Dowding knew that given the size of the force he was able to make available – sixteen squadrons – there would be times, howsoever brief, that cover would be unavailable. The man entrusted with Fighter Command's contribution to this operation was the commander of 11 Group: Air Vice-Marshal Park. For what he was about to do, there was no precedent whatsoever.

At this time, however, Fighter Command's pilots were given a performance advantage with the introduction of 100 octane fuel. Of this development, Jeffrey Quill wrote that:

It had the effect of increasing the combat rating of the Merlin from 3,000 rpm at 6½ lb or 9 lbs boost to 3,000 rpm at 12 lbs boost. This, of course, had a significant effect on the rate of climb.<sup>3</sup>

The Merlin III's capacity for a maximum emergency boost of +12 lbs per square inch was useful for increasing speed for a short-time span. Boost was obtained by pushing a knob on the throttle quadrant, called 'going through the gate', or 'Buster' in correct radio parlance – meaning 'make all haste'. Although the improvements of 12 lbs of extra boost were really only evident up to 15,000 feet, it was another step towards achieving an edge over the 109. Emergency boost, though, could only be used for a few minutes at a time, so as not to damage the engine, and any use of it, in fact, had to be recorded by the pilot in the engine's log. Pilots would use this facility to catch up and intercept an enemy aircraft or, indeed, to escape from a tactically disadvantageous situation. Pilots fighting over Dunkirk would soon find occasion to be thankful of this extra power.

On 21 May, Spitfires were in action off Dunkirk and Calais, 54 and 74 Squadrons claiming a number of enemy bombers. Two Spitfires were lost, both of 74 Squadron. One pilot returned to England but the other was captured. The following day saw 65 and 74 Squadrons claiming more bombers but without loss. On 23 May the first big air battle between the opposing fighters took place over Calais. Spitfires of 54 Squadron claimed three 109s destroyed, whilst 92 claimed two in addition to seven Me 110s shot down.<sup>4</sup> Both squadrons claimed various enemy aircraft as probably destroyed or damage. I/JG 27, however, lost four 109s whilst no 110s are recorded as having been destroyed or damaged that day.<sup>5</sup> The balance sheet was not favourable to Fighter Command: 74 Squadron lost two Spitfires, 92 Squadron five.<sup>6</sup> The total of sorties flown by 11 Group on that day was 250; ten pilots were lost.<sup>7</sup> Already the inexperience of the RAF pilots was beginning to show.

The action was even greater on 24 May, 54, 65, 74 and 92 Squadrons all being engaged, these being Spitfire squadrons of 11 Group based at Hornchurch and Biggin Hill. At this time Park's squadrons were patrolling singly. The *Luftwaffe* fighters, however, were sweeping the Channel coast in *gruppe* strength – some thirty-six aircraft. II/JG 26 pounced on 74 Squadron, giving Pilot Officer John Freeborn reason to be thankful for his Merlin's extra boost:

As I broke away two Me 109s got onto my tail. I dived steeply with the two e/a following me, one was on my tail the other on my port quarter. As I dived to ground level I throttled back slightly and the e/a on my tail overshot me and I was able to get a three seconds burst at a range of about fifty to 100 yards. He seemed to break away slowly to the right as though he was badly hit and I think he crashed. The second Me 109 then got on my tail but I got away from it using the boost cut-out.9

Only 54 Squadron's Spitfires made claims the following day. Pilot Officer Colin Gray, a New Zealander, destroyed a 109 but his own aircraft was damaged. Again, emergency boost got him out of trouble:

I decided the best course of action was to set off for home as speedily as possible. I pressed the emergency tit, which poured on the fuel, but was only for use in dire emergency as it could overstress the engine. I considered this was justifiable under the circumstances, since I was still inside France and could not see anyone coming to my assistance.<sup>10</sup>

Three other pilots of the same squadron were not so lucky, being shot down; in response, 54 claimed four 110s destroyed in addition to Gray's 109.12 The positive effect of extra boost in combat was becoming obvious.

