</tr>
<tr>
<td>BM255</td>
<td>FU–T</td>
<td>11.7.42</td>
<td>17.12.42</td>
<td>to Heston A/c Ltd</td>
</tr>
<tr>
<td>BM528</td>
<td>FU–G</td>
<td>21.6.42</td>
<td>13.12.42</td>
<td>crashed landing Southend (Barrien)</td>
</tr>
<tr>
<td>BM572</td>
<td></td>
<td>23.6.42</td>
<td>12.9.42</td>
<td>damaged flying Acc Cat B</td>
</tr>
<tr>
<td>BM631</td>
<td>FU–X</td>
<td>11.7.42</td>
<td>9.5.43</td>
<td>to AST for Seafire conversion</td>
</tr>
<tr>
<td>EN774</td>
<td></td>
<td>22.7.42</td>
<td>1.8.42</td>
<td>crashed near Drem (Riley)</td>
</tr>
<tr>
<td>EN775</td>
<td></td>
<td>17.8.42</td>
<td>15.10.42</td>
<td>damaged 18.9.42; to 65 Squadron</td>
</tr>
<tr>
<td>EN786</td>
<td></td>
<td>8.42</td>
<td>31.10.42</td>
<td>shot down in sea near Hawkinge (Galway), (ex FN–T of 331 Squadron)</td>
</tr>
<tr>
<td>EN824</td>
<td>FU–U</td>
<td>23.6.42</td>
<td>10.12.42</td>
<td>‘Ned V’ shot down near Flushing (J. Yarra)</td>
</tr>
<tr>
<td>EN914</td>
<td></td>
<td>11.7.42</td>
<td>31.10.42</td>
<td>damaged taxying Manston (McDermott)</td>
</tr>
<tr>
<td>EN947</td>
<td>FU–Y</td>
<td>7.7.42</td>
<td>31.3.43</td>
<td>to 222 Squadron</td>
</tr>
<tr>
<td>EN950</td>
<td>FU–L</td>
<td>23.6.42</td>
<td>31.3.43</td>
<td>damaged 14.10.42; to 222 Squadron</td>
</tr>
<tr>
<td>EP191</td>
<td>FU–A</td>
<td>23.6.42</td>
<td>14.9.42</td>
<td>damaged 18.7.42; to 501 Squadron coded SD–P</td>
</tr>
</tbody>
</table>

SPITFIRE VB April 43–June 43

During this period 453 operated from Hornchurch, where it replaced 64 Squadron, forming a wing with 122 and 222 Squadrons, flying both mark VB and IXB Spitfires. Sometimes aircraft from these Squadrons were borrowed, examples being W3574, AA729 and EN780. The mark Vs were generally used for gunnery training. In June 1943, 453 swapped bases with 129 Squadron at Ibsley to join No.10 Group, joining the Wing with Nos 165 and 616 Squadrons.
### SPITFIRE IXB April 43–June 43

<table>
<thead>
<tr>
<th>Serial Number</th>
<th>Squadron Code</th>
<th>Date on 453</th>
<th>Date off 453</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>BR140</td>
<td>FU-J</td>
<td>2.4.43</td>
<td>26.6.43</td>
<td>to 129 Squadron coded DV-J</td>
</tr>
<tr>
<td>BR600</td>
<td>FU-C</td>
<td>2.4.43</td>
<td>27.5.43</td>
<td>flying accident Cat B (Gaze), to AST (ex SH-V of 65 Squadron)</td>
</tr>
<tr>
<td>BR601</td>
<td>FU-S</td>
<td>2.4.43</td>
<td>6.43</td>
<td>to AST</td>
</tr>
<tr>
<td>BR624</td>
<td>FU-B</td>
<td>2.4.43</td>
<td>28.5.43</td>
<td>failed to return from operations</td>
</tr>
<tr>
<td>BS227</td>
<td>FU-E, FU-U</td>
<td>27.3.43</td>
<td>26.6.43</td>
<td>to 129 Squadron coded DV-?</td>
</tr>
<tr>
<td>BS280</td>
<td>FU-V</td>
<td>2.4.43</td>
<td>28.6.43</td>
<td>to 129 Squadron coded DV-?</td>
</tr>
<tr>
<td>BS282</td>
<td>FU-W</td>
<td>2.4.43</td>
<td>29.4.33</td>
<td>to AST</td>
</tr>
<tr>
<td>BS315</td>
<td>FU-Y</td>
<td>2.4.43</td>
<td>28.6.43</td>
<td>to 129 Squadron (ex SH-K 65 Sqn)</td>
</tr>
<tr>
<td>BS400</td>
<td>FU-X</td>
<td>2.4.43</td>
<td>22.6.43</td>
<td>lost on operations Schonwen, Holland (Gray)</td>
</tr>
<tr>
<td>BS441</td>
<td>FU-T</td>
<td>2.4.43</td>
<td>28.6.43</td>
<td>to 129 Squadron coded DV-T</td>
</tr>
<tr>
<td>ENS22</td>
<td>FU-F</td>
<td>2.4.43</td>
<td>7.5.43</td>
<td>'Tikke', to AST, 331 Squadron</td>
</tr>
<tr>
<td>ENS25</td>
<td>FU-A, FU-L</td>
<td>4.4.33</td>
<td>12.7.43</td>
<td>to 129 Squadron coded DV-L</td>
</tr>
<tr>
<td>MA232</td>
<td>FU-A</td>
<td>11.5.43</td>
<td>28.6.43</td>
<td>to 129 Squadron coded DV-G</td>
</tr>
<tr>
<td>MA594</td>
<td>FU-A</td>
<td>26.6.43</td>
<td>28.6.43</td>
<td>to 129 Squadron coded DV-V</td>
</tr>
</tbody>
</table>

The AM Form 78s show that on 17 July 1943 No.453 Squadron Spitfire VB and IX aircraft were swapped with No.129 Squadron at Hornchurch for Spitfire VB and VCs, but the 453 Operations Record Book records that by 5 July only Spitfire Vs remained on the Squadron. Most probably administrative delays occurred in recording aircraft movements, as these aircraft were actually changed over with the move to Ibsley on 28 June.

### SPITFIRE VB and VC June 43–January 44

453 moved from Ibsley to Perranporth in August 1943, remaining in 10 Group, to join a wing with 66 Squadron. Spitfire VCs were only operated until October 1943, when 453 moved to Skeabreae in the Orkney Islands as part of 14 Group.

