‘Pink’s War’ – Applying the Principles of Air Control to Waziristan, 9 March to 1 May 1925

By Lieutenant Colonel Andrew Roe

In March 1925 the R.A.F. was presented with a unique opportunity of testing the utility of air control against the mountain strongholds of Mahsud tribesmen in South Waziristan. The successful 54 day operation, under the command of Wing Commander Richard Charles Montagu Pink, was the only independent air campaign on the North-West Frontier of India, despite a number of ambitious schemes for the fledgling Service to take full control of the region. Known simply as ‘Pink’s War,’ this article overviews events prior to the start of operations, and offers a detailed account of R.A.F. bombing and strafing activities from 9 March to 1 May 1925. It concludes by analysis the outcomes of the mission, which ultimately resulted in the tribal leaders seeking an honourable peace, with the loss of only two British lives.

Don't you worry there's nought to tell
'Cept work and fly and bomb like hell
With hills above us and hills below
And rocks to fill where the hills won't go
Nice soft sitting for those who crash
But WAR you call it? – don't talk trash
War's a rumour, war's a yarn
This is the PEACE of Waziristan

Wing Commander R.C.M. Pink,
chorus to 'Waziristan 1925'

Introduction

Before the arrival of the aeroplane in India, there was only one method of applying armed force on the North-West Frontier when political initiatives or the threat of force failed: the employment of ground forces, either temporarily or permanently, in tribal territory to restore order or to inflict a sharp lesson on the tribesmen.[1] These so-called 'punitive expeditions' – referred to as 'Burn and Scuttle' or 'Butcher and Bolt' operations – killed innumerable tribesmen and sort to achieve a considerable amount of damage: villages were burnt or razed to the ground; cattle were confiscated or killed; and in some cases fruit trees, irrigation channels and wells were destroyed or poisoned. This was an unsophisticated, protracted and expensive means of enforcing discipline.[2]

The emerging technical capabilities of the aeroplane, for the first time, enabled the government the potential to enforce compliance upon the tribesmen in a timely, inexpensive, comparatively humane, and relatively safe manner from the air.[3] This was especially true against law-breakers in remote or mountainous locations. Even the most isolated tribes could now be reached with relative ease. The employment of aeroplanes – with their speed over great distances, complete indifference to the state of ground communications and detachment from prying war correspondents – was to secure a 'change of heart' with the minimum amount of force. By reacting selectively and without procrastination to tribal disturbances, it was hoped that operations could occur without the loss of life, through continuous and even prolonged air activity.

This outcome was achieved by interrupting the normal pattern of life of the tribes to such an extent that a continuance of hostilities became intolerable.[4] Known as 'air control,' in which the tribesmen were often blockaded out of their territory instead of into it, the tactic aimed to compel a tribe to abandon their grazing grounds and villages.[5] This forced them to hide in caves or relocate themselves (and their herds) as unwanted guests in a neighbouring village, preventing harvesting and other work, until a *volte-face* occurred. Unlike a traditional retaliatory army expedition, the R.A.F. hoped that operations would be conducted against an empty village or vacated area. Such an approach also prevented the tribesmen from having a fight on equal terms; the only truly honourable occupation of a tribesman. It also negated the prospect of loot, particularly capturing a good British service rifle, or replenishing their supply of accurate ammunition.[6]

Unsurprisingly, the employment of airpower in this manner was not

without its critics, limitations or challenges.[7] It was, however, an attractive option and an intelligent way of securing the R.A.F's future against a backdrop of a post-war struggle for resources between the three services. Moreover, at a time when the military defeat of the tribesmen was the principal objective of army operations, the R.A.F.'s goal of attacking the morale of those who had disturbed the peace to hopefully secure long-term political stability and pacification was exceedingly attractive in some quarters. Air Commodore C.F.A. Portal D.S.O., M.C. points to the apparent subtlety and dexterity of the air method:

The problem, then, is to get this change of heart without occupying the country of the delinquent tribe, and indeed without having any physical contact with them at all. If you can avoid even temporary contact, which means fighting, your remedy has the great advantage that it does not in itself inflame passions and obscure reasons, nor does it extend the original trouble to tribes that may have had nothing to do with it in the first instance, and the whole basis of this police method is that the idea of military occupation and, if you like, of military supervision, rankles much more with a proud and independent people than does the idea of observing the Government's standard of law and order, and that if you can avoid the former you will more easily achieve the latter.[8]

In March 1925 the R.A.F. was presented with a unique opportunity of testing the utility of air control against the troublesome Mahsuds in South Waziristan. This article overviews events prior to the start of operations, and offers a detailed account of R.A.F. bombing and strafing activities from 9 March to 1 May 1925. It concludes by analysing the outcomes of the 54 day mission, which in due course became known simply as 'Pink's War.'

