

BELOW: The instrument panel and gun sight of a Bf109E (probably a Bf109E-4) showing the compact nature of the instrumentation – there was little room for anything more complicated or bulky. The central panel below the instrument panel was associated with bomb-aiming, suggesting that this is the cockpit of a fighter-bomber Bf109E-4 or E-7.

Malcolm V. Lowe
Collection

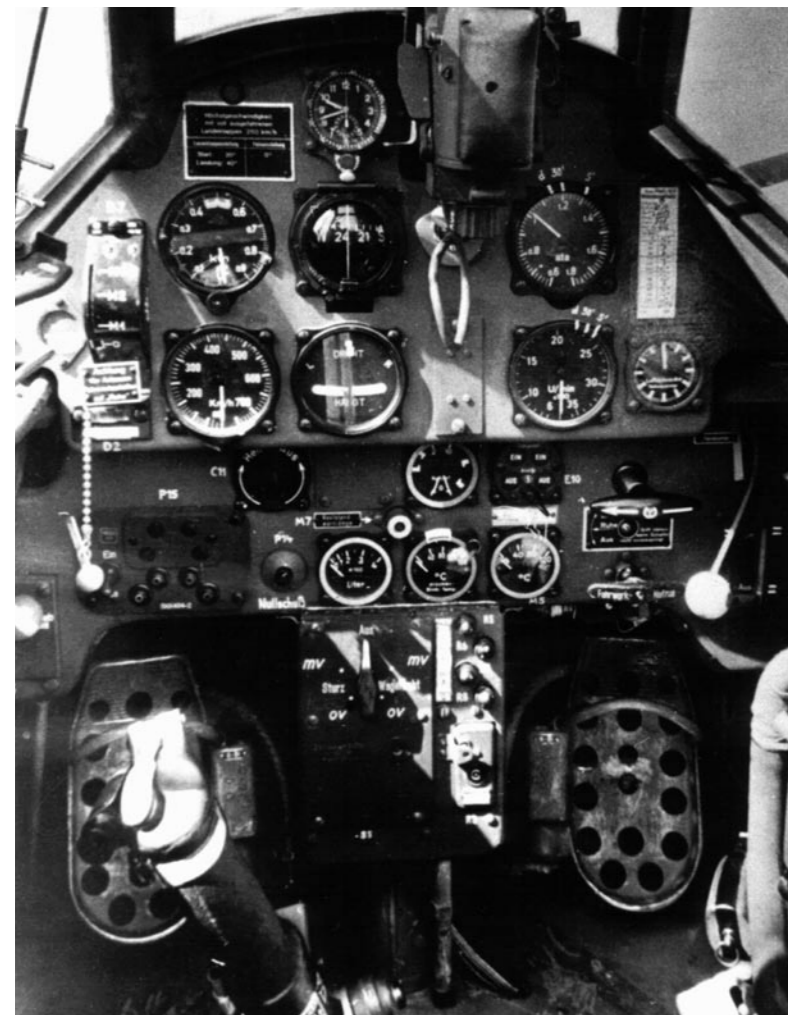
As a fighting machine Eric Brown found the Bf109G to be 'a delight to fly, but diving was a weakness, with the controls becoming very heavy as speed built up'. He also found that the wing leading edge slats, which were actually based on a Handley Page Patent for leading edge 'slots', were sometimes more of a hindrance than a help. These operated automatically and theoretically gave more control during low-speed flight and manoeuvres, but they would sometimes operate asymmetrically, particularly if the aircraft was pulled early into the air on its take-off run, or during air combat manoeuvring if too much elevator was used. In fact, he found the harmony of the various flight controls to be poor, with the elevators being heavy, the rudder too light, and the ailerons being light and prone to 'snatching' (moving unexpectedly quickly or harshly) if the wing leading edge slats opened

asymmetrically in combat manoeuvres. This latter point in particular made the Bf109 not a very good gun platform, particularly during dog-fighting, although it was well-mannered and stable in level flight at virtually all levels. The slats could also come open on occasion if the Bf109 was flown in the slipstream of another aircraft, which was not a very good trait for a fighter which was supposed to come up behind its quarry.

The stall was comparatively gentle, and occurred at altitude at approximately 105mph (169kmh) with the engine throttled back and with the fuel tanks half-empty. When the stall was neared there would be very noticeable elevator buffeting and the opening of the slats, which would sometimes open asymmetrically and make the stall more difficult to control due to the resulting aileron 'snatching'. On landing, the stall speed was 99mph (159kmh). The landing itself was a much less happy experience.

Countless pilots have found the act of landing the Bf109 to be something of a nightmare, and Eric Brown, with all his experience and airmanship skills, was none too impressed either. Care in particular was needed on the approach as forward view over the nose was poor and the aircraft would readily balloon up off the surface if it hit uneven ground on touchdown, there being a surplus of lift even with the rather more extensive wing-flaps arrangement of the Bf109F and G-series. Nevertheless, landings needed to be made on grass wherever possible, preferably without a crosswind, but the aircraft would happily head off in its own direction with its narrow-track undercarriage and tendency for an undercarriage leg to buckle if touched down too hard on one side.

Overall, Eric Brown felt that the Bf109G probably represented the Bf109 series after it had reached its best, but that it could still be a formidable opponent if flown well. Nevertheless, it did not warrant inclusion in his list of the top three fighters of the Second World War that he had flown – which were the Supermarine Spitfire (particularly in its later models), the Focke-Wulf Fw190 in its late-war Fw190D-9 development, and the North American P-51 Mustang.



Start-up and shut-down

Start-up procedure

Ground running and start-up for flying follow the same procedure except where stated.

- 1 Park the aircraft into wind, making sure the area is clear in front and behind.
- 2 Make sure the aircraft is chocked and that all intakes and bungs are removed.
- 3 Position fire extinguisher and ground power set if required.
- 4 Tie down the tail (ground running only).
- 5 Pull the prop through five blades by hand; this must only be carried out with a cold engine and after checking that the mag switch is OFF.
- 6 Pilot does a walk round check, making sure that all panels are secured, and that all flying controls move freely.

Cockpit checks

- 1 Canopy is closed and locked.
- 2 Trim is fully nose up.
- 3 Flaps are up.
- 4 Throttle is closed.
- 5 Tailwheel lock is engaged.
- 6 The fuel cocks (P1, P2) are closed.
- 7 The prop pitch is set to manual.
- 8 The magneto M1+M2 check OFF (0).
- 9 Undercarriage selector is in the neutral position, both buttons gated.
- 10 Radiator control set to AUTO.
- 11 Electrics circuit breaker panel is OFF and all circuit breakers in the OUT position.
- 12 Power ON.



- 13 Circuit breakers set to ON as required.
- 14 Check fuel and temperature gauges are reading.
- 15 Radio set to ON.



- 16 Check undercarriage indicator for two green lights.
- 17 Prop pitch set to 1230 (fully fine).