<table>
<thead>
<tr>
<th>Serial Number</th>
<th>Squadron Code</th>
<th>Date on 453</th>
<th>Date off 453</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>P8747</td>
<td>FU-Y</td>
<td>27.8.43</td>
<td>15.10.43</td>
<td>to 341 Squadron</td>
</tr>
<tr>
<td>W3305</td>
<td>FU-B</td>
<td>8.43</td>
<td>24.8.43</td>
<td>to 341 Squadron</td>
</tr>
<tr>
<td>W3941</td>
<td>FU-U</td>
<td>28.6.43</td>
<td>23.7.43</td>
<td>to 350 Squadron</td>
</tr>
<tr>
<td>AA878</td>
<td>FU-B</td>
<td>15.10.43</td>
<td>20.1.44</td>
<td>damaged Sumburgh 27.10; to 602 Squadron</td>
</tr>
<tr>
<td>AA966</td>
<td>FU-T</td>
<td>10.43</td>
<td>1.44</td>
<td>to Royal Navy 26.2.44</td>
</tr>
<tr>
<td>AA978</td>
<td>FU-G</td>
<td>5.7.43</td>
<td>1.44</td>
<td>storage</td>
</tr>
<tr>
<td>AB193</td>
<td>FU-F</td>
<td>28.6.43</td>
<td>15.10.43</td>
<td>to 341 Squadron</td>
</tr>
<tr>
<td>AB199</td>
<td>FU-E</td>
<td>28.6.43</td>
<td>15.10.43</td>
<td>to 341 Squadron</td>
</tr>
<tr>
<td>AB209</td>
<td>FU-E</td>
<td>15.10.43</td>
<td>20.1.44</td>
<td>to 341 Squadron</td>
</tr>
<tr>
<td>AB213</td>
<td>FU-J</td>
<td>28.6.43</td>
<td>24.7.43</td>
<td>struck BL68 landing Bradwell Bay, Essex</td>
</tr>
<tr>
<td>AB860</td>
<td>FU-P</td>
<td>5.9.43</td>
<td>15.10.43</td>
<td>to 314 Squadron</td>
</tr>
<tr>
<td>AB898</td>
<td>FU-P</td>
<td>15.10.43</td>
<td>19.1.44</td>
<td>to 602 Squadron</td>
</tr>
<tr>
<td>AB916</td>
<td>FU-W</td>
<td>15.10.43</td>
<td>20.1.44</td>
<td>to 602 Squadron</td>
</tr>
<tr>
<td>AD266</td>
<td>FU-N</td>
<td>15.10.43</td>
<td>19.1.44</td>
<td>to 602 Squadron</td>
</tr>
<tr>
<td>AD357</td>
<td>FU-A</td>
<td>15.10.43</td>
<td>19.1.44</td>
<td>to 602 Squadron</td>
</tr>
<tr>
<td>AR296</td>
<td>FU-M</td>
<td>15.10.43</td>
<td>20.1.44</td>
<td>to 602 Squadron</td>
</tr>
<tr>
<td>AR376</td>
<td>FU-R</td>
<td>15.10.43</td>
<td>25.1.44</td>
<td>to 602 Squadron (ex 303 Sqn coded RF-B)</td>
</tr>
<tr>
<td>AR567</td>
<td>FU-T</td>
<td>28.6.43</td>
<td>13.12.43</td>
<td>to 340 Squadron</td>
</tr>
<tr>
<td>AR607</td>
<td>FU-D</td>
<td>28.6.43</td>
<td>15.10.43</td>
<td>to 341 Squadron</td>
</tr>
<tr>
<td>BL418</td>
<td>FU-C</td>
<td>11.12.43</td>
<td>20.1.44</td>
<td>to 602 Squadron</td>
</tr>
<tr>
<td>BL437</td>
<td>FU-K</td>
<td>15.10.43</td>
<td>20.1.44</td>
<td>to 602 Squadron</td>
</tr>
<tr>
<td>BL686</td>
<td>FU-D</td>
<td>15.10.43</td>
<td>20.1.44</td>
<td>damaged 7.11.43; to 602 Squadron</td>
</tr>
<tr>
<td>BL696</td>
<td>FU-J</td>
<td>15.10.43</td>
<td>20.1.44</td>
<td>to 602 Squadron</td>
</tr>
<tr>
<td>BL727</td>
<td>FU-F</td>
<td>15.10.43</td>
<td>20.1.44</td>
<td>to 602 Squadron</td>
</tr>
<tr>
<td>BL780</td>
<td>FU-I</td>
<td>15.10.43</td>
<td>20.1.44</td>
<td>to 602 Squadron</td>
</tr>
<tr>
<td>BL957</td>
<td>FU-T</td>
<td>15.10.43</td>
<td>20.1.44</td>
<td>to 602 Squadron</td>
</tr>
<tr>
<td>BL968</td>
<td>FU-K</td>
<td>28.6.43</td>
<td>24.7.43</td>
<td>to 602 Squadron</td>
</tr>
<tr>
<td>BM156</td>
<td>FU-S</td>
<td>17.10.43</td>
<td>10.43</td>
<td>to 341 Squadron</td>
</tr>
<tr>
<td>BM200</td>
<td>FU-Q</td>
<td>17.10.43</td>
<td>25.1.44</td>
<td>to 602 Squadron</td>
</tr>
<tr>
<td>BM243</td>
<td>FU-C</td>
<td>19.8.43</td>
<td>15.10.43</td>
<td>to 341 Squadron</td>
</tr>
<tr>
<td>BM317</td>
<td>FU-A</td>
<td>28.6.43</td>
<td>15.10.43</td>
<td>to 341 Squadron</td>
</tr>
<tr>
<td>BM480</td>
<td>FU-U</td>
<td>20.11.43</td>
<td>1.44</td>
<td>stored; to 234 Squadron</td>
</tr>
<tr>
<td>BM583</td>
<td>FU-S</td>
<td>2.12.43</td>
<td>20.1.44</td>
<td>to 602 Squadron</td>
</tr>
<tr>
<td>EE601</td>
<td>FU-G</td>
<td>28.6.43</td>
<td>7.10.43</td>
<td>to 306 Squadron</td>
</tr>
<tr>
<td>EE602</td>
<td>FU-F</td>
<td>28.6.43</td>
<td>17.7.43</td>
<td>crashed during Army display Netheravon (Andrews)</td>
</tr>
<tr>
<td>EE611</td>
<td>FU-H, FU-U</td>
<td>28.6.43</td>
<td>8.43</td>
<td>to Boscombe Down</td>
</tr>
</tbody>
</table>
On 15 October 1943, 453 Squadron Spitfire VBs were swapped with 341 (Free French) Squadron. (Delays in recording this on the AM Form 78 showed this transfer occurred on 3 November.) These aircraft remained at Skeabrae when 602 Squadron relieved 453 there on 20 January 1944. The 602 Squadron Operations Record Book described these aircraft as ‘clipped, clapped and cropped’, referring to the shortened wings, the hard wear these aircraft had been subjected to, and the reduced size of the Merlin’s supercharger blades.

**SPITFIRE VII October 43–November 43**

Three mark VII Spitfires were flown by 453 at Skeabrae.

**SPITFIRE IXB April 43–June 43**

453 moved to 125 Wing Airfield at Detling, Kent on 20 January 1944 and inherited 602 Squadron’s mark IXBs. Many of these aircraft were flown until March 1944 with 602’s ‘LO’ code letters. 453 Squadron ORB records ‘the pilots were loud in their praises’ of the Spitfire mark IX after the mark V. In March 1944, 602 Squadron returned from Skeabrae and with 132 Squadron these three units moved as 125 Wing to Ford in April, in anticipation of the invasion of Europe. During the invasion 125 Wing formed part of 83 Group in the 2nd Tactical Air Force, and moved to Normandy on 25 June (D + 19). Many aircraft were swapped to and from No.602 Squadron, quite often this not being recorded on the RAF AM Form 78 (the aircraft status card).
<table>
<thead>
<tr>
<th>Serial Number</th>
<th>Squadron Code</th>
<th>Date on 453</th>
<th>Date off 453</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>MJ716</td>
<td>FU-Y</td>
<td>1.44</td>
<td>3.44</td>
<td>to 602 Squadron</td>
</tr>
<tr>
<td>MH736</td>
<td>FU-X</td>
<td>1.44</td>
<td>3.44</td>
<td>to 602 Squadron coded LO-X</td>
</tr>
<tr>
<td>MH779</td>
<td>FU-N</td>
<td>3.44</td>
<td>14.7.44</td>
<td>damaged on operations</td>
</tr>
<tr>
<td>MH882</td>
<td>FU-E</td>
<td>1.44</td>
<td>27.3.44</td>
<td>FAAC 1.3 to AST (ex LO-E of 602 Squadron)</td>
</tr>
<tr>
<td>MJ147</td>
<td>FU-B</td>
<td>1.44</td>
<td>3.44</td>
<td>to 421 Squadron (ex 602 Squadron LO-B)</td>
</tr>
<tr>
<td>MJ276</td>
<td>FU-C</td>
<td>1.44</td>
<td>3.44</td>
<td>to 602 Squadron</td>
</tr>
<tr>
<td>MJ303</td>
<td>FU-O</td>
<td>1.44</td>
<td>3.44</td>
<td>to 602 Squadron</td>
</tr>
<tr>
<td>MJ305</td>
<td>FU-K</td>
<td>1.44</td>
<td>3.44</td>
<td>damaged 5.2.44; to 602 Sqn LO-K</td>
</tr>
<tr>
<td>MJ333</td>
<td>FU-M</td>
<td>3.44</td>
<td>26.7.44</td>
<td>to 421 Squadron (ex 602 Squadron (LO-J))</td>
</tr>
<tr>
<td>MJ339</td>
<td>FU-Z</td>
<td>1.44</td>
<td>3.44</td>
<td>to 602 Sqn, crash-landed Normandy; 7.6.44 (ex DB-P of 411 Squadron)</td>
</tr>
<tr>
<td>MJ398</td>
<td>FU-W</td>
<td>1.44</td>
<td>3.44</td>
<td>to 602 Squadron</td>
</tr>
<tr>
<td>MJ398</td>
<td>FU-W</td>
<td>6.44</td>
<td>25.6.44</td>
<td>believed damaged landing B.9 France (Seeley)</td>
</tr>
<tr>
<td>MJ789</td>
<td>FU-B</td>
<td>4.44</td>
<td>11.6.44</td>
<td>shot down by flak Normandy (H. Smith)</td>
</tr>
<tr>
<td>MJ981</td>
<td>FU-F</td>
<td>1.44</td>
<td>28.2.44</td>
<td>to 405 ARF; to 66 Sqn coded LZ-N</td>
</tr>
<tr>
<td>MK191</td>
<td>FU-A</td>
<td>26.1.44</td>
<td>3.44</td>
<td>to 602 Squadron</td>
</tr>
<tr>
<td>MK235</td>
<td>FU-A</td>
<td>3.44</td>
<td>23.4.44</td>
<td>damaged by flak; to 421 Squadron</td>
</tr>
<tr>
<td>MK255</td>
<td>FU-V</td>
<td>1.44</td>
<td>3.44</td>
<td>to 602 Squadron</td>
</tr>
<tr>
<td>MK258</td>
<td>FU-D</td>
<td>3.44</td>
<td>4.44</td>
<td>to 504 Squadron</td>
</tr>
<tr>
<td>MK260</td>
<td>FU-K</td>
<td>3.44</td>
<td>6.7.44</td>
<td>shot down by flak, forced-land near Caen, France (Baker) to 401 Squadron</td>
</tr>
<tr>
<td>MK284</td>
<td>FU-U,</td>
<td>3.44</td>
<td>8.44</td>
<td>to 401 Squadron</td>
</tr>
<tr>
<td>MK284</td>
<td>FU-D</td>
<td>3.44</td>
<td>8.44</td>
<td>to 401 Squadron</td>
</tr>
<tr>
<td>MK285</td>
<td>FU-T</td>
<td>3.44</td>
<td>27.7.44</td>
<td>failed to return from operations (Dowding)</td>
</tr>
<tr>
<td>MK287</td>
<td>FU-R</td>
<td>3.44</td>
<td>20.5.44</td>
<td>damaged by flak (Scott), to AST</td>
</tr>
<tr>
<td>MK288</td>
<td>FU-E</td>
<td>25.2.44</td>
<td>9.6.44</td>
<td>damaged flying accident Cat B</td>
</tr>
<tr>
<td>MK299</td>
<td>FU-G,</td>
<td>3.44</td>
<td>20.7.44</td>
<td>to 403 Squadron</td>
</tr>
<tr>
<td>MK324</td>
<td>FU-Y</td>
<td>3.44</td>
<td>14.4.44</td>
<td>shot down by flak Abbeville, France (R. Yarra)</td>
</tr>
<tr>
<td>MK325</td>
<td>FU-B</td>
<td>3.44</td>
<td>23.4.44</td>
<td>Cat E operations (Stage)</td>
</tr>
<tr>
<td>MK355</td>
<td>FU-H,</td>
<td>25.2.44</td>
<td>31.7.44</td>
<td>to 412 Squadron</td>
</tr>
<tr>
<td>MK379</td>
<td>FU-Z</td>
<td>5.44</td>
<td>26.7.44</td>
<td>shot down Quillbeuf, France (McDade)</td>
</tr>
<tr>
<td>MK421</td>
<td>FU-Z</td>
<td>4.44</td>
<td>27.7.44</td>
<td>shot down by flak Lisieux, France (Harris)</td>
</tr>
<tr>
<td>MK510</td>
<td>FU-J,</td>
<td>15.6.44</td>
<td>2.8.44</td>
<td>damaged landing at B.9 on 25.6.45 (Murray); to 127 Wing HQ</td>
</tr>
</tbody>
</table>