Events Prior to the Start of R.A.F. Operations

The Mahsuds were a constant source of turbulence and unrest to the Government of India, primarily due to the inaccessibility of their country and their insolent, aggressive and warlike behaviour. Prior to 1919, their territory had not been visited since 1901-02, when a series of military operations against the tribes for raiding and murder resulted in the subjugation of the tribe, the restoration of order and the construction of new motorable all-weather connecting roads.[9] Although unsettled by these events, the resulting 'peace' remained largely unchanged until the outbreak of the Third Afghan War of 1919,[10] when the somewhat hasty evacuation of most of the forward militia posts in the Gomal and Tochi areas, especially in Wana,[11] resulted in over a 100 well-planned raids and offences being conducted by the tribesmen. With authority in Waziristan – lying on the western border of the Indian Empire, and forming the connecting link on the Afghan frontier between the districts of Kurram and Zhob – increasingly tenuous, the situation looked bleak for the government. As a result of the deteriorating security situation it was deemed necessary to undertake punitive operations against the Mahsuds to restore order. These occurred throughout 1919, 1922 and the beginning 1923 resulting – after some extremely bitter fighting – in peace

terms with the majority of the tribal sections, but not the intractable Abdur Rahman Khel; the last remaining pocket of tribal resistance. The R.A.F. took an active part in all operations over the period, not only in direct action against the tribesmen, but also in raising Army morale and lowering that of the tribes.[12]

The Abdur Rahman Khel, therefore, became the chief section against whom most R.A.F. activities of 1925 were directed in South-East Waziristan. A turbulent sub-section of the Nana Khel Bahlolzai tribe, the Abdur Rahman Khel included a significant proportion of young hotheads ineligible to receive government allowances – determined to make mischief and almost professional trouble-makers – as well as a number of bothersome fugitives, known as *hamsayas*, who had committed crimes inside the administered districts bordering tribal lands.[13] Of significance, many of the tribesmen possessed grazing land in Afghanistan, and summer migration across the permeable international border was commonplace.

On 27 December a full Bahlolzai *jirga* (assembly or parliament of tribal representatives) was held at Tank to make clear government terms to the tribesmen. This sought to obtain compensation for offences committed and for the 'exaction of promises to prevent further offences.'[14] Used as a means to resolve civil, criminal, and intertribal conflict, a *jirga* possesses neither a dominant leader nor chairman; participants sit cross-legged in a circle in order to avoid a prominent position and decisions are reached through dialogue and consensus. The democratic character of the Bahlolzai meant that the *jirga* had little control over the hot-headed elements and therefore was not truly representative of tribal opinion. Regrettably, the gathering was unsuccessful. On 16 January, a group of Abdur Rahman Khel representatives was interviewed. The deputation demanded an official pardon for recent offences, an increase in allowances from Rs. 3,000 to 6,000 and unconstrained access to their tribal share: these demands were dismissed outright. Thereafter, the Abdur Rahman Khel, assisted by the Guri Khel, Maresai and Faridai sections of the Manzai Mahsuds, committed further offences and outrages. The first occurred on the night of 24/25 January, when four Hindus were kidnapped from Manzai. This was followed by a second incident during the hours of darkness on 1/2 February, when two more Hindus were abducted from the *coolie* (unskilled labour) camp at Spli Toi. Eighteen days later, the Gomal Post was raided by a gang containing members of the hostile tribes. During the initial break-in, 27 European .303 Lee Enfield service rifles belonging to the police were stolen and taken to the Spli Toi area.

Prior to these events, on 16 December, the Resident in Waziristan asked the government to sanction the employment of airpower against the intractable sections.[15] Keen to establish the R.A.F.'s credentials, the request was reinforced by Air Vice-Marshal Sir Edward Ellington K.C.B., C.M.G., C.B.E. who had recently become the Air Officer Commanding (A.O.C), India, and who was a strong advocate of Sir John Salmond's policy of 'air control' and wider R.A.F employment on the frontier.[16]

He believed that, if properly used, the squadrons on the frontier could achieve results out of all proportion to numbers and to effort expended. The official account of events recalls the growing necessity of the request and initial moves: 'By the end of this month it appeared probable that operations would be necessary; a plan was therefore drawn up by No. 1 Wing, and the force to be employed was decided on.'[17] *Jirgas* with the affable sections of the tribes were undertaken, but despite demonstrations conducted by R.A.F. units on 7 and 24 February, outrages continued, and the hostile elements still persisted in unrealistic demands and bargained for time.

