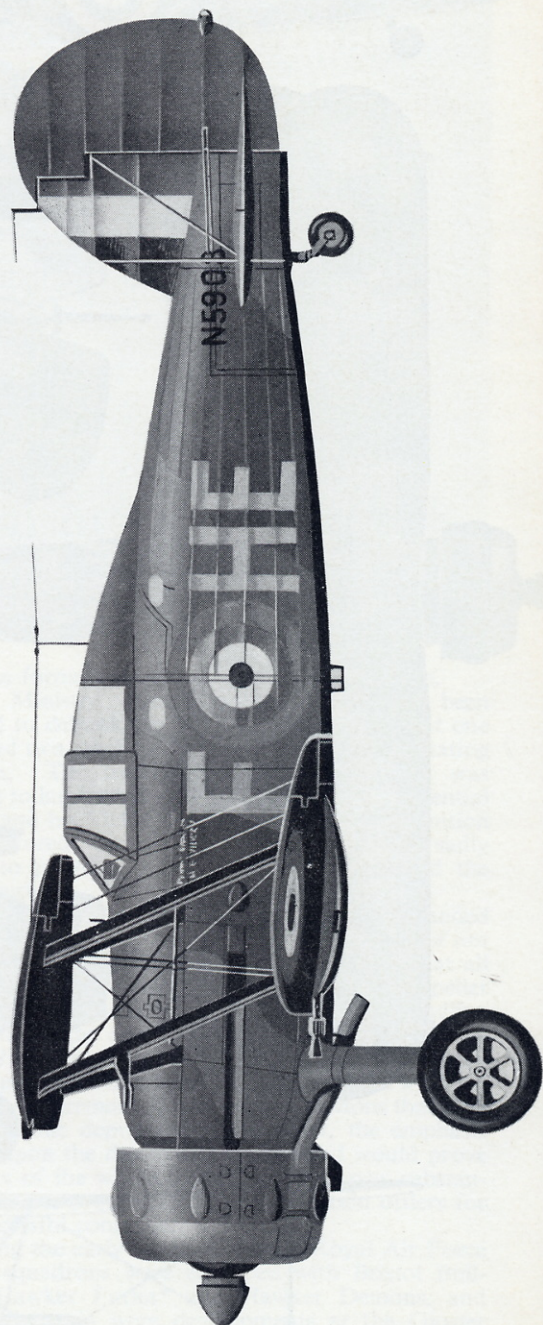
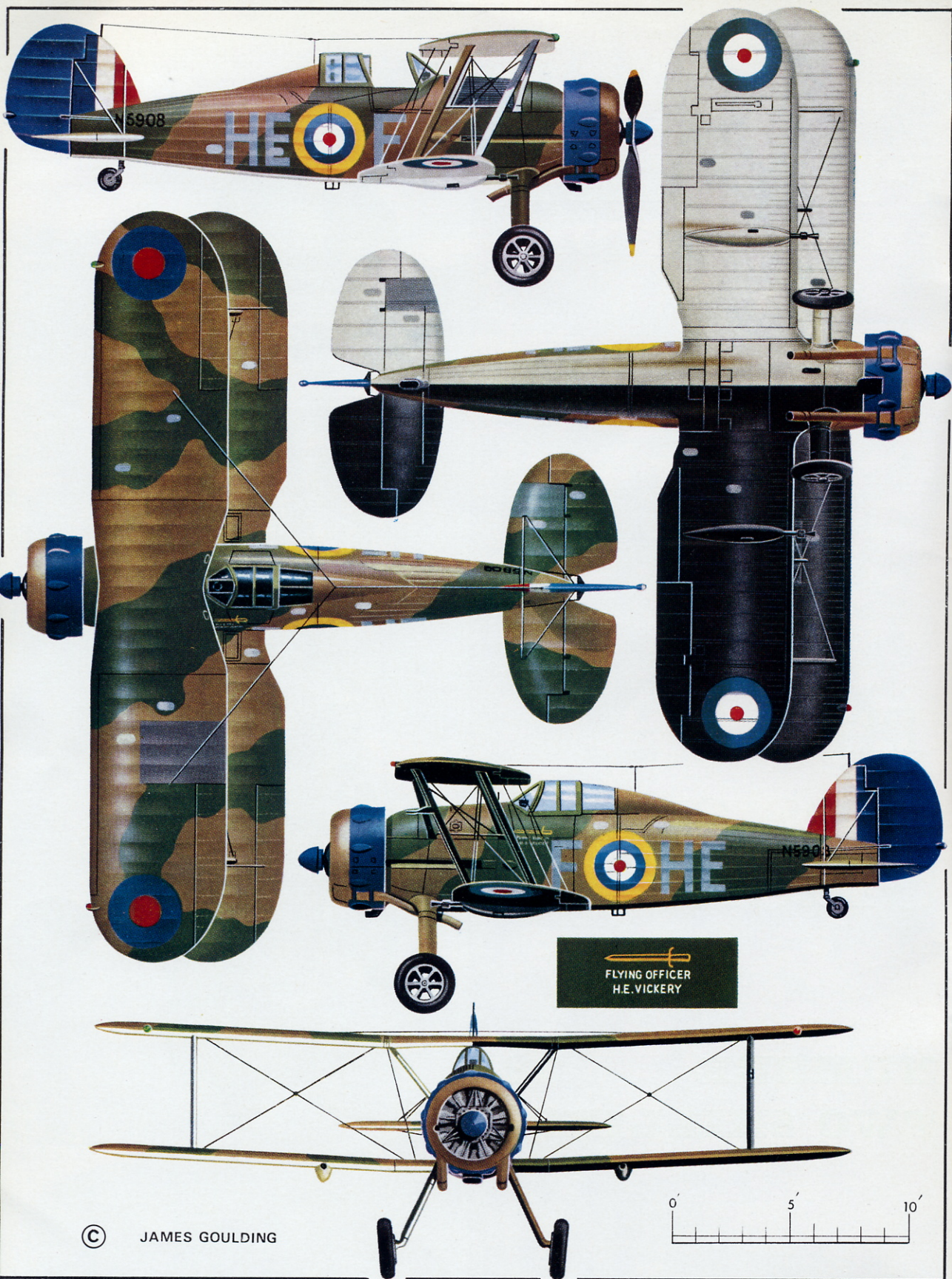


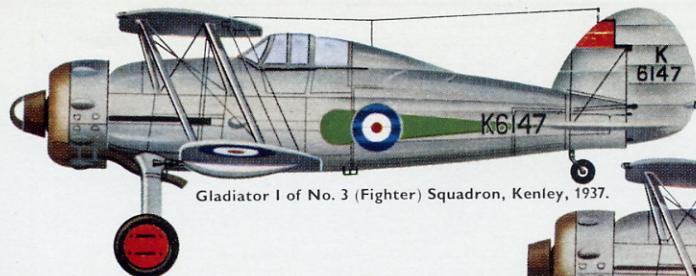
**PROFILE
PUBLICATIONS**

The
Gloster
Gladiator

**NUMBER 98
TWO SHILLINGS**



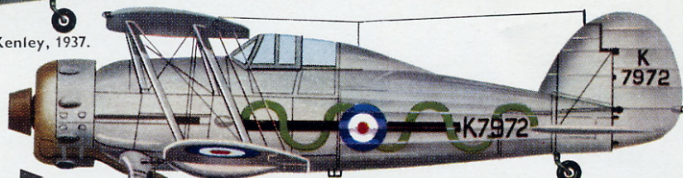




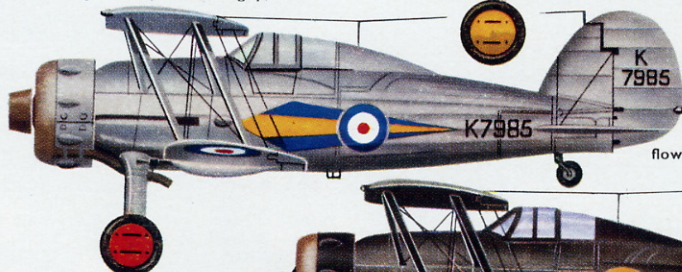
Gladiator I of No. 3 (Fighter) Squadron, Kenley, 1937.

K7972, Gladiator I of No. 87 (Fighter) Squadron, flown by Plt. Off. R. L. Lorimer in tied-together aerobatics, Villacoublay, 1938.

K7985, Gladiator I of No. 73 (Fighter) Squadron, Digby, 1938.



Wing detail of 3 Sqn. marking.



Wing detail of 73 Sqn. marking.



Gladiator II for Lithuania (upper surface of wings olive drab).



N2266, Sea Gladiator (Interim) of No. 804 Squadron flown by Lt. Cdr. J. C. Cockburn, H M S Sparrowhawk, April 1940. Destroyed He 111, Scapa Flow, 10 4 40.



Sea Gladiator, N5519, flown by Sgt. Plt. J. N. Robertson, No. 261 (Fighter) Squadron, Luqa, Malta, August 1940.

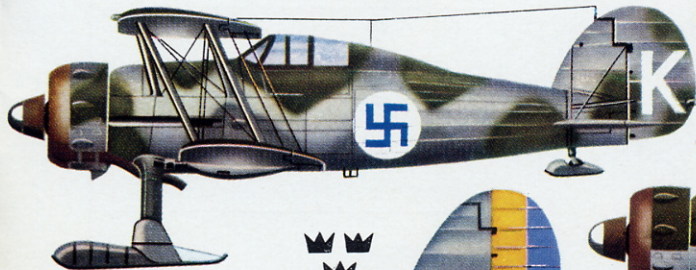


Gladiator I, L7616, of No. 94 (Fighter) Squadron, flown by Fg. Off. Herrtage; destroyed He 111, Habbaniyah, Iraq, 16 5 41.

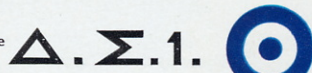


Gladiator II, N5636, with No. 1 School of Army Co-operation, 6 41

J8 (Gladiator I) of Swedish F19 at Kemi, North Finland, 1 40.