By 4 August 1944, no mark IXBs remained on 453 Squadron.

SPITFIRE LF.IXE July 44 - September 44
First four LF.IXEs were collected from England and delivered to France on 18 July 1944. Many mark IXEs were delivered new during late July. When 453 deployed from ALG B.19 to B.40 on 2 September 1944, 23 Spitfire IXEs were on strength.

<table>
<thead>
<tr>
<th>Serial Number</th>
<th>Squadron Code</th>
<th>Date on 453</th>
<th>Date off 453</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>MJ276</td>
<td>FU-V</td>
<td>7.44</td>
<td>19.8.44</td>
<td>damaged 18.8.44; to 441 Squadron</td>
</tr>
<tr>
<td>MK566</td>
<td>FU-L</td>
<td>7.44</td>
<td>19.8.44</td>
<td>to 403 Squadron</td>
</tr>
<tr>
<td>MK575</td>
<td>FU-D</td>
<td>7.44</td>
<td>19.8.44</td>
<td>to 403 Squadron</td>
</tr>
<tr>
<td>MK618</td>
<td>FU-S,</td>
<td>7.44</td>
<td>19.8.44</td>
<td>damaged 18.8.44; to 441 Squadron</td>
</tr>
<tr>
<td>ML138</td>
<td>FU-C</td>
<td>7.44</td>
<td>19.8.44</td>
<td>to 403 Squadron</td>
</tr>
<tr>
<td>ML146</td>
<td>FU-S</td>
<td>7.44</td>
<td>19.8.44</td>
<td>to 403 Squadron</td>
</tr>
<tr>
<td>NH208</td>
<td>FU-R</td>
<td>7.44</td>
<td>19.8.44</td>
<td>damaged 18.8.44; to 441 Squadron</td>
</tr>
<tr>
<td>NH244</td>
<td>FU-L</td>
<td>7.44</td>
<td>19.8.44</td>
<td>damaged 18.8.44; to 441 Squadron</td>
</tr>
<tr>
<td>NH274</td>
<td>FU-V</td>
<td>7.44</td>
<td>19.8.44</td>
<td>damaged 18.8.44; to 441 Squadron</td>
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<tr>
<td>NH462</td>
<td>FU-P,</td>
<td>7.44</td>
<td>19.8.44</td>
<td>damaged 18.8.44; to 441 Squadron</td>
</tr>
<tr>
<td>NH555</td>
<td>FU-L</td>
<td>7.44</td>
<td>19.8.44</td>
<td>damaged 18.8.44; to 441 Squadron</td>
</tr>
<tr>
<td>NH580</td>
<td>FU-J</td>
<td>7.44</td>
<td>19.8.44</td>
<td>damaged 18.8.44; to 441 Squadron</td>
</tr>
</tbody>
</table>

By 4 August 1944, no mark IXBs remained on 453 Squadron.
<table>
<thead>
<tr>
<th>Serial Number</th>
<th>Squadron Code</th>
<th>Date on 453</th>
<th>Date off 453</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>PL125</td>
<td>FU-J</td>
<td>2.8.44</td>
<td>17.8.44</td>
<td>flying accident Cat B 15.8.44; to 511 FRU</td>
</tr>
<tr>
<td>PL126</td>
<td>FU-K</td>
<td>20.7.44</td>
<td>28.9.44</td>
<td>to 411 Squadron</td>
</tr>
<tr>
<td>PL145</td>
<td>FU-E</td>
<td>3.8.44</td>
<td>12.10.44</td>
<td>to 412 Squadron</td>
</tr>
<tr>
<td>PL149</td>
<td>FU-D</td>
<td>3.8.44</td>
<td>28.9.44</td>
<td>to 412 Squadron</td>
</tr>
<tr>
<td>PL159</td>
<td>FU-S</td>
<td>18.8.44</td>
<td>28.9.44</td>
<td>to 412 Squadron</td>
</tr>
<tr>
<td>PL186</td>
<td>FU-H</td>
<td>27.7.44</td>
<td>5.10.44</td>
<td>damaged by flak (Lancaster) 10.9.44; to 412 Sqn</td>
</tr>
<tr>
<td>PL191</td>
<td>FU-A</td>
<td>8.44</td>
<td>7.9.44</td>
<td>damaged Cat AC on operations 15.8.44; to 127 Wing</td>
</tr>
<tr>
<td>PL201</td>
<td>FU-N</td>
<td>27.7.44</td>
<td>27.9.44</td>
<td>shot down by Me-109s Arnhem (Johns)</td>
</tr>
<tr>
<td>PL204</td>
<td>FU-T</td>
<td>27.7.44</td>
<td>28.9.44</td>
<td>to 412 Squadron</td>
</tr>
<tr>
<td>PL211</td>
<td>FU-J</td>
<td>27.7.44</td>
<td>30.9.44</td>
<td>damaged operations 2.8.44; to 412 Squadron</td>
</tr>
<tr>
<td>PL224</td>
<td>FU-C</td>
<td>27.7.44</td>
<td>28.9.44</td>
<td>to 412 Squadron</td>
</tr>
<tr>
<td>PL252</td>
<td>FU-R</td>
<td>18.8.44</td>
<td>7.9.44</td>
<td>to 412 Squadron</td>
</tr>
<tr>
<td>PL254</td>
<td>FU-U</td>
<td>27.7.44</td>
<td>16.8.44</td>
<td>damaged by flak, landed ALG B.17 (Cowpe)</td>
</tr>
<tr>
<td>PL402</td>
<td>FU-Z</td>
<td>2.8.44</td>
<td>28.9.44</td>
<td>to 412 Squadron</td>
</tr>
<tr>
<td>PL405</td>
<td>FU-F</td>
<td>2.8.44</td>
<td>19.9.44</td>
<td>flying accident Cat AC; to 82 MU</td>
</tr>
<tr>
<td>PL438</td>
<td>FU-U</td>
<td>18.8.44</td>
<td>28.9.44</td>
<td>to 412 Squadron</td>
</tr>
<tr>
<td>PL441</td>
<td>FU-A</td>
<td>4.8.44</td>
<td>7.8.44</td>
<td>failed to return from operations (Gates)</td>
</tr>
<tr>
<td>PT357</td>
<td>FU-L</td>
<td>9.8.44</td>
<td>28.9.44</td>
<td>to 412 Squadron</td>
</tr>
</tbody>
</table>

The ‘JR’ code for MJ276 indicates the initials of Officer Commanding 125 Wing, Group Captain J. Rankin. Spitfire mark IXE operated in Europe until 28 September 1944.

**SPITFIRE IXB September 44–November 44**

On 30 September 1944, 453 rotated with No.80 Squadron and returned from Belgium, having swapped many aircraft with 412 Squadron (of 126 Wing at B.68/Le Culot, France), and began first operations in the UK from Coltishall on 3 October. Later that month the Squadron moved to Matlaske, in Norfolk, as part of 84 Group.