On 1 February the Resident applied for the go-ahead to warn the Guri Khels that, unless they agreed and complied with the terms to be stated, air action would be undertaken against them. Judging that hostilities were now inevitable, Headquarters, R.A.F. approved the use of airpower and allocated the force to be employed. Following two further outrages, the government sanctioned the issue of a final warning to the sections concerned by coloured warning leaflets on 25 February; these were printed in the tribal language – *Pashtu*. Only five days before, Wing Commander R.C.M. Pink C.B.E., the officer commanding No. 2 (India) Wing, had flown to Rawalpindi for a conference with the Northern Command Headquarters' Commanders to discuss the nature of independent air operations. As the appointed commander, and with operations at least agreed in principle with the army commanders, Pink set about re-deploying his forces and forward based supplies. The official report notes:

Explosives were forwarded from the Ordnance Depot, RAWALPINDI; petrol, oil and other supplies came from the Depots at PESHAWAR, KOHAT, RAWALPINDI and LAHORE. All supplies for both MIRAMSHAH and TANK [the two main operating stations] were delivered at MARI INDUS, transported across the river INDUS to KALABAGH and forwarded by rail either to TANK direct or to BANNU for MIRAMSHAH. The average time taken for the delivery of supplies by this route was 14 days for TANK and 21 days for MIRAMSHAH.[18]

On 2 March the advanced parties moved to Tank and Miramshah.[19] Although some 60 miles apart, resulting in certain administrative difficulties, it was deemed necessary to employ two airfields as there was insufficient room for the number of aircraft required for the operations at either location. The squadrons selected moved to their respective operating stations on 3 March. This consisted of three squadrons:[20] one Bristol F.2 B Fighter and two de Havilland D.H. 9A's.[21]

On 5 March Pink's Operational Headquarters was established at Tank. The establishment of the aviation headquarters coincided with the issue of demands to the tribes in the clearest possible terms.[22] The alternatives to being bombed were:

- Abdur Rahman Khel – a complete *jirga* of Abdur Rahman Khel, including hostile tribesmen, as well as the Jalal Khels and others, who lived with the Abdur Rahman Khel, was to gather at Jandola at 12:00 hours on 7 March,

bringing the two captive Hindus. In the event of nonconformity disciplinary measures would start after sunrise on 9 March.

- Guri Khel – the Guri Khels were required to comply with the terms already announced to them. For the Karim Khel sub-section, this was: Rs. 1,600; two government rifles; the return of three bullocks and seven camels; and the deposit of eight country rifles as security. For the Biland Khel sub-section eight government rifles and the deposit of four tribal rifles was demanded as security. In both cases, compliance was demanded by 12:00 hours on 7 March. In case of disobedience, punitive measures would start after first light on 9 March.
- Faridai – a complete *jirga* of Faridais was to assemble at Jandola at 12:00 hours on 7 March. In the event of non-compliance retaliatory measures would start after daybreak on 9 March.
- Maresai – a complete *jirga* of Maresais was to convene at Jandola at 12:00 hours on 7 March. In the event of non-cooperation castigatory measures would also start after dawn on 9 March.[23]

As no reply was forthcoming from the Abdur Rahman Khel, and the Faridai, Maresai and Guri Khel simply attempted to negotiate, it was decided on 8 March to begin air action against all sections concerned at sun-up on 9 March, based on the tribal principle of communal responsibility for crimes committed. The rationale behind this approach was that each tribe, sub-tribe, village, *malik* (a tribal leader or elder) or mullah (a religious leader who takes prayers) was responsible for its own people and for what went on in its area. There was no distinction between combatants and non-combatants or those who were guilty or innocent.

Area of Operations and Tactics

The planned area of operations was *circa* 50-60 square miles of wild mountainous terrain, precipitous gorges and isolated small valleys, including approximately 40 targets varying in height from 3,000 to 6,000 feet above sea level. This necessitated aircraft with full war-loads to limit fuel loads to approximately 60 per cent in order to attain bombing heights.[24] The targets varied from good-sized villages consisting of mud-built flat-roofed houses and fortified watch-towers, relatively susceptible to bomb attacks, of the Faridai and Maresai, to the inaccessible cave homes of the Abdur Rahman Khel, furnished with personal belongings, food and water, and the distributed huts and enclosed compounds of the Guri Khel.[25] Most sections lived by necessity as independent economic units. Tribesmen in the open or their livestock were equally fair game. However, as was customary in Waziristan, all villages possessed access to a protective cave system nearby, where tribesmen and their families could live in comparative comfort for long periods.[26] Furthermore, all tribes possessed a sizable head of livestock. Throughout the hostilities these were mostly secured in the surrounding caves

during daylight hours and watered and fed under the cover of darkness. At the headquarters in Tank, all objectives were carefully numbered on a master map, with specific targets allocated to the squadrons. For the air staff, this proved to be a primary means of recording and conveying information, calculating moves and directing action. Pink quickly knew every inch of the map as if he had been flying over it daily for weeks.