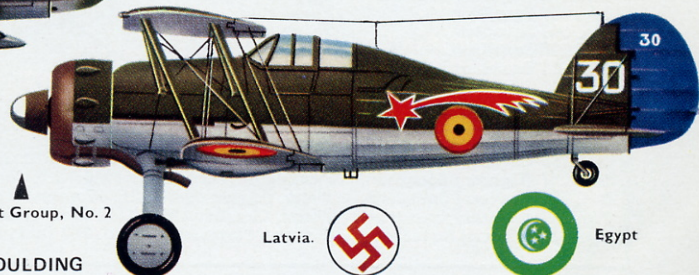
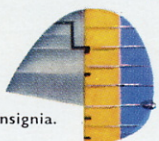
Fuselage markings of one of two Gladiators presented to Greek Government by M. Zarparkis Homogenos.



Greek wing marking (not repeated on fuselage)



Flygvapnet insignia.



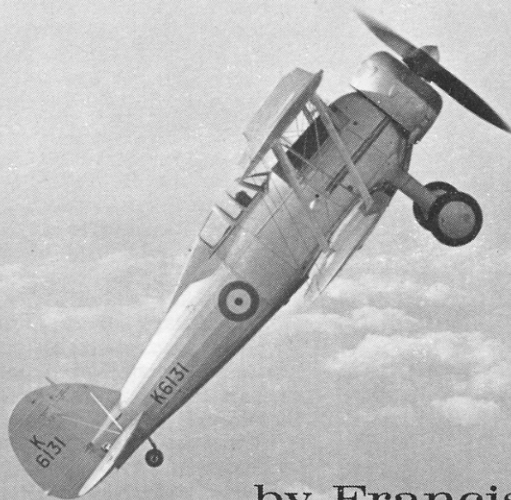
Gladiator I of 1ère Escadrille de Chasse (La Comete), 1st Group, No. 2 Fighter Regiment at Diest, Belgium, 1940.

Latvia.



Egypt

The Gloster Gladiator



by Francis K. Mason

A pleasant air-to-air study of Gladiator K6131 (the third production Mark I). This photo was taken during the manufacturers' check-out flight before the installation of armament.
(Photo: Flight Neg. No. 13930s)

Among all the obsolescent aircraft which inevitably equipped the warring nations at the outbreak of the Second World War, the Gloster Gladiator stands proud as the ultimate perfection of a bygone age, and perhaps accordingly was invested with responsibilities far beyond its theoretical capacity to meet. For while aggressor nations were able to embark upon excursions according to their resources, the less-prepared and ill-equipped British Strategic Command (*sic*) was faced with applying *any* defensive measures that came to hand. The anomaly of the Gladiator was that reliance upon it grew week by week and numbers in service increased during almost the whole of the first year of the War!

It has been averred that the Gladiator should, according to political postulations of the early 'thirties, never have appeared. And, out of industrial and technical considerations, very nearly didn't. Churchill's Ten Year Rule axiom (that ten years' notice would be forthcoming of any participation in a European war) was finally abandoned in 1932 with the imminent breaking up of the Disarmament Conference and, by implication, the likelihood of war within ten years thereby increased. Bearing this in mind—and that since 1920 Britain's metropolitan defence had been orientated against French aggression—the immediate demands by the technical planning committee at Air Ministry were for short range interceptor fighters, and already views had been expressed in 1930 that the age-old 150-200 m.p.h.

two-gun formula must be superseded forthwith.

Air Ministry Specification F.7/30 had been evolved to debunk the long-cherished belief that one man and two machine guns represented a devastating weapon. The trouble was that his aircraft was tending to lag further and further behind his potential target, and his Vickers guns, which fired ammunition manufactured twenty years previously, were sadly prone to jamming no sooner than he pressed the firing button.

In effect therefore the new requirement demanded a maximum speed of 250 m.p.h., an armament of not less than four forward-firing guns (assuming that all would be synchronised to fire through the propeller and therefore slow firing) and such ease of handling as to enable the one fighter to be operated both by day and night squadrons. By 1932, with almost every fighter project design team in the country at work on the new requirement, it had become obvious that with the economic depression at its worst, the emphasis placed upon the day-and-night demand would prove the crux of the whole matter, and this was substantiated by the promise of large production orders for the successful contender.

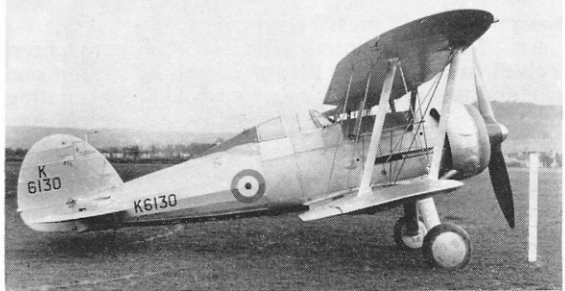
During the early nineteen thirties Royal Air Force fighter squadrons were equipped with Bristol Bulldogs, Hawker Furies* and Hawker Demons, and already in train were developments at the Gloster Aircraft Company with the S.S.19 prototype that was

*Bristol Bulldog, PROFILE No. 6; Hawker Fury I, PROFILE No. 18;

Facing page: Gloster Gladiator II of No. 263 (Fighter) Squadron, R.A.F. Norway, 1940. This aircraft, originally allocated to Fg. Off. H. E. Vickery, was flown by Plt. Off. L. R. Jacobsen during the afternoon of 2nd June 1940. During a running fight with German bombers, Jacobsen destroyed four He 111's, and Luftwaffe sources record that two Ju 88's were also lost. Such a feat of arms was certainly unequalled by any other Allied fighter in World War II. Jacobsen was awarded an immediate D.F.C. but lost his life four days later when returning to the U.K. aboard H.M.S. Glorious. The aircraft was lost at the same time.



Three interesting comparative views of Gladiators. Top: The Gladiator prototype S.S.37 as it originally emerged from the experimental shops at Glosters. Note open cockpit, drum-fed Lewis guns under the lower wings, narrow-chord engine cowling and unfaired wheel discs. Centre: The same aircraft after modification to full production standard with Service serial, enclosed cockpit, Browning underwing guns, Mercury VIII engine and faired wheel discs. The spatted tailwheel has however been retained. Bottom: The second production Gladiator I, K6130, with unspatted tailwheel and minor alterations to the radio aerial. (Photos: Upper, Flight Neg. No. 10763s; Centre, Gloster Aircraft Co. Neg. No. G105; Lower, Ministry of Defence Neg. No. 8995D).



to become the Gauntlet*—scheduled to replace the Bulldog in 1935-36.

So while preoccupation with the Gauntlet development prevented Gloster from participation in the initial scramble to prepare an F.7/30 contender, other Companies (namely Hawker, Bristol, Supermarine, Fairey, de Havilland and Westland) were experimenting with technical advances such as had never before been engendered by a single Specification. Two obstacles lay in their path. The first was the virtual insistence that the F.7/30 fighter should be powered by the steam-cooled Rolls-Royce Goshawk; however it was the delay in realising that this engine was not suitable for fighters (on account of the weight and vulnerability of the steam condensers) that spelt failure for so many of the designs. The other obstacle to most designers was the insistence on placing the machine gun breech assemblies within reach of the pilot.

It was the very fundamental nature of these demands that fostered the extraordinary variety of aircraft configurations. But from this wierd collection—the

Westland "gull biplane" with pilot in front of engine, the Supermarine monoplane and the more conventional Hawker P.V.3—none proved a match for the demands. Moreover the advent, as yet on paper only, of the Spitfire and Hurricane monoplane fighters, threatened to eliminate the F.7/30 requirement altogether.

It was only when it seemed likely that a gap might occur in defence requirements between the demise of the Bulldog and Service acceptance of the monoplanes that Gloster realised that a development of the Gauntlet might well nurture the F.7/30 thesis and achieve worthwhile production contracts.

THE GLADIATOR PROTOTYPE

Such a development had been evolved as an academic exercise at Brockworth. Improved wing design, resulting from the adoption of Hawker techniques, allowed a change to single-bay wings, and choice of the 700 h.p. Bristol Mercury M.E.30 radial engine suggested a worthwhile performance increase over that of the Gauntlet; with redesigned, cantilever undercarriage incorporating internally-sprung mainwheels, an armament of two Vickers Mk. III guns and landing flaps on upper and lower wings, paper calculations promised a top speed of 250 m.p.h. at 14,000 feet and a landing speed of 48 m.p.h.

Thus, as something of a fortuitous afterthought, Gloster (and H. P. Folland in particular) had almost achieved what the remainder of the aircraft industry had failed to achieve. With the courage of the conviction, Gloster commenced in the early spring of 1934 the construction of a prototype, the S.S.37, and completed it in September that year for its first flight by Flt. Lt. P. E. G. Sayer. Powered by a 645 h.p. Mercury VIS and armed with two Vickers and two drum-fed Lewis guns, the prototype achieved a speed of 242 m.p.h. at 11,500 feet.

As if disbelieving the achievement of so high a performance with a radial engine, the Air Ministry sponsored protracted evaluation trials, and transferred the prototype to R.A.F. charge as K5200 on 3rd April 1935. Production plans were put forward in June, including 840 h.p. Mercury IX, four Vickers Mk. V guns and improved wheel discs, and thereafter events—prompted by the urgency of R.A.F. expansion—moved rapidly. In two weeks a production Specification, F.14/35, had been drawn up and agreed, a contract for twenty-three aircraft was awarded to Gloster, and on 1st July the name Gladiator was officially announced.

As the months passed, the wisdom of Gloster's foresight became apparent. Factions were resurrected in Europe which spelt impending doom, if only when seen by those whose eyes were open. Mussolini attacked Abyssinia, and Hitler made little secret of his military intentions. The R.A.F.'s monoplane fighters were still at least two years away and unknown quantities. While K5200 underwent numerous trials (which resulted in the addition of a sliding hood for the pilot), production got under way at Hucclecote. As at the parent Company, Hawker, production of the complete batch was undertaken simultaneously so that the entire order was completed almost together, the first aircraft, K6129, being taken on R.A.F. charge on 16th February and the last, K6151, on 4th March 1937. Furthermore a second batch of 180 Gladiators, ordered in September 1935, was close behind, it being a term of the production contract that all should have been taken on Air Ministry charge by the end of 1937.