<table>
<thead>
<tr>
<th>Serial Number</th>
<th>Squadron Code</th>
<th>Date on 453</th>
<th>Date off 453</th>
<th>Remarks</th>
</tr>
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<tbody>
<tr>
<td>MJ393</td>
<td>FU-Z</td>
<td>28.9.44</td>
<td>11.44</td>
<td>stored 25.5.45; to Mediterranean Allied AF</td>
</tr>
<tr>
<td>MJ461</td>
<td>FU-D,</td>
<td>28.9.44</td>
<td>29.9.44</td>
<td>damaged landing Bradwell Bay (Baker)</td>
</tr>
<tr>
<td>MJ476</td>
<td>FU-H</td>
<td>1.10.44</td>
<td>9.11.44</td>
<td>to 3501 Storage Unit</td>
</tr>
<tr>
<td>MJ605</td>
<td>FU-E</td>
<td>28.9.44</td>
<td>11.44</td>
<td>to 327 Squadron</td>
</tr>
<tr>
<td>MJ959</td>
<td>FU-W</td>
<td>28.9.44</td>
<td>11.44</td>
<td>to 412 Squadron</td>
</tr>
<tr>
<td>MK128</td>
<td>FU-B</td>
<td>3.11.44</td>
<td>11.44</td>
<td>to 29 MU</td>
</tr>
<tr>
<td>MK180</td>
<td>FU-W</td>
<td>26.10.44</td>
<td>28.11.44</td>
<td>to Scottish Aviation Ltd (ex AH-T of 332 Squadron)</td>
</tr>
<tr>
<td>MK205</td>
<td>FU-C</td>
<td>5.10.44</td>
<td>4.12.44</td>
<td>to AST</td>
</tr>
<tr>
<td>MK294</td>
<td>FU-N</td>
<td>30.10.44</td>
<td>11.44</td>
<td>to De Havillands</td>
</tr>
<tr>
<td>MK366</td>
<td>FU-Q</td>
<td>28.9.44</td>
<td>11.44</td>
<td>to 328 Squadron</td>
</tr>
<tr>
<td>MK516</td>
<td>FU-E</td>
<td>11.44</td>
<td>11.44</td>
<td>to 1 Contractors Repair Unit</td>
</tr>
<tr>
<td>MK519</td>
<td>FU-J</td>
<td>10.44</td>
<td>1.44</td>
<td>unknown</td>
</tr>
<tr>
<td>MK569</td>
<td>FU-J</td>
<td>5.10.44</td>
<td>11.44</td>
<td>to 1 CRU Crawley</td>
</tr>
<tr>
<td>MK586</td>
<td>FU-U</td>
<td>5.10.44</td>
<td>11.44</td>
<td>stored; to MAAF</td>
</tr>
<tr>
<td>MK590</td>
<td>FU-X</td>
<td>28.9.44</td>
<td>11.44</td>
<td>to ASREX</td>
</tr>
<tr>
<td>MK630</td>
<td>FU-L</td>
<td>28.9.44</td>
<td>10.44</td>
<td>stored; to RNAF as H-19</td>
</tr>
<tr>
<td>MK678</td>
<td>FU-A</td>
<td>10.44</td>
<td>11.44</td>
<td>to 9 MU</td>
</tr>
<tr>
<td>MK981</td>
<td>FU-?</td>
<td>20.10.44</td>
<td>7.11.44</td>
<td>damaged landing Debach, Norfolk (McAuliffe); stored</td>
</tr>
<tr>
<td>MK989</td>
<td>FU-P</td>
<td>30.10.44</td>
<td>21.12.44</td>
<td>to 33 MU</td>
</tr>
<tr>
<td>ML202</td>
<td>FU-F</td>
<td>5.10.44</td>
<td>11.44</td>
<td>to De Havillands (ex AH-X of 332 Squadron)</td>
</tr>
<tr>
<td>NH171</td>
<td>FU-T</td>
<td>28.9.44</td>
<td>30.11.44</td>
<td>to General A/c Ltd for mods</td>
</tr>
<tr>
<td>NH173</td>
<td>FU-V</td>
<td>5.10.44</td>
<td>11.44</td>
<td>flying accident Cat AC 19.10.44; stored</td>
</tr>
<tr>
<td>NH212</td>
<td>FU-B</td>
<td>28.9.44</td>
<td>11.44</td>
<td>stored; to Westland Ac Ltd</td>
</tr>
</tbody>
</table>

These aircraft were operated until 23 November 1944, and then most went to storage or modification.
First batch of Spitfire XVIs received by 453 Squadron on 11 November. The 453 ORB noted: ‘To all intents and purposes the Spitfire XVI is merely a cleaned up Spit IX with Merlin Packard engine, bomb racks to carry a 250 lb bomb under each wing and 0.5 inch machine guns instead of .303s. All have the modified pointed tail and some have clipped wings. The pilots are quite happy about their performance against that of the Spit IXs.’ On 20 November, 453 with Nos 602 and 229 Squadrons moved to Swannington, a satellite of Matlaske. The first operation with XVIs was conducted on 21 November, and until 23 November both marks were flown on operations. Most operations were against the V2 sites around The Hague, quite often rearming at B.67/Ursel, in Belgium, for further attacks on the return journey to the UK.

<table>
<thead>
<tr>
<th>Serial Number</th>
<th>Squadron Code</th>
<th>Date on 453</th>
<th>Date off 453</th>
<th>Remarks</th>
</tr>
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<tbody>
<tr>
<td>SM184</td>
<td>FU-D</td>
<td>9.11.44</td>
<td>18.5.45</td>
<td>heavy landing, Cat E at Hawkinge to 183 Squadron</td>
</tr>
<tr>
<td>SM185</td>
<td>FU-M</td>
<td>23.11.44</td>
<td>15.6.45</td>
<td>shot down by flak Hagueharlot, Holland (Bennett)</td>
</tr>
<tr>
<td>SM187</td>
<td>FU-N</td>
<td>9.11.44</td>
<td>24.12.44</td>
<td>damaged landing at B.67 on 2.3.45 (Marsh); shot down by flak near The Hague, Holland (Marsh)</td>
</tr>
<tr>
<td>SM188</td>
<td>FU-S</td>
<td>23.11.44</td>
<td>20.3.45</td>
<td>to 183 Squadron</td>
</tr>
<tr>
<td>SM193</td>
<td>FU-Q</td>
<td>9.11.44</td>
<td>15.6.45</td>
<td>to 183 Squadron</td>
</tr>
<tr>
<td>SM194</td>
<td>FU-C</td>
<td>10.11.44</td>
<td>4.12.44</td>
<td>Cat C on operations</td>
</tr>
<tr>
<td>SM207</td>
<td>FU-R</td>
<td>23.11.44</td>
<td>15.6.45</td>
<td>damaged on operations 14.3.45 (Leith); to 183 Squadron</td>
</tr>
<tr>
<td>SM230</td>
<td>FU-F</td>
<td>9.11.44</td>
<td>15.6.45</td>
<td>to 183 Squadron</td>
</tr>
<tr>
<td>SM233</td>
<td>FU-P</td>
<td>23.11.44</td>
<td>18.3.45</td>
<td>shot down by flak, forced-land Gouda, Holland (Tonkin)</td>
</tr>
<tr>
<td>SM243</td>
<td>FU-J</td>
<td>23.11.44</td>
<td>15.6.45</td>
<td>to 183 Squadron</td>
</tr>
<tr>
<td>SM244</td>
<td>FU-K</td>
<td>9.11.44</td>
<td>21.2.45</td>
<td>crash-landed near Gouda, Holland (Gadd)</td>
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<tr>
<td>SM249</td>
<td>FU-B</td>
<td>11.11.44</td>
<td>6.2.45</td>
<td>damaged by flak near The Hague, Holland (Adams)</td>
</tr>
<tr>
<td>SM250</td>
<td>FU-T</td>
<td>11.11.44</td>
<td>15.6.45</td>
<td>to 183 Squadron</td>
</tr>
<tr>
<td>SM255</td>
<td>FU-A</td>
<td>20.11.44</td>
<td>21.2.45</td>
<td>crashed on operations near Amsterdam (Carmichael)</td>
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<tr>
<td>SM256</td>
<td>FU-W</td>
<td>21.11.44</td>
<td>11.5.45</td>
<td>flying accident Cat E</td>
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<tr>
<td>SM278</td>
<td>FU-J</td>
<td>10.11.44</td>
<td>15.6.45</td>
<td>to 183 Squadron</td>
</tr>
<tr>
<td>SM281</td>
<td>FU-E</td>
<td>11.44</td>
<td>15.6.45</td>
<td>believed to 183 Squadron</td>
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<tr>
<td>SM282</td>
<td>FU-Z</td>
<td>10.11.44</td>
<td>15.6.45</td>
<td>to 183 Squadron, to 341 Squadron coded NL-C</td>
</tr>
<tr>
<td>SM348</td>
<td>FU-G</td>
<td>22.3.45</td>
<td>15.6.45</td>
<td>to 183 Squadron</td>
</tr>
<tr>
<td>SM402</td>
<td>FU-C</td>
<td>13.12.44</td>
<td>12.6.45</td>
<td>to 183 Squadron</td>
</tr>
<tr>
<td>SM484</td>
<td>FU-N</td>
<td>8.1.45</td>
<td>15.6.45</td>
<td>to 183 Squadron</td>
</tr>
<tr>
<td>TB304</td>
<td>FU-J</td>
<td>13.2.45</td>
<td>15.6.45</td>
<td>to 183 Squadron</td>
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<tr>
<td>TB520</td>
<td>'DGA'</td>
<td>2.3.45</td>
<td>14.6.45</td>
<td>to 183 Squadron</td>
</tr>
<tr>
<td>TB619</td>
<td>FU-A</td>
<td>7.3.45</td>
<td>15.6.45</td>
<td>to 183 Squadron</td>
</tr>
</tbody>
</table>

The code ‘DGA’ for TB520 was personalised for the Wing Leader, Wing Commander D.G. Andrews DFC.