On the evening of 25 May, 12 Group's 19 Squadron moved from Duxford in 12 Group to Hornchurch in 11 Group, still north of the Thames Estuary but closer to the French coast. What Flight Lieutenant Brian Lane had previously considered to be a 'queer war' was about to come to an end. As he later wrote, the shadow of Dunkirk had fallen across our path ... to-morrow it would become reality'. The following day, 26 May, the decision was formally made to retire upon, and evacuate from, Dunkirk. Air Vice-Marshal Park had already decided upon his tactics, which he explained to 11 Group's controllers. Squadrons, like 19, had been brought south to make up the sixteen squadrons he had been assigned for the task. These would operate from airfields near the coast, such as Hornchurch, Biggin Hill, and Manston. After their first patrol, however, they would land at forward stations such as Hawkinge and Lympne, where the fighters would be quickly re-armed and re-fuelled before returning to their patrol lines. The force would be divided so that half worked mornings, the other half afternoons. After the day's second patrol, unless, as Orange wrote, 'the crisis was great', the squadrons were permitted to return to their home or adopted home base as appropriate.

Pilot Officer Michael Lyne remembered arriving at Hornchurch and the following day's events:

To us the Mess had a new atmosphere, people clearing kit from the rooms belonging to casualties and the Station Commander insisting on closing the bar and sending us to bed early to be ready for the battles awaiting us.

On 26 May we were called upon to patrol over the beaches as a single squadron. I will always remember heading off to the east and seeing the columns of black smoke from the Dunkirk oil storage tanks. We patrolled for some time without seeing any aircraft. We received no information from British radar. We had received excellent VHF radios shortly before, but they were only of use between ourselves, we could not communicate with other squadrons should the need arise.

Suddenly we saw ahead, going towards Calais where the Rifle Brigade was holding out, about forty German aircraft. We were twelve. Squadron Leader Geoffrey Stephenson aligned us for an attack in sections of three on the formations of Ju 87s. As a former CFS Ar Flying Instructor he was a precise flier and obedient to the book, which stipulated an

overtaking speed of 30 mph. What the book never foresaw was that we would attack Ju 87s at just 130 mph. The CO led his Section, Pilot Officer Watson No. 2 and me No. 3, straight up behind the *Stukas* which looked very relaxed. They thought we were their fighter escort, but the leader had been very clever and had pulled his formation away towards England, so that when they turned in towards Calais he would protect their rear. Alas for him we were coming, by sheer chance, from Dunkirk rather than Ramsgate.

Meanwhile Stephenson realised that we were closing far too fast. I remember his call "Number 19 Squadron! Prepare to attack!" then to us "Red Section, throttling back, throttling back." We were virtually formatting on the last section of Ju 87s – at an incredibly dangerous speed in the presence of enemy fighters – and behind us the rest of 19 Squadron staggered along at a similar speed. Of course the Ju 87s could not imagine that we were a threat. Then Stephenson told us to take a target each and fire. As far as I know we got the last three, we could hardly have done otherwise, then we broke away and saw nothing of the work by the rest of the Squadron – but it must have been dodgy as the 109s started to come round. As I was looking round for friends after the break I came under fire from the rear for the first time – and did not at first know it. The first signs were mysterious little corkscrews of smoke passing my starboard wing. Then I heard a slow "thump, thump", and realised that I was being attacked by a 109 firing machine-guns with tracer and its cannon banging away. I broke away sharpish – and lost him.

I made a wide sweep and came back to the Calais area to find about five *Stukas* going around in a tight defensive circle. The German fighters had disappeared so I flew to take the circle at the head-on position and gave it a long squirt. It must have been at this stage that I was hit by return fire, for when I got back to Hornchurch I found bullet holes in the wings which had punctured a tyre.

Alas my friend Watson was never seen again. Stephenson forced-landed on the beach and was taken prisoner.<sup>16</sup>

Flight Lieutenant Lane's report of the action described what happened when the 109s bounced the hapless Spitfires and shot down Pilot Officer Watson:

... I was forced to break away ... I looked round and observed an Me 109 attacking a Spitfire which was almost immediately hit forward of the cockpit by a shell from the e/a. The Spitfire went into a steep dive and I subsequently saw a parachute in the sea about half a mile off Calais.

A dogfight now ensued and I fired bursts at several c/a, mostly deflection shots. Three e/a attached themselves to my tail, two doing stern attacks, whilst the third attacked from the beam. I managed to turn towards this e/a and fired a good burst in a front quarter deflection attack. The e/a then disappeared and was probably shot down. By this time I was down to sea level and made for the English coast, taking violent evasive action. I gradually drew away from the e/a's using 12 lb boost which gave me an air speed of 300 mph.<sup>17</sup>

Clearly the German fighter pilots involved in this action were experienced and knew exactly what they were about. Once more, 12 lbs boost saved the day for a Spitfire pilot.