*Gloster Gauntlet, PROFILE No. 10.



A Gladiator 1 K7985, of No. 73 (Fighter) Squadron.

(Photo-via R. C. B. Ashworth)

Next in line for the new fighter was No. 80 Squadron at Henlow in May 1937, but as within a year this unit moved to the Middle East, more will be told later of the squadron's exploits. Other squadrons to receive Gladiators in 1937 were No. 65 (at Hornchurch on 1st June), Nos. 73 and 87 (at Debden on 8th June), and No. 56 Squadron at North Weald on 12th July.

Introduction of the Gladiator into R.A.F. service

The first squadron to receive Gladiators was No. 72 at Tangmere having been formed from a nucleus flight from No. 1 Squadron on the same airfield. On 22nd February 1937, Flt.Lt. E. M. Donaldson* and four other pilots collected K6130-K6134 from Brockworth and flew them to their new base at Church Fenton. It transpired that the new squadron was to fly Gladiators until April 1939—longer than any other home-based front-line unit.

Following further deliveries to No. 72, No. 3 Squadron at Kenley received most of the remainder of the first production batch on 2nd April, the Gladiators replacing Bulldogs.

Thus far all deliveries had been made with Lewis guns under the lower wings pending clearance of the Vickers Mark V guns remote from the pilot. Events proved that although clearance was eventually achieved, Service units encountered such difficulties that the Vickers was seldom used, and with the arrival of the Browning (Colt licence) gun, reversion to Vickers V, Vickers "K" and Lewis was favoured only in dire emergency.

First squadron to equip with Browning-firing Gladiators was No. 54 Squadron at Hornchurch on 27th April, followed shortly afterwards by No. 74, also at Hornchurch. The Gladiators on the latter unit were however handed on to No. 3 Squadron, their place being taken almost immediately by Gauntlets.

*Later Air Commodore E. M. Donaldson, C.B., C.B.E., D.S.O., A.F.C.

Four Gladiator 1's of No. 33 (Fighter) Squadron in flight over Jerusalem in 1939. The appearance of squadron code letters on silver aircraft is interesting but not unique.

(Photo: British Official Neg. No. M711)



had been surprisingly difficult. Although pilots were usually complimentary of the new fighter, operational training had not been without event; in fact, so high had the accident rate been (albeit of a superficial nature in the main), that a small replacement batch of 28 aircraft had been hurried through (L8005-L8032), but these came to be delivered into storage where they remained until 1939 when they were shipped to the Middle East. The main flying difficulty was as the result of the increased wing loading and the lack of experience in landing with the generous flap area now provided. The new biplane stalled more abruptly, with increased tendency to drop a wing (hence a plague of damaged wing tips), and the relatively easily-attained flat spin demanded great care for recovery. Spinning at night was forbidden.

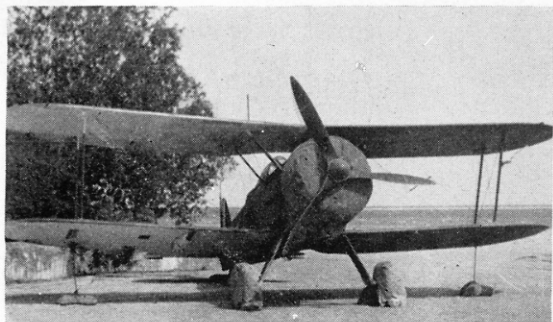
In the long run therefore the Gladiator demonstrated its great value, for it was experience gained with sliding hood environment and landing flaps that stood pilots in good stead when it came to conversion to Hurricanes and Spitfires, and it is significant from records that the monoplane fighter squadrons that had flown Gladiators achieved far better accident records than those that had come straight from Gauntlets.

By September 1937 all eight Gladiator squadrons had reached operational status so that the British Government felt inclined to invite a party of senior

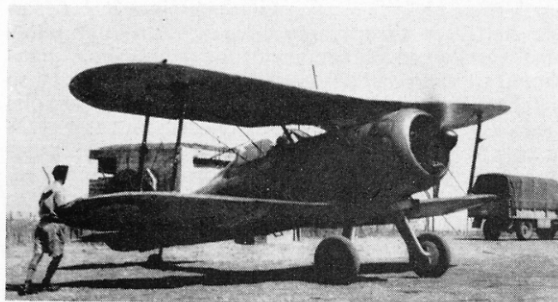
Intimate photo of pre-War R.A.F. armourers servicing a Gladiator's underwing Browning gun. The air of delightful simplicity of the operation is refreshing in comparison with servicing of later years.

(Photo: Ministry of Defence Neg. No. H190)





Little documented in post-War narratives were the excursions of No. 94 (Fighter) Squadron. The photo above shows a 94 Squadron Gladiator II at Berbera, British Somaliland in 1941; that below was taken during the Iraqi investment of Habbaniyah. After the latter action most of the Squadron's Gladiators were handed over to the S.A.A.F. and R.A.A.F. in the Middle East. (Photos: Top, Gp. Capt. W. T. F. Wightman, R.A.F.; Bottom, Ministry of Defence Neg. No. H1238)



Luftwaffe air officers to inspect two of the squadrons. Thus, with traditional and illogical diplomacy that is a feature of British politics, Generals Milch, Stumpff and Udet (staff officers of the very armed force against whose potential threat Britain was re-arming) were invited to inspect Nos. 54 and 65 Squadrons at Hornchurch—the spearhead of London's defence—on 23rd October!

The year 1938 saw a shift in the emphasis upon the Gladiator. Once whetted, the R.A.F.'s appetite for Hurricanes could scarcely be sated. It was published policy now that for every Gladiator squadron equipped, one other would be re-equipped with Hurricanes or Spitfires. In place of Nos. 3 and 56 Squadrons, who gave up Gladiators for Hurricanes early in the year, Nos. 25 and 85 Squadrons took on full establishment of Gladiators. In place of Nos. 73 and 87 came the first of the Auxiliary Air Force Squadrons, No. 607 (County of Durham) based at Usworth. Moreover, realising that should war come to Europe, Britain's overseas trade lines would be critically vulnerable, the R.A.F. commenced despatching Gladiator squadrons to the Middle East for the defence of the Suez Canal. The wisdom of this move will be evident later in this account.

Thus at the time of Neville Chamberlain's much criticised peace overtures that culminated in the Munich appeasement, the defence of Britain rested upon a fighter force predominantly supported by biplane wings:

1st line strength

- 2 Hurricane squadrons, fully established and operational.
- 5 Gladiator squadrons, fully established and operational.
- 8 Gauntlet squadrons, fully established and operational
- 3 Fury I/II squadrons, fully established and operational

3 Demon squadrons, fully established and operational
2nd line strength

2 Hurricane squadrons, fully established but non-operational.

1 Gladiator squadron, being re-equipped.

1 Gauntlet squadron, partly established and operational

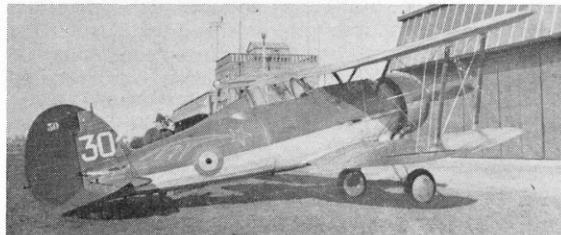
4 Demon squadrons, partly established and operational.

So with the knowledge that Britain's defence could only be secured with a minimum of fifty-two fighter squadrons, the military planners now had graphic information as to the size of the expansion task that lay ahead. So great was that task that when war finally arrived, the Gladiator had by no means disappeared from the scene.

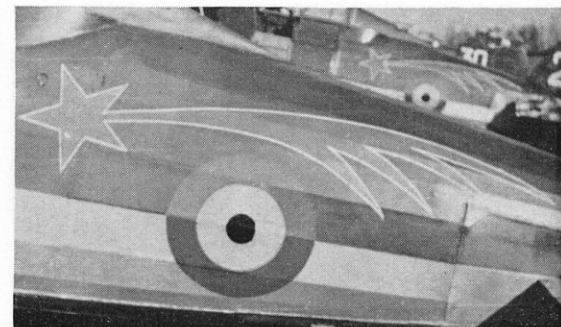
GLADIATORS AT WAR

On the outbreak of war in September 1939 the home defence of Great Britain rested upon Hurricanes, Spitfires and, to a lesser extent upon Blenheims and Gladiators. The Spitfire squadrons were regarded as something of a *corps d'élite*, to be carefully husbanded until the eventual attack on these shores. At the same time Britain's "plans for expediency" provided for a fighter force to cover and accompany the inevitable despatch of an expeditionary force to France. Thus, with the remarkable haste and efficiency that attended the sailing of the B.E.F. during the first weeks of war, so departed the first two Hurricane squadrons.

It soon became clear that, treaty obligations apart, the R.A.F. was too thin on the ground in France and accordingly in November Nos. 607 and 615 Squadrons departed from Croydon and flew to Merville* to join the Northern Air Component of the B.E.F. Little of excitement occurred for many weeks as the severe winter weather prevented much air activity on either side. Numerous accidents were attributable to poor visibility and bad field conditions, but just as news arrived that both squadrons were to re-equip with Hurricanes the German storm fell upon the Low Countries and all at once the Air Component pilots were fighting for their lives. For one week after that



At the time of the German invasion of Belgium in May 1940 about fifteen Gladiators remained on strength with the 1ère Escadrille de Chasse at Diest. Known as "La Comète", this unit displayed distinctive fuselage insignia which is also shown in colour on Page 15 of this Profile. (Photos: Above, André Pernet; Below, Maj. Terlinden, Avi. Belge Militaire)



*No. 607 Squadron, previously based at Usworth until 8th October, had moved to Aeklington and on 17th October a section of three Gladiators, led by Flt. Lt. J. Sample, destroyed a Dornier Do 18 flying boat over the North Sea, its crew being rescued and taken prisoner.

fateful 10th May the Gladiators were constantly in action; 607 lost its C.O., a Flight Commander and seven other pilots, yet replacement pilots and aircraft continued to arrive so that between them the two Squadrons were still operating about 18 Gladiators and a dozen Hurricanes on 18th May. On that day, however, after a running battle with Bf 109s and 110s over Arras (not entirely one-sided), the remaining Gladiators were caught on the ground at Vitry-en-Artois by a force of enemy bombers and many were destroyed together with their stores. Deprived of fuel and ammunition, the Squadrons were ordered to burn their aircraft and make their way to the coast for evacuation to England. No. 615's operational record book did not survive, but depositions recorded by No. 607 suggest that seventy-two enemy aircraft were destroyed by the two units between 10th and 20th May, and, bearing in mind the relatively small number of Hurricane sorties flown, it would seem likely that most of these fell to Gladiators' guns.