Last operation flown on 29 April 1945. On 14 June 1945, 453 moved to RAF Lasham, and by 15 June all Spitfire XVIs had been handed over to No.84 Group Service Unit, who issued them to No.183 Squadron (then re-equipping from Typhoons) at Hawkinge on 21 June. 453 Squadron then began flying Spitfire XIVs belonging to the Station at Lasham until arrival of their own mark XIVs in July.
<table>
<thead>
<tr>
<th>Serial Number</th>
<th>Squadron Code</th>
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<th>Date off 453</th>
<th>Remarks</th>
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<tbody>
<tr>
<td>TZ106</td>
<td></td>
<td>22.7.45</td>
<td>6.1.46</td>
<td>crashed, Wichling, Kent (Davidson)</td>
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<tr>
<td>TZ111</td>
<td></td>
<td>6.9.45</td>
<td>1.46</td>
<td>stored, to Belgian AF 8.2.49 as SG-89</td>
</tr>
<tr>
<td>TZ116</td>
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<td>6.9.45</td>
<td>18.10.45</td>
<td>damaged, flying accident Cat AC, to 607 Squadron coded RAN-D</td>
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<tr>
<td>TZ123</td>
<td></td>
<td>1.7.45</td>
<td>17.1.46</td>
<td>to 443 Squadron</td>
</tr>
<tr>
<td>TZ127</td>
<td></td>
<td>6.9.45</td>
<td>1.46</td>
<td>stored, to Belgian AF 18.1.49 as SG-81</td>
</tr>
<tr>
<td>TZ130</td>
<td></td>
<td>25.7.45</td>
<td>23.11.45</td>
<td>flying accident Cat E</td>
</tr>
<tr>
<td>TZ131</td>
<td></td>
<td>6.9.45</td>
<td>16.1.46</td>
<td>to 443 Squadron</td>
</tr>
<tr>
<td>TZ132</td>
<td></td>
<td>6.9.45</td>
<td>16.1.46</td>
<td>to 443 Squadron, to Belgian AF 10.7.48 as SG-48</td>
</tr>
<tr>
<td>TZ134</td>
<td></td>
<td>6.9.45</td>
<td>1.46</td>
<td>stored, to 613 Squadron coded RAT-Z 25.3.47</td>
</tr>
<tr>
<td>TZ137</td>
<td></td>
<td>6.9.45</td>
<td>4.10.45</td>
<td>flying accident Cat AC, to Vickers, Belg AF as SG-33</td>
</tr>
<tr>
<td>TZ141</td>
<td></td>
<td>6.9.45</td>
<td>16.1.46</td>
<td>to 443 Squadron, to 611 Squadron coded RAR-F</td>
</tr>
</tbody>
</table>

No. 453 Squadron disbanded 21 January 1946 with most of the aircraft being stored by 39 MU and some being transferred to No. 443 Canadian Squadron at B.174/Utersen, Holland.

**APPENDIX NINE**

RAAF Spitfires in at the Kill

PILOTS and ground staff of an Australian Spitfire squadron are regarded as the luckiest members of the RAAF in the European war. They had the incomparable thrill of being in at the kill from the word 'go'. They were first to keep watch while the greatest armada of all time crossed the English Channel on that breath-taking day, June 6, 1944. They gave air cover as the great Allied armies surged inland. They landed on a Normandy aerodrome on D + 19; shared in the attack and defeat of such remnants of the now vainglorious Luftwaffe as dared to show its swastikas over the battle areas; flew interminable sorties at nought feet shattering a terrified and fleeing enemy after Montgomery had broken through. Tense and dog-weary from the toil of the battle the Spitfire pilots never let up. This was what they had waited for—the fleeing enemy square in the sights of their cannon, at long last being blasted into utter defeat.

It is appropriate that first impressions of D-day should be recorded by the commanding officer, Squadron-Leader Donald H. Smith, of Victor Harbour, SA. Squadron-Leader Smith had already received the Soviet Medal for Valour in recognition of his splendid combat record in Spitfires over Malta. His leadership in the final campaign in Western Europe won him the DFC. Not long before the invasion began he succeeded another notable Spitfire pilot in command of this squadron—Squadron-Leader Donald G. Andrews, DFC. With Andrews in command, the squadron had done fine service as a unit in the air defence of Great Britain. Well before D-day the squadron had transferred to the 2nd Tactical Air Force and flew many sorties as escorts to American Marauders, Fortresses, Liberators and Mitchells over enemy targets in Europe. As invasion day grew nearer, enemy marshalling areas, headquarters, radio stations, road transport and railways became priority targets for the Spitfires. All this time the Luftwaffe was expected. But it failed to live up to these expectations. Then came D-day itself and still the Luftwaffe was absent.

'We knew it was on,' Squadron-Leader Smith declared a few days after D-day, 'when we went on patrol on the evening of June 5. We saw the greatest convoy the world has ever known. And when we got back to our base in England we attended a memorable mass briefing where we learned details of the tremendous invasion plan. On D-day we were out patrolling the coast and the Allied beach-head. We were sightseers. We saw this great battle begin.'

'As the invasion fleet approached the enemy coast I watch Bomber Command's heavies go into action. High on the cliff of a small headland there was a battery of heavy German guns—six or eight of them in a great concrete emplacement. That battery was completely blasted into utter defeat. I have some good bombing since the war began, but nothing to equal this. Later in the campaign I was able to visit the site of this battery. There was just a mass of wreckage where walls and roof of concrete, six to eight feet thick, had once sheltered guns 15 feet long.'

While the Spitfires, with thousands of other Allied aircraft from the 2nd Tactical Air Force and the 8th and 9th US Air Forces, mounted guard over the Allied invasion forces or made swift and deadly sorties behind the German lines, the Luftwaffe was...
always on the job; rarely were they unable to give
was superb and though that June weather proved
Spitfires began carrying a 1000-pound bomb load—
thing was going on all over Normanby, leading up
those tankers had a marked effect on the course of
reconnaissance spotted nine large German fuel
he got his revenge by pumping a long burst into
perspex was blown to pieces by cannon-fire and he
Lancaster's
Two enemy aircraft destroyed, two probably destroyed and one damaged without loss to themselves, was the Australians very satisfactory score. Flight Officer K.K. Lawrence, Adelaide, and, Warrant-Officer C.A. Seeney, Toowong (Qld) (since reported missing, believed killed), shared the first one destroyed; Flight-Lieutenant V. Lancaster, North Fitzroy (Vic), and, Warrant-Officer C.A. Rice, Armidale (NSW), accounted for the other. First combat with the Luftwaffe after the squadron had moved to France came on the second day of operations. Four Spitfires led by Flight-Lieutenant Lancaster ran into eight FW190s. With the odds two to one against them, the Australians were still
Smith, who now had Lancaster had scored one probable and one damaged and the other three pilots had claimed one each damaged, the Germans made for base. Later in the same day, Lancaster and Flight-Sergeant Handcock, Hawkston (Vic) (since reported missing, killed), were 'jumped' by six FW190s which had been skulking in the clouds. Lancaster's perspex was blown to pieces by cannon-fire and he was wounded in the hand and neck by shrapnel, but he got his revenge by pumping a long burst into another FW, which burst into flames.
It was about this period that the onslaught on enemy road transport began to mount. Not long after they had established their base in Normandy, the men of the RAAF Spitfires got their first real taste of this ground attack—a task in which they were to become adept. These aircraft on armed reconnaissance spotted nine large German fuel tankers moving along a road. 'Seven of them went up in flames very smartly,' Squadron-Leader Smith commented. Later an Allied tank commander, arriving, left a message of congratulations. The destruction of those tankers had marked a clear effect on the course of the battle in that small section. The same sort of things were going on all over Normandy, leading up to the utter ruin of the enemy. About this time the Spitfires began carrying a 1000-pound bomb load—a load that made them even more formidable. From the beginning, army-air force cooperation was superb and though that June weather proved the worst June weather known in Normandy for many years the RAF and RAAF Spitfires were always on the job; rarely were they unable to give the armoured forces a field bomb. The other four Hans fought and evaded and there was quite a dog-fight for a while, but we got one more of them down. Roberts (Flight-Lieutenant G. Roberts of Balwyn, Victoria) and I shared him.' At night the ground battle became extremely realistic—'a Guy Fawkes display free nearly every night.' Among the shots, the A.R.A.F. Spitfires shot down a Bf 109, the hearthing sound of Allied heavy and medium bombers going over, the flash of searchlights, the glare of flares lighting up the bombers' targets and the fantastic pattern of tracer from the enemy's ground defences. All this to watch from the squadron's 'grandstand', only a few miles off. Sometimes the enemy raided and bombed. Once he caused several casualties in the squadron's lines, but the airmen knew the Allies were on the 'up and up', were winning the war in Western Europe and no squadron's morale could have been higher.

At last the airmen learned something of the grind of war of the French people. They learned to ask, haltingly perhaps, but with the desired results, for 'six litres du lait' and 'Douzaine oeufs'. More often than not they got the six litres of milk and one dozen eggs. At one village they found an ageing Frenchman who had fought with the Australians in the last war and was tremendously proud of the fact. There was no question that the Spitfires were welcome in Normandy. Between events the Australians tried to teach their RAF comrades Australian Rules football. The ball had come from the United States Army Air Forces and acquitted them very satisfactorily in the game. Once they were playing against the Melbourne University team, which had flown from Australia to Normandy. The Australian Comforts Fund. It provided a lot of fun for the men of the RAAF Spitfires. As the great battle went on the scene changed with almost incredible rapidity. Squadrons moved forward to new bases while squadrons from the home bases moved in. The Tactical Air Force was tactical indeed. It was fighting almost as part of the great mobile Allied armies it supported. Some of the ground organisation was hard put to maintain the pace and do its job thoroughly all the time. On occasions officers and men were passing through villages scarcely touched by the immense mechanized tongues of the Army's fast-moving columns. On one occasion, the medical officer, Flight-Lieutenant Gordon Walker, one of the flight-commanders, Flight-Lieutenant Jack Olver and Flight-Sergeant F. ('Timber') Wood, fitted in charge of ground maintenance crew, drove into a village past which the Army's columns had already swept. They were hailed as 'liberators'. Wood was brought out and men of the gallant Maquis insisted on giving him the Australian's embrace, on embracing them, and kissing them traditionally on both cheeks.