Of the fifty-odd biplanes which flew to France between October 1939 and May 1940 only a handful survived, the tired but veteran pilots being withdrawn from combat to rest and convert on to Hurricanes and Spitfires.

THE NORWEGIAN CAMPAIGN

It was almost certainly a shy reluctance on the part of British information services to admit the weight of responsibilities vested in aged biplanes that relegated the Gladiator's part in the Norwegian campaign to obscurity in those dark days of 1940. Yet amidst all the ballyhoo attending the fight at odds, No. 263 (Fighter) Squadron's tremendous achievements must certainly rank among the highest of the Royal Air Force.

When Hitler moved against southern Norway on 8th April 1940, British forces were already under orders to prepare for operations further north. No. 263 Squadron at Filton had been brought up to front line strength and warned for operations in Finland with Gladiators. It was this "low temperature" environmental training that caused their destination to be altered to Norway and eighteen



One of 14 Gladiators sold to Lithuania in 1937. Not clearly visible in this view are the upper surfaces which were doped olive drab. (Photo: Bristol Engine Co. Ltd., Neg. No. 18201)

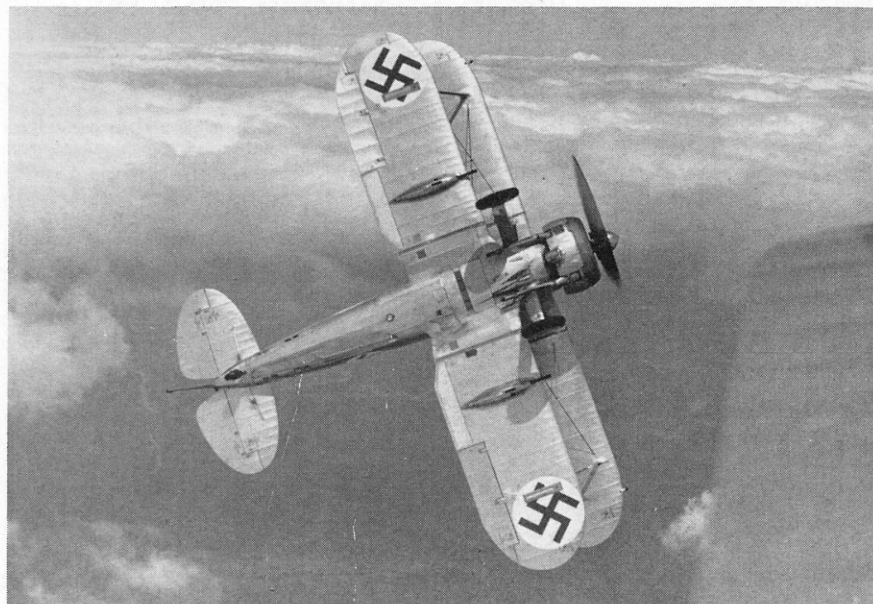


Eire took delivery of four Gladiator I's in 1938, registered 23-26. Aircraft Nos. 23 and 25 were painted in a different camouflage pattern to that on Nos. 24 and 26.

(Photo: Bristol Engine Co. Ltd., Neg. No. 18202)

pilots accompanied their aircraft in H.M.S. *Glorious* from Scapa Flow eastwards towards the Norwegian coastline on 22nd April. When still 150 miles from the mainland the aircraft were flown off and landed on the frozen Lake Lesjaskog in central Norway. This first expedition was marred by lack of administrative preparation for, though the pilots were well prepared to meet the onslaught of the *Luftwaffe*, their machines were not; what was worse, the frozen lake began to melt. Nevertheless the Squadron's task was to cover British and Norwegian ground forces operating in central Norway, a task performed admirably having regard for the appalling conditions and the almost

total lack of a ground warning system. It is now history that the very runway on the ice was, under the direction of Sqdn. Ldr. Whitney Straight, trampled and cleared by 200 local inhabitants while a skeleton servicing Flight was established at Aandalsnes by Wg. Cdr. L. T. Keens. On the morning of the first day, despite starting difficulties owing to frozen carburettors, two Gladiators took off and



Twenty-six Gladiator I's were sold to Latvia in 1937, being subscribed by State Lottery. The swastikas were painted in red, but the upper surface markings did not include the white disc as background.

(Photo: Flight, Neg. No. 14491s)

destroyed a Heinkel He 115, but a lone He 111, seeing the patrol's attention diverted elsewhere, dropped a stick of bombs along the runway. On learning that British fighters were operating in Norway, the enemy carried out numerous attacks on 25th April against the lake and, due to an almost complete lack of servicing crews, the re-arming and fuelling was carried out by the pilots themselves. On several occasions pilots were wounded on the ground but still flew, either in defence of the base or to give cover to the artillery in action not ten miles distant. By mid-day two further enemy aircraft had been shot down (by Flt. Lt. Mills and Plt. Off. MacNamara), but ten Gladiators had been destroyed on the ground. By nightfall the lake was a shambles; only four Gladiators remained airworthy and on the following day these were flown north to Aandalsnes where, without adequate fuel to continue the fight, they were destroyed.

Returning to Filton to re-equip, No. 263 took stock of its experience. Plainly the Gladiator was scarcely a match for the modern German aircraft, but in view of new plans to return to Norway there was no time to convert to Hurricanes. This time more elaborate preparations had been completed so that adequate servicing crews would accompany the Squadron and on 14th May eighteen replacement Gladiators set sail in *Glorious* with their pilots, this time destined for Narvik far to the north. Several of the pilots wounded during the first expedition had been replaced by new squadron members, but one, Lt. Lydekker R.N., volunteered to join the Squadron during the voyage.

Arriving at Bardufoss on 22nd May (having lost two Gladiators which flew into a mountain during the flight from *Glorious*), the Squadron carried out 54 sorties on the first day. Pilot Officer Craig-Adams was killed ramming an He 111, and the following day Sgt. Whall destroyed a Do 17. Several aircraft (including three Ju 90s, a Ju 88 and an He 111) were shot down without further loss during the next few days, and the Gladiators now commenced patrolling up to sixty miles from their base, often in company with Hurricanes of No. 46 Squadron, the only other R.A.F. unit in Norway.

Ground attack sorties were now added to the Gladiators' duties and during the last days of May railway stations, enemy vehicles and coastal vessels were attacked by 263's pilots. Fg. Off. Vickery's aircraft (the subject of the general arrangement drawing on page 2) returned from a sortie over Bjornfjell on 30th May with heavy *flak* damage—minus an interplane strut and a flying wire and with an enormous hole in the port upper wing.

It was in this aircraft that during the afternoon of 2nd June Plt. Off. Jacobsen fought his classic fight against large numbers of enemy bombers. After his No. 2 (Plt. Off. Wilkie) had been shot down, Jacobsen roamed the skies near Narvik, probably destroying a Ju 88 by forcing it to dive into the side of a mountain, certainly destroying three He 111s (these were confirmed from the wreckage found) and probably destroying a fourth (which was posted as missing in German records). To quote from an official deposition:

"Now the Gladiator was surrounded by two Ju 88s and six He 111s, some of which attacked with cannon or heavy machine guns. The fighter's oil cooler was hit, the wind-



One of 15 Gladiator IIs diverted from an Air Ministry contract to Portugal in 1939, seen here during contract evaluation at Martlesham Heath by the A. & A. E. E.

(Photo: Ministry of Defence, Neg. No. MH5724)

screen was coated with oil and a flying wire was shot through and, to avoid a collision Jacobsen dived and turned sharply on to the tail of one of the Heinkels. Firing almost blindly, he saw the German rock violently and both its engines stop before his own guns ran out of ammunition . . . Jacobsen then found himself up against very superior numbers with ammunition exhausted and fuel almost gone. By low flying evasive tactics he managed to shake off his pursuers and return to base. It was later confirmed from Norwegian sources that three He 111s were found to have crashed near the Swedish border and these were credited to Jacobsen; it is felt however that a thorough search would have revealed the remains of further crashes of enemy aircraft . . ."

It will never be known for certain how many enemy aircraft Jacobsen destroyed in his epic fight; an examination of German records in relation to the actions by Allied forces on that day, suggest that he may have caused the destruction of as many as *six* aircraft; if such was the case, this score must rate a record among Allied pilots in World War II.

It is a matter of History that Nos. 46 and 263 Squadrons were evacuated from Narvik on 7th June, the aircraft being flown on to the deck of H.M.S. *Glorious*. The following day the carrier was sunk by the *Scharnhorst* and *Gneisenau* and almost the entire strength of the two squadrons was lost.* Only two Hurricane pilots were rescued from the sea.

Swedish J8 Gladiator I's of F18 probably suffered worse winter rigours than any others for the Russo-Finnish campaign of 1939-40 was fought in the severest winter known for many years. Here an aircraft is being prepared for flight after a snow storm at Kemi and the camouflage wraps are being removed from the wings. (Photo: Colonel Hugo Beckhammar, Flygvapnet)



*In such a record of the Gladiator, the names of the ten pilots lost should be recorded: Sqdn. Ldr. J. W. Donaldson, D.S.O., D.F.C., A.F.C.; Fg. Off. Grant-Ede, D.F.C.; Fg. Off. H. E. Vickery; Fg. Off. A. T. Williams, D.F.C.; Plt. Offs. J. Falkson, P. H. Purdy, D.F.C., L. R. Jacobsen, D.F.C.; S. R. McNamara, D.F.C.; M. A. Bentley; Sgt. Plt. E. Russell, M.M.

THE MEDITERRANEAN AND MIDDLE EAST

The Gladiator's war in the Middle East commenced in mid-1938, No. 80 Squadron operating a detachment of about three Gladiators (flown by Fg. Offs. H. L. I. Brown, P. Wykeham-Barnes* and M. T. St. J. Pattle) in "Airpin" operations from Ramleh in Palestine against Arab cordon breakers. Squadrons operating Gladiators during the period 1938-1940 in Egypt and Palestine were Nos. 33, 80 and 112—the last-named squadron formed aboard H.M.S. *Argus* in transit from Southampton to Alexandria on 16th May 1939.

Broadly speaking, Gladiator operations in the Middle East covered all theatres in the years 1940-41. At the outbreak of war with Italy on 10th/11th June 1940 the old biplane was liberally distributed between Malta, Egypt, Palestine, Aden and the Indian Ocean. The stocks at Malta were at hand to provide spares for H.M.S. *Glorious* which had been engaged in shipping protection duties in the Indian Ocean since 1939 until ordered home to participate in the Norwegian campaign. After her return there remained about a dozen Sea Gladiators at Kalafrana, Malta, and several of these were assembled for use in defence of the Island in the event of an attack by Italy. Much has been made of the fight by "Faith, Hope and Charity", and, without being deprecating of the efforts of these fighters, there is little actual substance to support the claim that "they fought alone against the might of the *Regia Aeronautica*". From post-War records there is evidence of only desultory action against the island during the first fortnight and but three Italian aircraft shot down. Moreover the fact that Hurricanes were present on the Island for much of that time has never been adequately emphasised.

Perhaps of greater interest was the operation of Gladiators in defence of Aden. Here was based No. 94 (Fighter) Squadron under the command of Sqdn. Ldr. W. T. F. Wightman. From the earliest days, when it seemed likely that Aden was endangered by Italian presence in East Africa, this Squadron maintained spirited offensive action against Italian airfields, attacking dumps and strafing enemy aircraft, providing cover for shipping entering Aden and defending Aden itself by day and night. It was the tenacious action by a 94 Squadron pilot, Fg. Off. G. S. K. Haywood, that resulted in the surrender and subsequent capture of the Italian submarine *Galilei Galilei*!

Later on, as the danger to Aden passed, 94 Squadron moved north to the Canal Zone under orders to re-equip with Hurricanes, but before this could be accomplished, Wightman and his pilots flew to the assistance of the R.A.F. base at Habbaniyah in Iraq which, in May 1941, was on the verge of being attacked by the Axis-supported revolutionary Iraqi army. Despite the use of a number of modern



A No. 263 (Fighter) Squadron Gladiator at Aandalsnes in 1940. This photo, which also shows a Fleet Air Arm Skua in the background, gives some indication of the rugged Norwegian terrain, while the care taken to disperse and camouflage the aircraft suggests an acute awareness of the proximity of enemy forces. Also of interest is the absence of wheel discs, the removal of which was found to be necessary owing to the pervading mud and moisture freezing and locking the wheels; this expedient was a relic of No. 263's preparations for action in Finland, and was adopted throughout the Norwegian campaign. (Photo: Air Commodore Whitney W. Straight)



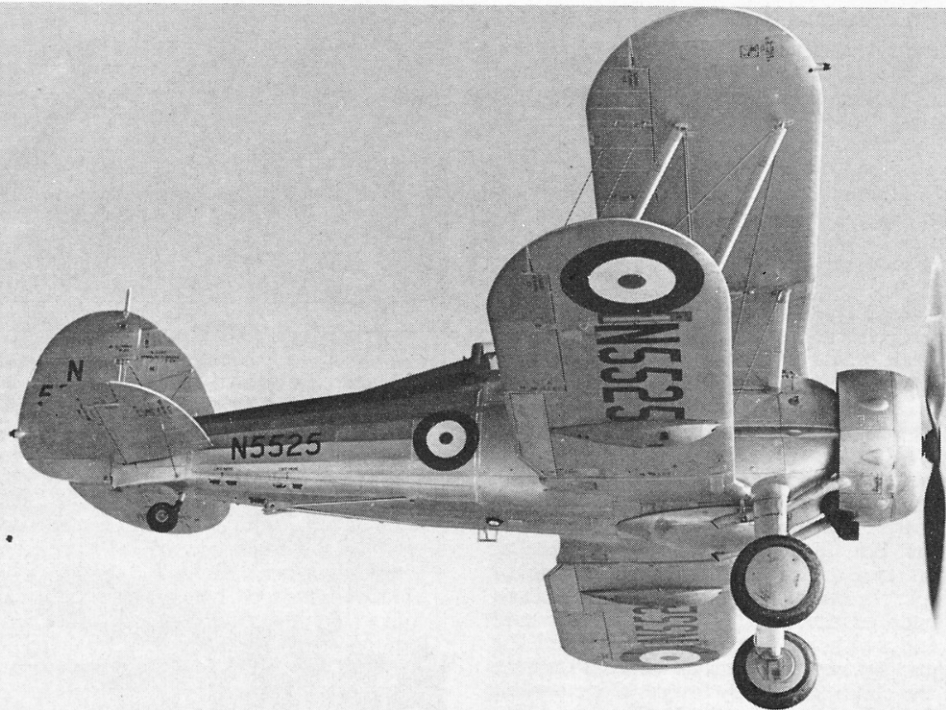
When Norway was attacked by Germany on 9th April 1940, seven of her nine remaining Gladiators were serviceable. The fate of all these seven aircraft is known (their pilots having covered themselves with glory that day in defence of Oslo) and the above rare photo evidently depicts one of the two remaining unserviceable Gladiators at Fornebu under discussion between a Leutnant and Staff Officers of the Luftwaffe after the capture of the base. (Photo: Courtesy Archiv Ries)

German aircraft (including Bf 110s and He 111s), the Gladiators acquitted themselves admirably, Sgts. Smith and Dunwoodie each destroying a Bf 110, and Fg. Off. Hertridge a He 111. The last Gladiator-equipped action was, appropriately, fought by



A Sea Gladiator II modified to full naval standard. (Photo: Ministry of Defence)

*Later Gp. Capt. W. T. F. Wightman, D.F.C., A.F.C., R.A.F. (retd.).



In-flight photo of Sea Gladiator, N5525, showing ventral dinghy fairing and deck arrester hook. This aircraft was later dismantled, crated up and delivered into storage at Kalafrana, Malta. (Photo: Flight, Neg. No. 16911s)

Wightman himself who shot down a C.R.42 in defending the relief column moving on Baghdad. On 1st June 1941 94 Squadron, back at Ismailia, handed its Gladiators over to the South African Air Force and the Royal Australian Air Force.

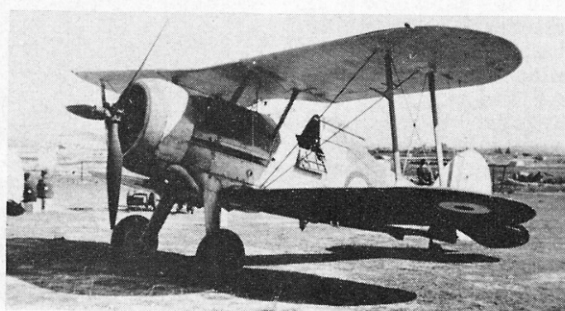
Gladiators had been active in the Western Desert since the outbreak of war, and three squadrons accompanied the British Expeditionary Force in Greece at the time of the campaign against Italy—and later Germany. These were Nos. 33, 80 and 112. Due however to the bad state of the airfields during the winter of 1940-41 relatively few operations were flown until the closing stages of the campaign. Once again the name of Flt. Lt. Pattle crops up for, having flown Gladiators in the desert against the *Regia Aeronautica* for two or three months previously, he was now to display astonishing virtuosity in the Greek campaign. Perhaps the most notable air battle occurred over the Albanian frontier on 28th

February 1941 when twenty-eight Hurricanes and Gladiators fought about fifty Italian aircraft, destroying or severely damaging no less than twenty-seven enemy aircraft. Pattle himself shot down five, only to be shot down and killed six weeks later. With a score of more than thirty victories achieved in about six months, Pattle must rank among the finest Allied pilots of World War II, and certainly the greatest of all Gladiator exponents.

Gladiators and Sea Gladiators fought on almost every front during the first two years of the War: Finland, Norway, Belgium, France, Britain, Egypt, Libya, Greece, Malta, Aden, Somaliland, Iraq, Syria, Crete, Latvia and Lithuania. There is even evidence of their turning up in Russia! But, as Allied arms production gathered momentum, reliance upon outdated equipment disappeared; Gladiators were relegated to second line duties—often in the most unlikely places.

Two of the much publicised Malta Sea Gladiators; that Left, has been identified as flown by Sgt. Plt. Robertson in August 1940, whereas the Right picture (almost certainly taken in September 1940) shows a Sea Gladiator fitted with an ex-Blenheim Mercury engine and Hamilton propeller. One is perhaps prompted to remark that had the defence of Malta rested upon but three aircraft, it would be difficult to justify the lack of dispersion evident in these two photographs!

(Photos: Imperial War Museum, Neg. Nos. MH3992 and ZZZ3915E)



Perhaps the most widespread use of the old biplane was among the numerous Meteorological Flights, in North, East and West Africa as late as 1944, at home and with the Fleet, and in such places as Mosul in Iraq, Gibraltar and Iceland.