As the airmen flew out on their sorties and returned to base they could trace the course of the battle by the great swathes of bomb and shell craters, the strange patterns inscribed on the landscape by thousands of tanks manoeuvring in battle, the pack-marks of field guns, the ranges of smoke and earthworks, where bitter infantry and artillery conflicts had been waged. Smashed bridges, uprooted woods and pulverized towns all told the same story. But that picture has faded. The great initial task set for the 2nd Tactical Air Force by Supreme Head-quarters Allied Expeditionary Forces had been accomplished. The Allied Armies had swept on to Germany itself. Australians will find a deep national significance in the accomplishment of this task. Men of the Royal Australian Air Force fought with their comrades of the Royal Air Force and the United States Army Air Forces and acquitted themselves just as their fathers acquired themselves 26 years before—and the battlefields were the same.1

1. From 'RAAF Saga', RAAF Yearbook 1944, Australian War Memorial, Canberra.
Squadron Leader Ernest Esau DFC, RAAF, 453 Squadron

"PINPOINTING THE V2 ROCKET SITES"

Recorded on DOX 48346
Transmission: Pacific Service, Thursday April 26, 1945
0615-0625 GMT1
Produced by Mrs E.J. Davy
Censored by W. Grantham and G. Looker
Passed by Air Ministry PR4

OPENING ANNOUNCEMENT: 'Anzacs Calling' — 'Pinpointing the V2 Rocket Sites'. The first attack on a V2 base was made by the Australian Spitfire fighter-bomber squadron led by Squadron Leader E.A. Esau DFC of Brisbane. They are doing another job now — escorting heavy bombers on their final sorties against the remaining strongholds of the Reich — but when the rocket sites were put out of action, Squadron Leader Esau recorded this account of his squadron’s work against the V2s.

Squadron Leader E.A. Esau: When the first rocket-bomb (flying gas main, the security conscious public called it) landed in Southern England, we’d already begun our job against them.

You probably know something about the rockets now, although nothing was published in the days when they were landing in this country. It’s driven by a special kind of highly inflammable fuel, it travels faster than sound so you never hear it coming, and it travels 50–60 miles up, more or less vertically from its firing point, and then dives down again to earth. To see the trail when a rocket went up was an amazing sight . . . I’ve seen several as I was approaching the Dutch coast. I first noticed a trail starting at about 8000 feet . . . a practically vertical trail . . . it soared right up to a fantastic height, and it grew at an incredible speed . . . and then it gradually leaned over towards England. Sometimes I saw the rocket itself . . . It looked rather like a small black speck; there was no flame about it, or if there was, I couldn’t see it in the daytime — it was such a tiny black speck, but it left behind a fantastically broad white fluffy trail . . . and that gradually dispersed with the wind, and disappeared.

It was quite obvious that the only thing the Air Force could do against such a weapon was to prevent it from being fired . . . the rocket bomb couldn’t be intercepted in the air as the flying bomb had been — by fighters, flak and balloons. So . . . Bomber Command attacked the places where rockets and rocket fuel were manufactured; Tactical Air Force attacked transport to prevent them being brought up to the firing points; and towards the end squadrons of Fighter Command joined in with TAF, but at first Fighter Command concentrated on attacking the sites to prevent the Germans establishing any fixed programme of operating.

The sites were very small and extremely mobile so we kept up continuous patrols during the hours of daylight . . . We aimed to create such disorder and panic that no permanent firing site could be established, no regular supplies delivered, no regular firing programme followed. But it wasn’t a case of having a certain number of sites to eliminate and the job was finished . . . they were so mobile that they sprung up unobtrusively like mushrooms overnight. These sites were centred round The Hague — capital of Holland. This city is surrounded by large woods; they give excellent cover and the Germans made use of them to camouflage their activities. Every site was camouflaged — none of us ever saw one . . . but we were so carefully briefed that we could pinpoint the target easily, on the basis of photo reconnaissance and other information. I’m looking for a chance to go to The Hague now, and have a look at the sites from the ground.

Every attack we made was different, of course, but the general procedure was always the same. Before we left base, we were very carefully briefed for a particular target, and when we’d finished our general reconnaissance of the area we checked up on our information about the target. Then the leader got ready for his bombing run, and began to talk up, giving the approximate time when he was coming down . . . and the time gradually worked down to about a 30-second warning, and the last order was ‘Going down now’. Then everybody peeled off after him in a very steep power dive from 9000 feet down to 3000. We got a good view of the target in that dive and were able to aim our bombs. Everyone followed the leader in and attacked in rapid succession, and then we’d use the tremendous speed gained in the dive to zoom climb and to gain height. The pull-out followed by the vertical climb usually resulted in blackout lasting 10 to 15 seconds . . . during that time the aircraft flew itself . . . but I always felt quite normal when I came to, and I never heard anyone complain.

Before we became interested in what the Germans were doing with these rockets they didn’t bother to shoot up much flak if we passed over The Hague area, but once we began to reconnoitre and harass them they sent up everything they had the minute we came in sight. The flak is really designed to put you off your aim as well as to shoot you down, but I must say that all the members of our wing ‘pressed on regardless’ to use an RAF expression — and in spite of the really murderous flak there were very few losses on my squadron.

Although a Spitfire is a single-seater aircraft we kept close contact with each other by means of R/T. This had to be kept down to an absolute minimum, but during the more tense moments of an attack we did say some silly things — and they helped us. ‘Hell of a lot of flak coming up Leader’, one pilot might say and I’d answer: ‘Yes I can see it’. Or ‘Look out boss, they’re after us’. I knew that well enough, but it helped us both when I replied: ‘Yeah, don’t let it worry you’. The whole rocket site area was always under an alert when we went there, so we never saw any life there at all, and that was terribly depressing . . . all the streets were bare . . . it looked as though no one had lived there for hundreds of years. It was very seldom that we saw even an odd car or transport . . . in other places there was quite a bit of traffic, and some shipping, but here, nothing at all . . . there was nothing on the water either, not even a rowing boat.

We did a lot of transport harrying too, and kept a close look-out in the back areas for trains or movement of any kind. Some pilots had better eyesight than
others, and there was a lot of competition as to who should see and report movement on the ground first to the leader. It was a great thing to fire at a vehicle, watch it explode, or to run cannon shell up and down a train, and see the engine blow up in a cloud of steam. But here again, the Germans resorted to camouflage, and they generally moved their supplies under cover of darkness. Sometimes in the back areas, tearing down a road to examine transport it wasn’t uncommon to see young women on bicycles or farmers walking along beside their horses and carts. Once I saw two trucks, went roaring down on them and was just going to fire when I saw they were milk floats; I don’t know where the milk had come from because I never saw any cows there.

Up north of The Hague there’s still a large building with the usual very big circle with a Red Cross in the middle... the international marking for a hospital. The Germans used the woods adjoining this building as a rocket site so we were faced with a problem of hitting the site without hitting the hospital. We attacked the site several times with very good results... the majority of bombs falling in exactly the right place, with no damage to the hospital.

Another place they used to fire rockets from was a long wood almost in the centre of town... it’s probably a public garden... there was a canal running across it, and several roads through it. The problem here was to plaster the wood without doing any damage to the built up area around... There are some film studios in The Hague... very large film studios. The Germans were storing stuff in there... liquid oxygen, and filling up the V2s. So we attacked it with a dozen aircraft and burnt it to the ground... we hit it at 11 in the morning, and it was still burning at 7 that night.

A lot of emphasis was laid on ‘rail interdiction’. We spent our last few weeks just doing that, and transport strafing. By that time we were doing a shuttle service... we’d leave our base in England with a 1000 pound load and drop that; then bomb up again at one of our aerodromes on the Continent and deliver that load on our way home.

The end didn’t come suddenly... the Army was moving up, and we knew that once they’d overrun the sites our job was finished in the only possible and final way... but our last day wasn’t dramatic. We did rail interdiction with 1000 pound loads up around Amsterdam, and then a little transport strafing; and the next day there were no more sorties—just a weather recce!

In the five months the V2s held our interest the squadron did over 1000 sorties. March was the biggest month... March was a terrific month... flying conditions were good and the ground crew worked flat out. My flight commanders were Colin Leith, known as ‘Rusty’, who was recently awarded the DFC, and Bob Clemesha from Sydney. Norman Baker from Melbourne was with us for a time, but he’s since gone back to Australia.

To combat this modern weapon we had used one of our oldest, the Spitfire, which has been since the very early days of the war, the finest all-round performer we have produced. The Mosquito boys wouldn’t agree with that but still... I’ve always been in Spits and never wanted anything else. In this particular job they were used mainly as a dive-bomber. And we proved again that besides being a great fighter the Spit is also an excellent ground attack weapon.