By the end of the War few remained, except in one or two Maintenance Units; most were scrapped, but two survived to be purchased by Mr. V. H. Bellamy who managed to resurrect one flying specimen in 1952. Built from parts of L8032 and N5903 thus emerged a hybrid carrying the serial K8032 (and at one time the civil marks G-AMRK). Yet, hybrid or no, this is the sole example of what was, after all, the most romantic of all British biplane fighters—the biplane that carried the “Finest Flying Club in the World” into battle while the wartime R.A.F. was learning to fly its Hurricanes and Spitfires.

PRODUCTION AND SERVICE ALLOCATION

Gloster G.37 Gladiator Prototype. One aircraft, K5200, built by Gloster during 1934 under Contract No. 395996/35. Taken on R.A.F. charge 3/4/35; trials with No. 1 (F) Sqdn., 4/35; trials with Glosters, A. & A.E.E. and R.A.E. between 5/35 and 3/37; Bristol, 4/37; Glosters, 20/4/37; R.A.E. 17/4/39; No. 24 (C) Sqdn., 27/3/41; Hurn T.F.U., 27/10/41; struck off charge, 12/11/42, with 473 flying hours.

Gloster Gladiator I. 23 aircraft built under Spec. F.14/35, K6129–K6151. Bristol Mercury IX with Watts wooden 2-blade propeller. First aircraft taken on charge 16th February 1937, last on 4th March 1937.

Gloster Gladiator I. 180 aircraft built under Spec. F.14/35, K7892–K8055 and L7608–L7623. Universal armament mounting under lower wings.

Gloster Gladiator I. 28 aircraft, originally intended as replacement aircraft, built during 1937. L8005–L8032.

Gloster Latvian Gladiator I. 26 new aircraft order by Latvia and subscribed by State lottery during 1937. Delivered by sea 8-11/37.

Gloster Lithuanian Gladiator I. 14 new aircraft ordered by Lithuania in May 1937, and assembled at Vilna and Kaunas.

Gloster Norwegian Gladiator I. 6 new aircraft ordered by Norway in June 1937. Contract negotiations for further aircraft superceded by orders for Gladiator IIs.

Gloster Swedish Gladiator I (J8). 37 new aircraft ordered by Sweden in June 1937. Served with F8 at Barkaby, 1938-39, and F19 in Northern Finland during Russo-Finnish War, 1940.

Gloster Belgian Gladiator I. 22 new aircraft ordered by Belgium

in June 1937. Served with 1ère Escadrille de Chasse in the 1st Group of No. 2 (Fighter) Regiment at Diest until 1940. Other aircraft believed transferred from R.A.F. stocks, 4-5/40.

Gloster Chinese Gladiator I. 36 new aircraft ordered by China in October 1937. Assembled near Canton and served in defence of Siuchow, 1938.

Gloster Irish Gladiator I. 4 new aircraft, registered 23-26, delivered to the Irish Army Air Corps during 1938.

Gloster Greek Gladiator I. 2 aircraft purchased by M. Zarparkis Homogenos (for £9,200) for presentation to Royal Hellenic Air Force in 1938. 17 ex-R.A.F. aircraft transferred to R.H.A.F. early in 1941 but most were destroyed in air attack on Paramythia.

Gloster Iraqi Gladiator I. 9 ex-R.A.F. aircraft transferred to Iraqi Air Force during 1940-42 and based at Mosul and Raschid.

Gloster Egyptian Gladiator I. 18 ex-R.A.F. aircraft transferred to Royal Egyptian Air Force in March 1939 (as Mk. IIs), but some later returned.

Gloster Gladiator II and Sea Gladiator (Interim). 50 aircraft, ordered under Spec. F.36/37, and built during 1938. N2265–N2314. The first 38 aircraft delayed for modification to Sea Gladiator (Interim) standard, N2265–N2302, with deck arrester hooks. Transferred to Admiralty charge in December 1938. All aircraft powered by Bristol Mercury VIIIA.

Gloster Gladiator II and Sea Gladiator. Principal production batch of 300 aircraft, ordered under Spec. F.36/37 and built during 1938 and 1939. Powered by Bristol Mercury VIIIA and VIIIA engines. N5500–N5549, N5565–N5594, N5620–N5649, N5680–N5729, N5750–N5789, N5810–N5859, N5875–N5789. First sixty airframes (N5500–N5549, N5565–N5574) transferred to Admiralty charge and completed to full Sea Gladiator standard.

Gloster Swedish Gladiator II, (J8A). 18 new aircraft ordered by Sweden in 1938. Powered by Nohab Mercury VIIIS.3 engines driving 3-blade Fairey propellers.

Gloster Portuguese Gladiator II. Order for 15 new aircraft (diverted from Air Ministry contract) by Portugal in 1939.

Gloster Norwegian Gladiator II. Order for 6 new aircraft (diverted from Air Ministry contract, ex-N5919–N5924) by Norway in 1939. Based at Fornebu these aircraft took part in the defence of Oslo in April 1940.

Gloster Finnish Gladiator II. 30 ex-R.A.F. aircraft transferred to Finnish Air Force during 12/39–1/40 and flown in defence of Helsinki.

Gloster Greek Gladiator II. About 6 ex-R.A.F. aircraft transferred to Royal Hellenic Air Force in 1940-41 but most destroyed on ground at Paramythia.

Gloster Egyptian Gladiator II. 27 ex-R.A.F. aircraft transferred to Royal Egyptian Air Force during 1941 for service with Nos. 2 and 5 Fighter Squadrons, but majority returned subsequently to R.A.F. charge.

A very rare photograph of a Sea Gladiator, N2274, with U.S. Navy personnel aboard U.S.S. Wasp, probably taken during 1942 in the Mediterranean. (Photo: Fred C. Dickey, Jr.)





This Gladiator I, K7964, underwent prolonged trials with Fairey metal 3-blade propellers of various pitches in conjunction with different reduction gear ratios in efforts to arrive at the best take-off and climb performance. It is seen here at Martlesham Heath.
(Photo: Imperial War Museum, Neg. No. MH5725)

Gloster South African Gladiator II. 11 ex-R.A.F. aircraft transferred to Nos. 1 and 2 Squadrons, S.A.A.F. on 18th April 1941, mostly from No. 94 (Fighter) Squadron, Ismailia.

Gloster Iraqi Gladiator II. 5 ex-R.A.F. aircraft transferred to the Iraqi Air Force as replacements from Habbaniyah on 1st March 1944. Two known to have been airworthy at Mosul in 1949.

REPRESENTATIVE AIRCRAFT IN R.A.F. SERVICE

No. 3 (Fighter) Squadron, Kenley, 1937: K6145-K6149, K6150 (crashed after spin, 24/1/38; Sgt. E. Lomas safe); K7892-K7897 (ex-74 Sqn., 7/37), K7898 (crashed in mist, 23/11/37; P/O H. E. Vickery safe), K7900-K7951, K7952, K7954-K7958, K7960, K7062, K7963, K7965, K7984, K7986 (ex-73 Sqn., 6/38); K8008, K8009, K8023, K8024, K8032, K8044 (replacements, 1938).

No. 6 (Fighter) Squadron, Wadi Halfa and Kufra, 1941: N5820, N5821, N5828, N5830, N5851.

No. 25 (Fighter) Squadron, Hawkinge, 1938: K6147, K6149, K7961, K7982, K7988, K7989, K7992, K7995, K8000, K8019, K8030 (all from 56 Sqn.); K7983, K7996-K7999 (all ex-65 Sqn., 6/38).

No. 33 (Fighter) Squadron, Mataan Garawala, 1940: K6140, K7897 (shot down Fiat C.R.42, 4/7/40), K7954, N5751 (shot down 4/7/40), N5752, N5764, N5769, N5777, N5779 (P/O Bennett shot down C.R.42, 4/7/40), N5780, N5784, N5786; Ismailia, 1938: K8013, K8034 (crashed after flat spin at night, 1938; F/O H. D. Cooke safe), K8035, K8047, K8050 (crashed after flat spin, March 1938; P/O Marley baled out), K8050; Mersa Matruh, 1939: K8006, K8007, K8018, K8025, K8031, K8036-8039, K8047, K8048, K8054, L7608, L7609, L7611, L7612, L7614-L7617, L7622, L7623, N5763, N5766, N5776, N5781, N5785; Mersa Matruh, 6/40: N5761, N5765 (F/Sgt. L. Cottingham shot down two C.R.42s, 4/7/40), N5768 (Sgt. Craig shot down Caproni Ca 310, 14/6/40, and F/O Worcester shot down four C.R.42s, 4/7/40), N5774, N5775, N5781 (P/O E. J. Woods shot down C.R.42, 4/7/40), N5782 (F/O E. H. Dean, shot down C.R.42, 4/7/40), N5783; Maleme, Crete, 5/41: N5513, N5535 (Sea Gladiators taken over from Naval stocks); Fuka, 9/40: N5770, N5773, N5825.

No. 54 (Fighter) Squadron, Hornchurch, 1937-38: K7894 (ex-3 Sqn.); K7917, K7918, K7920, K7921, K7923, K7925-K7933, K7935 (all ex-Works, 1/38); K7937, K7938 (ex-65 Sqn., 1/38); K7946, K7949, K7961 (ex-65 Sqn., 4/38); K7972, K7987, K7990 (ex-M.U.s.); K8013-K8015, K8029 (all ex-Works, 3/38); K8044 (ex-65 Sqn., 1938).

No. 56 (Fighter) Squadron, North Weald, 7/37: K6145, K6147, K6149 (all ex-3 Sqn.); K7961 (ex-73 Sqn.), K7982, K7983, K7987-K8000, K8020-K8022, K8030 (ex-Works).

No. 65 (Fighter) Squadron, Hornchurch, 1937-39: K7895 (ex-3 Sqn., 6/38); K7936, K7950 (ex-Works, 6/37); K7961

(ex-25 Sqn., 8/38); K7970, K7979 (ex-87 Sqn., 7/38); K7983, K7996-K7999 (ex-56 Sqn., 12/37); K8001, K8002, K8016 (ex-Works, 1/38); K8013-K8015, K8029 (ex-54 Sqn., 5/38); K8033 (ex-87 Sqn., 3/38); K8040 (ex-10 F.T.S., 1/39); K8044 (ex-3 Sqn., 3/38).

No. 72 (Fighter) Squadron, Church Fenton, 1937-39: K6130-K6134, K6136-K6145 (initial equipment); K7893 (ex-73 Sqn., 12/38); K7897 (ex-No. 3 Sqn., 7/38); K7922 (ex-A. & A.E.E., 1938); K7934 (ex-Works, 11/37); K7954, K7963 (ex-3 Sqn., 8/38); K7969 (ex-85 Sqn., 8/38); K7974, K7977, K7978, K7981 (ex-87 Sqn., 8/38); K7984, K7986, K8004, K8019 (ex-Works, 1/38).

No. 73 (Fighter) Squadron, Digby, 6/38; K6151 (on loan ex-3 Sqn.); Debden and Digby, 1937-38: K7893 (ex-3 Sqn., 6/38); K7951-K7963, K7965, K7984-K7986, K8023, K8024, K8031, K8032 (ex-Works, 1937-38).

No. 74 (Fighter) Squadron, Hornchurch, 6/37; K6146-K6151, K7892-K7897 (ex-Works, initial equipment on temporary establishment; transferred to No. 3 Sqn., 7/37).

No. 80 (Fighter) Squadron, Ismailia, 1938: K8009; 1940: K7892, K7901-K7907, K7908 (missing, 1/8/40), K7909, K7911-K7916, K7937, K8010-K8012, K8021, K8022, L8010, N5583; Sidi Barrani, 8/40: K7892, K7910 (F/O Pattle shot down Breda 65 and C.R.42, 1/8/40), K7916, K7923, K7937, K8003, K8017, K8020, K8051, L8010 (F/L Wykeham-Barnes baled out, El Esem, 1/8/40), L8011; Larissa and Yannina, Greece, 1940: K7892, K7923, K7973, K8017, L8011, N5763, N5776, N5785, N5788, N5811, N5812, N5814, N5819, N5923, N5827 (withdrawn to Egypt, 12/40), N5832, N5854, N5858, N5859 (most of these aircraft destroyed or transferred to Royal Hellenic Air Force, 1941).

No. 85 (Fighter) Squadron, Debden, 1938: K7969 (ex-87 Sqn., 7/38).

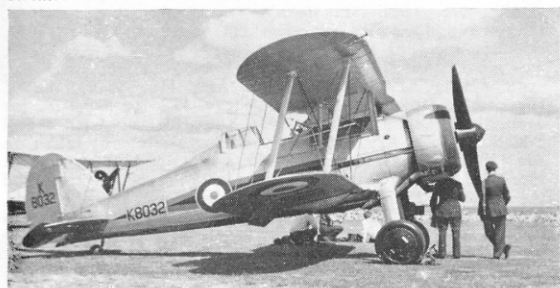
No. 87 (Fighter) Squadron, Debden, 1937-38: K7966-K7975, K7977-K7981 (ex-Works, 6/37); the following aircraft performed tied-together aerobatics at Hendon and Villacoublay, 1938: K7967 (flown by Sgt. Dewdney), K7972 (P/O R. L. Lorimer), K8027 (F/O G. H. Feeney, flight leader); K8026-K8028, K8033 (ex-Works, 4/38).

No. 94 (Fighter) Squadron, Sheikh Othman, Aden, 1939-40: N2278, N2279 (attacked enemy submarine, 18/6/40), N2283 (attacked Macaaca airfield, 28/6/40), N2284, N2285, N2290 (F/O Haywood shot down S.81, 13/6/40), N2291-N2295, N5627 (S/L Wightman shot down S.81, Aden, 20/11/40), N5778, N5887, N5892; Khormaksar, Aden, 1940: N2289; Berbera, Brit. Somaliland, 7/40: N2288; Habbaniyah, Iraq, 5/41: K7899, L7616 (F/O Herrtage shot down He 111, 16/5/41, but killed), N5777 (W/C Wightman shot down C.R.42, Khan Nuqta, 29/5/41), N5780, N5857, N5889.

No. 112 (Fighter) Squadron, Helwan, 6/39: K8025; Port Sudan



One of the sole remaining Gladiators reconstructed from parts taken from a Mark I, L8032, and a Mark II, N5903. This was originally registered G-AMRK (above), but is today resplendent in the pre-War colours of No. 46 (Fighter) Squadron and a bogus serial.



and Khartoum, 7/40: K6134–K6136, K6143, K7948, K7969, K7974 (shot down Ca 133 at Gedaref, 1/8/40), K7977, K7986, L7612, L7619.

No. 127 (Fighter) Squadron, Tahoune Guemac, Syria, 7/41: K7899, K7907, K8048, N5857.

No. 141 (Fighter) Squadron, 1939–40: K7918, K7921, K7925, K7926, K7928, K7936, K7938, K7990, N5626, N5893, N5902, N5903 (temporary 2nd line equipment).

No. 152 (Fighter) Squadron, Acklington and Leconfield, 1939: K7894, K7920, K7924, K7927, K7932, K7935, K7972, N5579, N5588, N5589, N5623, N5624, N5628, N5640 (crashed Denton Burn, Newcastle, 24/11/39; P/O Doughty safe), N5645, N5646; Sumburgh, Orkneys, 25/11/39: N5642, N5643.

No. 247 (Fighter) Squadron, Roborough and Sumburgh, 1939–40: K8049, N2308, N5576, N5585, N5622, N5631, N5644 (crashed 20/11/40), N5648, N5649, N5684, N5685, N5702, N5897, N5901.

No. 261 (Fighter) Squadron, Shaibah, 8/41: K6147, K7928, K7984, K7989.

No. 263 (Fighter) Squadron, Filton, 10/39: K6145 (ex-605 Sqn., crashed 21/10/39), K7917, K7952, K7961, K7965, K7979, K8004, K8044 (all ex-605 Sqn.); K7985 (ex-Works); K8020 (ex-607 Sqn.); K8032 (ex-615 Sqn.); N5579 (P/O MacNamara shot down He III, Lake Lesjaskog, Norway, 25/4/40), N5588, N5589, N5624 (lost at sea, Scapa Flow, 21/4/40), N5628, N5632, N5633 (S/L Donaldson shot down He III, Aandalsnes, Norway, 25/4/40, N5639, N5641, N5647, N5681 (F/L Williams shot down He III, Narvik, 29/5/40) N5695, N5697 (crashed at Soreisa, 21/5/40), N5698 (P/O Craig-Adams rammed He III, Bardufoss, 21/5/40), N5699, N5705 (F/O Ede shot down two Ju 90s, 23/5/40), N5723, N5725, N5909 (destroyed on ground, Aandalsnes, 26/4/40), N5915, N5905 (F/L Williams shot down He III, Narvik, 2/6/40. N5906, N5908, (P/O Jacobsen shot

down at least 3 e.a., 2/6/40). All the above aircraft accompanied the Sqn. on first or second expeditions to Norway, 1940; following aircraft retained at Filton: N5634, N5635, N5644, N5690, N5714, N5894.

No. 521 (Metcal) Squadron, Bircham Newton, 1942: N2307, N2309; Langham, 1942: N5621; Docking and Langham, 1943–4: K8043, N2310, N5594, N5897, N5900, N5902.

No. 603 (City of Edinburgh) Squadron, A.A.F., Turnhouse, 1939: K7894, K7917, K7918, K7920, K7921, K7925–K7929, K7931, K7932, K7935, K7936, K7938, K7972, K7990 (all ex-54 Sqn., 30/3/39); K7924 (new, ex-M.U., 6/39).

No. 605 (County of Warwick) Squadron, A.A.F., Castle Bromwich, 1939: K7951, K7952, K7961, K7965, K7979, K8004, K8044 (all ex-615 Sqn., 1939); K8000 (ex-25 Sqn., 2/39); K8032 (ex-3 Sqn., 4/38); Tangmere, 1939: K6145 (ex-56 Sqn.), N2303, N2304, N2305 (collided with N2313, 9/39; F/O Warren killed), N2306, N2312, N2313 (collided with N2305; F/O Forbes safe), N5576–N5578, N5580–N5583, N5585, N5586; Croydon, 10/39: N2310–N2312, N2314.

No. 607 (County of Durham) Squadron, Usworth, 1938–39: K6137, K6147, K6149, K7982, K7983, K7988, K7989, K7992, K7995–K7999, K8020, K8030; Croydon, 10/39: N2303, N2304, N2306, N2310–N2312, N2314 (ex-605 Sqn.); Merville, France, 1939: K6137 (crashed St. Ingelvert, 7/2/40), K6147, K6149, K7931, K7965, K7967, K7980, K7988, K7989, K7995–K7999, K8026, K8030; Vitry, France, 1940: K7996 (crashed, 26/3/40; P/O Whitty safe), K8000 (collided with K8030, 23/3/40; P/O Radcliffe killed), K8030 (Collided with K8000, F/O Graeme killed).

No. 615 (County of Surrey) Squadron, Kenley, 7/39: K7946, K7949, K7961, K7987, K8044 (ex-54 Sqn.); K7951, K7956–K7958, K7960, K7965, K7984 (ex-3 Sqn.); K7979 (ex-65 Sqn.); K8004 (ex-72 Sqn.); K8032 (ex-605 Sqn.); Croydon, 10/39: N2303, N2304, N2306, N2310, N2312, N2314 (ex-605 Sqn.), N5577, N5578, N5580, N5581, N5582 (force landed, Guildford, 23/10/39), N5583, N5585–N5587; Merville and Vitry, France, 1939–40: N2303, N2304, N2306, N2308–N2310, N2312, N5577, N5578, N5580–N5582 (crashed, St. Ingelvert, 18/12/39, pilot killed), N5583, N5585–N5587, N5590, N5717, N5899, N5900.