CLOSING ANNOUNCEMENT: That was Squadron Leader E.A. Esau DFC of Brisbane speaking in the series ‘Anzacs Calling’. Next week, Lieutenant O.S. Hintz of Auckland will talk about New Zealanders in the Navy.

CO Squadron Leader Ern Esau (centre) with flight commanders, Flight Lieutenants ‘Rusty’ Leith (left) and Bob Clemesha.
APPENDIX ELEVEN

RAF Order of Battle
No. 83 Group, 2nd Tactical Air Force
6 June 1944

<table>
<thead>
<tr>
<th>Wing</th>
<th>Squadron</th>
<th>Aircraft</th>
<th>Base</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.121</td>
<td>No.174</td>
<td>Typhoon</td>
<td>Holmesley South</td>
</tr>
<tr>
<td>No.121</td>
<td>No.175</td>
<td>Typhoon</td>
<td></td>
</tr>
<tr>
<td>No.121</td>
<td>No.245</td>
<td>Typhoon</td>
<td></td>
</tr>
<tr>
<td>No.122</td>
<td>No.19</td>
<td>Mustang</td>
<td>Funtington</td>
</tr>
<tr>
<td>No.122</td>
<td>No.65</td>
<td>Mustang</td>
<td></td>
</tr>
<tr>
<td>No.122</td>
<td>No.122</td>
<td>Mustang</td>
<td></td>
</tr>
<tr>
<td>No.124</td>
<td>No.181</td>
<td>Typhoon</td>
<td>Hurn</td>
</tr>
<tr>
<td>No.124</td>
<td>No.182</td>
<td>Typhoon</td>
<td></td>
</tr>
<tr>
<td>No.124</td>
<td>No.247</td>
<td>Typhoon</td>
<td></td>
</tr>
<tr>
<td>No.125</td>
<td>No.132</td>
<td>Spitfire</td>
<td>Ford</td>
</tr>
<tr>
<td>No.125</td>
<td>No.453 RAAF</td>
<td>Spitfire</td>
<td></td>
</tr>
<tr>
<td>No.126 RCAF</td>
<td>No.401</td>
<td>Spitfire</td>
<td>Tangmere</td>
</tr>
<tr>
<td>No.126 RCAF</td>
<td>No.411</td>
<td>Spitfire</td>
<td></td>
</tr>
<tr>
<td>No.126 RCAF</td>
<td>No.412</td>
<td>Spitfire</td>
<td></td>
</tr>
<tr>
<td>No.127 RCAF</td>
<td>No.403</td>
<td>Spitfire</td>
<td>Tangmere</td>
</tr>
<tr>
<td>No.127 RCAF</td>
<td>No.416</td>
<td>Spitfire</td>
<td></td>
</tr>
<tr>
<td>No.127 RCAF</td>
<td>No.421</td>
<td>Spitfire</td>
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<tr>
<td>No.129</td>
<td>No.184</td>
<td>Typhoon</td>
<td>Westampnett</td>
</tr>
<tr>
<td>No.143 RCAF</td>
<td>No.438 RCAF</td>
<td>Typhoon</td>
<td>Hurn</td>
</tr>
<tr>
<td>No.143 RCAF</td>
<td>No.439 RCAF</td>
<td>Typhoon</td>
<td></td>
</tr>
<tr>
<td>No.143 RCAF</td>
<td>No.440 RCAF</td>
<td>Typhoon</td>
<td></td>
</tr>
<tr>
<td>No.144 RCAF</td>
<td>No.441 RCAF</td>
<td>Spitfire</td>
<td>Ford</td>
</tr>
<tr>
<td>No.144 RCAF</td>
<td>No.442 RCAF</td>
<td>Spitfire</td>
<td></td>
</tr>
<tr>
<td>No.144 RCAF</td>
<td>No.443 RCAF</td>
<td>Spitfire</td>
<td></td>
</tr>
</tbody>
</table>

In addition to the above fighter wings in the 2nd TAF, No. 39 Reconnaissance Wing (later renamed No. 128 Wing), comprising four squadrons of recce Mustangs and Spitfires at Odiham, was also attached to 83 Group.

APPENDIX TWELVE

Spitfire vs FW — 190 Comparison

SPITFIRE VB
In June 1942 the RAF received a Luftwaffe Focke-Wulf FW-190 fighter when its pilots mistakenly landed at Pembrey in Wales. This was a stroke of luck as this new German fighter, first encountered in September 1941, appeared superior to Fighter Command’s standard aircraft — the Spitfire VB. Combat trials were immediately conducted, and the inferiority of this current version of the Spitfire is illustrated by the report on the trial by the Air Fighting Development Unit.\(^1\)

The FW-190 was compared with a Spitfire VB from an operational squadron for speed and all-round manouevrability at heights up to 25 000 feet. The FW-190 is superior in speed at all heights, and the approximate differences are listed as follows:

<table>
<thead>
<tr>
<th>Height in feet</th>
<th>Fastest Aircraft</th>
<th>By How Much</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000</td>
<td>FW-190</td>
<td>25–30 mph</td>
</tr>
<tr>
<td>3000</td>
<td>FW-190</td>
<td>30–35 mph</td>
</tr>
<tr>
<td>5000</td>
<td>FW-190</td>
<td>25 mph</td>
</tr>
<tr>
<td>9000</td>
<td>FW-190</td>
<td>25–30 mph(^2)</td>
</tr>
<tr>
<td>15 000</td>
<td>FW-190</td>
<td>20 mph</td>
</tr>
<tr>
<td>18 000</td>
<td>FW-190</td>
<td>20 mph</td>
</tr>
<tr>
<td>21 000</td>
<td>FW-190</td>
<td>25 mph</td>
</tr>
<tr>
<td>25 000</td>
<td>FW-190</td>
<td>20–25 mph</td>
</tr>
</tbody>
</table>

Climb. The climb of the FW-190 is superior to that of the Spitfire VB at all heights. The best speeds for climbing are approximately the same, but the angle of the FW-190 is considerably steeper. Under maximum continuous climbing conditions the climb of the FW-190 is about 450 ft/min better up to 25 000 feet.

With both aircraft flying at high cruising speed and then pulling up into a climb, the superior climb of the FW-190 is even more marked. When both aircraft are pulled up into a climb from a dive, the FW-190 draws away very rapidly and the pilot of the Spitfire has no hope of catching it.

Dive. Comparative dives between the two aircraft have shown that the FW-190 can leave the Spitfire with ease, particularly during the initial stages.

Manoeuvrability. The manoeuvrability of the FW-190 is better than that of the Spitfire VB except in turning circles. If on the other hand the Spitfire was flying at maximum continuous cruising and was ‘bounced’ under the same conditions, it had a reasonable chance of avoiding being caught by opening the throttle and going into a shallow dive, provided the FW-190 was seen in time. This forced the FW-190 into a stern chase and although it eventually caught the Spitfire, it
took some time and as a result was drawn a considerable distance away from its base. This is a particularly useful method of evasion for the Spitfire if it is ‘bounced’ when returning from a sweep. This manoeuvre has been carried out during recent operations and has been successful on several occasions.

If the Spitfire VB is ‘bounced’ it is thought unwise to evade by diving steeply, as the FW-190 will have little difficulty in catching up owing to its superiority in the dive.

The above trials have shown that the Spitfire VB must cruise at high speed when in an area where enemy fighters can be expected. It will then, in addition to lessening the chances of being successfully ‘bounced’, have a better chance of catching the FW-190, particularly if it has the advantage of surprise.

SPITFIRE IX
The balance was restored in mid-1942 when a developed Spitfire V, the mark IX, was rushed into service. The earlier Merlin 46 was replaced by the Merlin 61, which gave an improvement in horsepower of over 40 per cent. The Air Fighting Development Unit report shows a close similarity between the FW-190 and the Spitfire IX.

The FW-190 was compared with a full operational Spitfire IX for speed and manoeuvrability at height up to 25,000 feet. The Spitfire IX at most heights is slightly superior in speed to the FW-190 and the approximate differences in speeds at various heights are as follows:

<table>
<thead>
<tr>
<th>Height in feet</th>
<th>Fastest Aircraft</th>
<th>By How Much</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>FW-190</td>
<td>7-8 mph</td>
</tr>
<tr>
<td>5000</td>
<td>FW-190 and Spitfire IX</td>
<td>approx the same</td>
</tr>
<tr>
<td>8000</td>
<td>Spitfire IX</td>
<td>8 mph</td>
</tr>
<tr>
<td>15000</td>
<td>Spitfire IX</td>
<td>5 mph</td>
</tr>
<tr>
<td>18000</td>
<td>FW-190</td>
<td>3 mph</td>
</tr>
<tr>
<td>21000</td>
<td>FW-190 and Spitfire IX</td>
<td>approx the same</td>
</tr>
<tr>
<td>25000</td>
<td>Spitfire IX</td>
<td>5-7 mph</td>
</tr>
</tbody>
</table>

Climb. During comparative climbs at various heights up to 23,000 feet with both aircraft flying at maximum continuous climbing conditions, little difference was found between the two aircraft although on the whole the Spitfire IX was slightly better. Above 22,000 feet the climb of the FW-190 is falling off rapidly, whereas the climb of the Spitfire IX is increasing. When both aircraft were flying at high cruising speed and were pulled up into a climb from level flight, the FW-190 had a slight advantage in the initial stages of the climb due to its better acceleration. This superiority was slightly increased when both aircraft were pulled up into the climb from a dive.