Fleet Air Arm Units: No. 769 Training Squadron, Donibristle, 1939: N5502, N5503, N5506–N5508, N5510, N5511, N5537, N5539; No. 800 Squadron: K6129 (Admiralty trials, 2/39); No. 801 Squadron, 1939: N5500–N5517; No. 802 Squadron, H.M.S. *Glorious*: N5537, N5539 (shipping protection duties, Indian Ocean, 12/39), N5532–N5534 (Kalafrana, Malta, 12/4/40; to Scapa Flow, 4/40). Aircraft allocated to Kalafrana, Malta, 5/39: N5518–N5535; the following aircraft assembled and issued to Hal Far Fighter Flight, 1940: N5519, N5520, N5523,



In-flight view of N2306, the fourth Gladiator II delivered to the R.A.F. and one of the few to survive the Battle of France and return to England at the time of Dunkirk. It was flown back to Lympne by Fg. Off. Aitken of No. 16 Squadron, taken on reserve strength of that unit and coded UG-R. Its subsequent fate is unknown.
(Photo: via John Robertson)

N5524, N5529, N5531, and used in operations from Hal Far, Luqa and Ta Kali, 6-7/40; following aircraft used for spares: N5518, N5521, N5522, N5525-N5528, N5530; moved to Maleme, Crete, 1940: N5513, N5535 (both aircraft taken over by No. 33 Sqn., and flown by F/O Woods and P/O Winsland during invasion); N5538 (H.M.S. *Furious*, 9/39).
Meteorological Flights: No. 1401 Flt., Bircham Newton, 1943: N2307, N2309, N2310, N5594, N5621; No. 1402 Flt., Aldergrove, 1942-44: N5575 (broken up, 7/11/44), N5576, N5637 (crashed, 19/1/43), N5900; No. 1403 Flt., Mildenhall, 1943: N5630 (crashed, 5/8/43), N5717; No. 1411 Flt., Heliopolis, 1942-43: K6138, K7893, K8008 (force landed, El Adem, 26/1/43), N5825; No. 1412 Flt., Khartoum, 1942: K6140, K8001, N5828, N5831; No. 1413 Flt., Ramleh and Nicosia, 1942: K7914, K7949 (crashed Nicosia, 27/3/42), K7978 (W/O Lavalee crashed Nicosia, 22/10/42), K7983 (crashed Nicosia, 15/5/42), K7999; No. 1414 Flt., Eastleigh, Africa, 1943:

K8037, N5821; No. 1415 Flt., Habbaniyah, 1943: K6147 (ex-Iraqi Air Force); No. 1560 Flt., Maiduguri, Nigeria, 1943: N5682; No. 1561 Flt., Ijeka, West Africa, 1943: N5693, N5703; No. 1562 Flt., Waterloo, West Africa, 1943: N5684, N5702; No. 1563 Flt., Benina, Cyrenaica, 1942-43: K8003. Other Notes: K6131 (No. 9 F.T.S., 1938); K6132 (Ouston Stn. Ftn., 4/41); K7999 (Watchfield Stn. Flt., 9/40); K8042 (Boscombe Down Stn. Flt., 8/41); K7922 (to S.A.A.F. for evaluation, ex-72 Sqn., 1/39); K8040 (trials with Rotol 3-blade prop.); K7976 (crashed during trials; not taken on Air Ministry charge); L8029-L8032 (retained in storage at No. 27 M.U. until struck off charge in 1945; L8032 transferred to G.A.C., 23/2/48); N2266 (Fighter Flight, Shetlands, 2/40); N2278, N2280, N2283, N2285-N2290, N2292, N2294 (transferred to S.A.A.F., 18/4/41); N2300 (No. 18 (Bomber) Sqn., 17/6/40).

© Francis K. Mason, 1966

Probably the most authentic surviving Gladiator is that which is preserved in Sweden today. It is a J8 and carries the colours and markings borne by F18 during the Russo-Finnish war of 1939-40.
(Photo: Kungl Ostgöta Flygfliotilj, Malmslätt)



SPECIFICATION

	Gladiator I Bristol Mercury IX	Gladiator II Bristol Mercury VIIIa or VIIIAS*	Sea Gladiator Bristol Mercury VIIIa or VIIIAS*
Powerplant	830 b.h.p. at 14,500 ft. at 2,750 r.p.m.	830 b.h.p. at 14,600 ft. at 2,750 r.p.m.*	830 b.h.p. at 14,600 ft. at 2,750 r.p.m.*
B.H.P.	10 ft. 9 in. dia. Watts wooden 2-blade	10 ft. 6 in. dia. Fairey metal 3-blade	10 ft. 6 in. dia. Fairey metal 3-blade
Aircscrew	Four fixed 0.303-inch Browning machine guns. Two on sides of nose, each with 600-round belt box; two under lower wings (free firing), each with 400-round belt box (†). Sea Gladiators had provision for two extra Browning guns on the top wing.		
Dimensions			
Wing span	32 ft. 3 in.	32 ft. 3 in.	32 ft. 3 in.
Length	27 ft. 5 in.	27 ft. 5 in.	27 ft. 5 in.
Height (tail down)	11 ft. 9 in.	11 ft. 7 in.	11 ft. 7 in.
Total wing area	323 sq. ft.	323 sq. ft.	323 sq. ft.
Armament			
Weights			
Empty weight	3216.7 lb.	3444.2 lb.	3553.3 lb.
Total military load	1375.3 lb.	1419.8 lb.	1466.2 lb.
Loaded weight... ..	4592.0 lb.	4864.0 lb.	5019.5 lb.
Performance			
Max. Speeds: Sea level	210 m.p.h.	215 m.p.h.	210 m.p.h.
5,000 feet	226 m.p.h.	224 m.p.h.	220 m.p.h.
10,000 feet	245 m.p.h.	249 m.p.h.	245 m.p.h.
14,500 feet	253 m.p.h.	257 m.p.h.‡	253 m.p.h.‡
17,500 feet	250 m.p.h.	253 m.p.h.	248 m.p.h.
20,000 feet	236 m.p.h.	239 m.p.h.	230 m.p.h.
Stalling speeds,			
(I.A.S. flaps up)	56 m.p.h.	57.5 m.p.h.	58 m.p.h.
(I.A.S. flaps down)	53 m.p.h.	54.5 m.p.h.	55 m.p.h.
Climb, time to			
10,000 feet	4 min. 40 sec.	4 min. 30 sec.	4 min. 42 sec.
20,000 feet	9 min. 3 sec.	8 min. 45 sec.	9 min. 8 sec.
Service Ceiling	32,800 feet	33,500 feet	32,200 feet
Field performance (still air)			
Take-off ground run	125 yards	125 yards	130 yards
Take-off to 50 feet	200 yards	180 yards	205 yards
Landing ground run	170 yards	180 yards	190 yards
(minimum)			
Range (combat equipped)	428 miles	444 miles	415 miles
Maximum endurance	1 hr. 54 min.	2 hr. 6 min.	1 hr. 58 min.

(†) The first 70 Gladiators I's were fitted with Lewis or Vickers guns under the lower wings, each with 97- or 100-round ammunition drums.
 (‡) Engine rated to bestow this speed at 14,600 feet. (*) 840 b.h.p. with manual boost override.

GLADIATORS FEATURING IN R.A.F. FIRST LINE ORDERS OF BATTLE, 1937—1942

Order of Battle, September 1937	1st line strength	Reserve strength
No. 3 (Fighter) Squadron	Kenley 13 aircraft	4 aircraft
No. 54 (Fighter) Squadron	Hornchurch 14 aircraft	5 aircraft
No. 56 (Fighter) Squadron	North Weald 14 aircraft	5 aircraft
No. 65 (Fighter) Squadron	Hornchurch 12 aircraft	6 aircraft
No. 72 (Fighter) Squadron	Church Fenton 14 aircraft	5 aircraft
No. 73 (Fighter) Squadron	Mildenhall 14 aircraft	5 aircraft
No. 80 (Fighter) Squadron	Henlow 14 aircraft	4 aircraft
No. 87 (Fighter) Squadron	Debden 13 aircraft	4 aircraft

Totals 108 aircraft 38 aircraft

Order of Battle, September 1938 (Munich Crisis)

No. 25 (Fighter) Squadron	Hawkinge 14 aircraft	5 aircraft
No. 33 (Fighter) Squadron	Egypt 16 aircraft	6 aircraft
No. 54 (Fighter) Squadron	Hornchurch 14 aircraft	5 aircraft
No. 65 (Fighter) Squadron	Hornchurch 14 aircraft	5 aircraft
No. 72 (Fighter) Squadron	Church Fenton 14 aircraft	5 aircraft
No. 80 (Fighter) Squadron	Palestine 16 aircraft	6 aircraft
No. 85 (Fighter) Squadron	Debden 12 aircraft	5 aircraft
No. 607 Squadron, A.A.F.	Usworth 2 aircraft	

(re-equipping)

Totals 102 aircraft 37 aircraft

Order of Battle, September 1939 (Outbreak of WW2)

No. 33 (Fighter) Squadron	Egypt 14 aircraft	5 aircraft
No. 80 (Fighter) Squadron	Egypt 14 aircraft	3 aircraft
No. 94 (Fighter) Squadron	Aden 12 aircraft	4 aircraft
No. 112 (Fighter) Squadron	Egypt 16 aircraft	8 aircraft
No. 603 Squadron, A.A.F.	Turnhouse 16 aircraft	2 aircraft
No. 605 Squadron, A.A.F.	Tangmere 10 aircraft	4 aircraft
No. 607 Squadron, A.A.F.	Usworth 16 aircraft	8 aircraft
No. 615 Squadron, A.A.F.	Croydon 16 aircraft	4 aircraft

Totals 114 aircraft 38 aircraft

Gladiator Squadrons equipped after September 1939

No. 127 (Fighter) Squadron,	Syria, June 1941 (U.E. 12 aircraft)
No. 152 (Fighter) Squadron,	Acklington, October 1939 (U.E. 16 aircraft)
No. 247 (Fighter) Squadron,	Acklington, November 1939 (U.E. 16 aircraft)
No. 261 (Fighter) Squadron,	Malta, August 1940 (U.E. 12 aircraft)
No. 263 (Fighter) Squadron,	Filton, October 1939 (U.E. 24 aircraft)
No. 521 (Metcal) Squadron,	Bircham Newton, August 1942 (U.E. 8 aircraft)