It must be appreciated that the differences between the two aircraft are only slight and that in actual combat the advantage in climb will be with the aircraft that has the initiative.

Dive. The FW-190 is faster than the Spitfire in a dive, particularly during the initial stage. This superiority is not as marked as with the Spitfire VB.

Manoeuvrability. The FW-190 is more manoeuvrable than the Spitfire IX except in turning circles, when it is out-turned without difficulty.

The superior rate of roll of the FW-190 enabled it to avoid the Spitfire IX if attacked when in a turn, by flicking over into a diving turn in the opposite direction and, as with the Spitfire VB, the Spitfire IX had great difficulty in following this manoeuvre. It would have been easier for the Spitfire IX to follow the FW-190 in the diving turn if its engine had been fitted with a negative ‘G’ carburettor, as this type of engine with the ordinary carburettor cuts out very easily. The Spitfire IX’s worst heights for fighting the FW-190 were between 18,000 and 22,000 feet and below 3,000 feet. At these heights the FW-190 is a little faster.

Both aircraft ‘bounced’ one another in order to ascertain the best evasive tactics to adopt. The Spitfire IX could not be caught when ‘bounced’ if it was cruising at high speed and saw the FW-190 when well out of range. When the Spitfire IX was cruising at low speed its inferiority in acceleration gave the FW-190 a reasonable chance of catching it up and the same applied if the position was reversed and the FW-190 was ‘bounced’ by the Spitfire IX, except that the overtaking took a little longer.

The initial acceleration of the FW-190 is better than the Spitfire IX under all conditions of flight, except that in level flight at such altitudes where the Spitfire has a speed advantage and then, provided the Spitfire is cruising at high speed, there is little to choose between the acceleration of the two aircraft.

The general impression gained by the pilots taking part in the trials is that the Spitfire IX compares favourably with the FW-190 and that provided the Spitfire has the initiative, it undoubtedly has a good chance of shooting down the FW-190.

2. with second blower in operation.
## APPENDIX THIRTEEN

### 453 Claims Against German Aircraft

<table>
<thead>
<tr>
<th>Date</th>
<th>Pilot</th>
<th>Destroyed</th>
<th>Probable</th>
<th>Damaged</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1942</td>
<td>Swift</td>
<td>1 Ju-88</td>
<td>Deal, Kent</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 FW-190</td>
<td>Foret de Crecy, France</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 FW-190</td>
<td>Abbeville, France</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 FW-190</td>
<td>Axel Hurst, Belgium</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>1 FW-190</td>
<td>Rotterdam, Holland</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>1 FW-190</td>
<td>Zeebrugge, Belgium</td>
<td></td>
<td></td>
</tr>
<tr>
<td>02.07</td>
<td>Dowding</td>
<td>1/2 FW-190</td>
<td></td>
<td>1 FW-190</td>
<td>shared, Chartres</td>
</tr>
<tr>
<td>09.07</td>
<td>Smith</td>
<td>1 Me-109</td>
<td></td>
<td>1 FW-190</td>
<td>Lisieux, France</td>
</tr>
<tr>
<td>09.07</td>
<td>Steward</td>
<td>1 FW-190</td>
<td></td>
<td>1 FW-190</td>
<td>Lisieux</td>
</tr>
<tr>
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<td>Daff</td>
<td>1 Me-109</td>
<td></td>
<td>1 FW-190</td>
<td>Lisieux</td>
</tr>
<tr>
<td>09.07</td>
<td>Boulton</td>
<td>1 FW-190</td>
<td></td>
<td>1 FW-190</td>
<td>Lisieux</td>
</tr>
<tr>
<td>09.07</td>
<td>Seeley</td>
<td>1 FW-190</td>
<td></td>
<td>1 FW-190</td>
<td>Lisieux</td>
</tr>
<tr>
<td>09.07</td>
<td>Roberts</td>
<td>1 FW-190</td>
<td></td>
<td>1 FW-190</td>
<td>Lisieux</td>
</tr>
<tr>
<td>09.07</td>
<td>Kinross</td>
<td>1 Me-109</td>
<td></td>
<td>1 FW-190</td>
<td>Lisieux</td>
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<tr>
<td>09.07</td>
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<td>1 Me-109</td>
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<td>1 FW-190</td>
<td>Lisieux</td>
</tr>
</tbody>
</table>

1. Discrepancy between Herington and official records whether Sergeant Swift (Green 2) or Pilot Officer Blumer (Green 1) credited with this claim. The 453 Operations Record Book is quite clear that Swift was the scorer.
2. Destroyed by Wing Commander Ratten when leading 453 in combat as Wing Leader.
3. Two aircraft were evidently awarded later for this engagement. McDermott, Hansell, O’Dea and Greaves fired guns but did not lodge claims, but by 30 November 1943 No.453 had officially been awarded 11 aircraft as damaged, so it appears two damaged were awarded for this combat.

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### Glossary of Terms

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Ack-Ack</td>
<td>anti-aircraft fire from the ground, also known as flak</td>
</tr>
<tr>
<td>ADGB</td>
<td>Air Defence of Great Britain, the temporary renaming for the RAF's Fighter Command after the forming of the 2nd Tactical Air Force in 1944</td>
</tr>
<tr>
<td>AOC</td>
<td>Air Officer Commanding</td>
</tr>
<tr>
<td>Big Ben</td>
<td>code name for anti-V2 operations</td>
</tr>
<tr>
<td>C-in-C</td>
<td>Commander-in-Chief</td>
</tr>
<tr>
<td>Circus</td>
<td>fighter-escorted light daylight bombing attacks against short-range or fringe targets to lure German fighters to battle and maintain a strong enemy fighter force on the particular front concerned</td>
</tr>
<tr>
<td>Detachment</td>
<td>part of a unit, detached from its parent unit to another base for operations in another area</td>
</tr>
<tr>
<td>EATS</td>
<td>Empire Air Training Scheme, established during World War II to train aircrew in Australia, Canada and Rhodesia primarily for the RAF</td>
</tr>
<tr>
<td>Flak</td>
<td>anti-aircraft fire, abbreviation from the German Fliegerabwehrkanone (aeroplane defence gun)</td>
</tr>
<tr>
<td>Flight</td>
<td>a subdivision of a squadron, normally two flights to a squadron</td>
</tr>
<tr>
<td>Jim Crow</td>
<td>operational patrols of the home coastline to intercept any hostile aircraft crossing the coast</td>
</tr>
<tr>
<td>NEI</td>
<td>Netherlands East Indies</td>
</tr>
<tr>
<td>Noball</td>
<td>code name for launching, storage and manufacturing sites for German V-weapons</td>
</tr>
<tr>
<td>OTU</td>
<td>Operational Training Unit</td>
</tr>
<tr>
<td>Ramrod</td>
<td>code name for operations similar to a Circus but with a primary aim of destruction of a target</td>
</tr>
<tr>
<td>Ranger</td>
<td>code name for operations, usually of squadron, wing or group strength, aimed as freelance intrusions over enemy territory with the aim of wearing down the enemy fighter force</td>
</tr>
<tr>
<td>Rhubarb</td>
<td>small-scale fighter or fighter-bomber attacks on ground targets of opportunity</td>
</tr>
<tr>
<td>Roadstead</td>
<td>code name for operations on ships by fighters or bombers escorted by fighters</td>
</tr>
<tr>
<td>Rodeo</td>
<td>code name for fighter sweeps over enemy territory</td>
</tr>
<tr>
<td>Rover</td>
<td>code name for armed reconnaissance against chance targets behind enemy lines</td>
</tr>
<tr>
<td>Scramble</td>
<td>calling aircraft on readiness into the air to intercept hostile or unidentified intruders</td>
</tr>
<tr>
<td>Section</td>
<td>subdivision of a Flight, comprising two to four aircraft and defined by a colour, e.g. Blue section</td>
</tr>
</tbody>
</table>

Sortie: an aircraft’s individual operational flight — if the squadron launched 12 aircraft on a sweep, 12 sorties would be flown on that one operation.

Sweep: an offensive formation of fighters or fighter bombers designed to draw the enemy.

USAAF: United States Army Air Force.

V Weapon: Hitler’s reprisal weapons, the V1 rocket bomb and the V2 guided missile; from the German Vergeltungsraffe.

Vics: three or more aircraft flying in a V-formation.
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On the clear moonlit Singapore night of 7 December 1941, the Japanese were to begin the Pacific War. With 20 minutes' warning of the approach of Japanese bombers in the early hours of 8 December, No.453 Fighter Squadron prepared to take off and intercept the raiders. However, their request to engage the enemy was refused. They could not believe this response and were informed that if they took off, they would be disobeying orders. Their dismay was soon compounded by the sight of enemy bombers over Singapore. No aircraft intercepted the attackers of the British 'fortress' of the Far East, and the reason for this inaction was inexplicable to the members of this Australian fighter squadron. This frustration and apparent incompetence typified the war that No.453 Squadron was to fight in the futile defence of Malaya and Singapore.

Squadron Leader John Bennett is an RAAF navigator who has served on both RAAF and RAF squadrons flying Canberra, F111 and Buccaneer strike aircraft. *Defeat to Victory* is his first book, which will be followed by others tracing the history of Australian military aviation.