The tactical unit employed against the tribesmen was a 'flight' of three machines, as the targets were so small that it was often not economical to attack with anymore than three aircraft at a time, with bombing normally occurring at a height of 3,000 feet over the target on a signal from the formation commander. The tactics employed could roughly be divided into: *intensive air attack*, *air blockade* and *night bombing*. In each case, every effort was made to avoid setting patterns, in order to keep the tribes in a constant state of insecurity and apprehension. Taking tactic each in turn:

- ***Intensive air attack*** was regularly conducted by a series of coordinated flight raids. The hours of daylight were divided into periods and these periods were allocated to squadrons in rotation. This form of attack varied by directing more than one squadron on a selected target during a defined period, thereby increasing the intensity of the attack by concentrating all available force at a predetermined time and place. Attempts were made to achieve tactical surprise by altering the times and order of attack on targets.
- ***Air blockade*** consisted of deploying aircraft over the target area at irregular intervals during the hours of daylight to attack certain objectives, or to assault any target which might present themselves with 112 lb and 20 lb high explosive anti-personnel bombs.[27] The *raison d'être* behind this method was to harass the tribes constantly, thus creating a general feeling of uncertainty, insecurity and apprehension. Such activities sought to encourage the tribesmen to capitulate by causing intolerable inconvenience to their daily lives, cutting off communication, and preventing them from cultivating their crops or grazing their flocks for an indefinite period. Routes were carefully planned so that tribes with a history of trouble making were also covered; aircraft often descended over them to leave the villagers in no doubt that they were being watched.[28]
- ***Night bombing*** (30 March onwards), although limited, was undertaken by individual aircraft employing moonlight to enable pilots to fix their positions accurately. Attacks took place either against an observed target, or on localities where it was advantageous to enforce the blockade. Reconnaissance flares were used to assist the pilot in identifying targets, but it was recognised that 'no great material damage' could be expected from night bombing.[29] To be effective, night bombing

> had to be continuous. However, the tactic prolonged the blockade into the hours of darkness, and in consequence disorganised the normal pattern of life of tribesmen still further. On nights when bombing was not viable, the R.A.F. relied on delay-action bombs dropped during the previous day.

To prevent pattern setting, a number of variations to the above methods were introduced during the campaign. For example, 'desultory' bombing was carried out for a number of days, followed by an intensive and focused assault.[30] Orders were also given to stop all raids at a set hour, in order to give the impression that attacks for the day had ceased, before a resumption of activity prior to last light. Moreover, the times of attack were continually varied, as were the type of bombs employed, the time of delay-action fuse used, and the number of aircraft selected. Night bombers were ordered to attain maximum height over the aerodrome and then to 'throttle down' their engines in order to appear over the target as silently as possible and a reserve was always maintained at high readiness to permit a heavy attack against an identified target. In addition, and to help negate any forced landings in tribal territory, raids were carried out at sufficient height to allow pilots a realistic chance of being able to reach one of the three emergency landing grounds adjoining the operational area, should they encounter engine failure.

Forced landings in tribal territory were something to be feared. Capture by the tribesman could entail mutilation, followed by death; although more routinely pilots were held for ransom. The prospect of being found or rescued was negligible; aircraft carried bedding, emergency rations and water. Moreover, 'every officer-airman carried a letter in *Pashtu* [and *Urdu*], signed by the Chief Commissioner, … offering a reward of Rs. 10,000 to any tribesmen who brought the bearer to safety in the event of his having to make a forced landing in tribal territory.'[31] These safety certificates were known commonly as 'gooli chits,' as castrations without the benefit of anaesthetic was not unheard of. However, the actual treatment of the captured aircrew depended greatly on individual circumstances and particularly on the role they had just been undertaking.

Behind the scenes, preparations for the forthcoming operations continued apace. Chaz Bowyer recalls in *RAF Operations, 1918-38* that:

Pink wasted no time, and once Miramshah [Fort] had received its squadrons he flew to the fort from Tank to brief all personnel on the imminent operations – in itself a somewhat novel procedure at the time. Seating ***all*** *crews, air* ***and*** *ground, in a semi-circle around him Pink proceeded to explain in detail the tactics and objectives intended – to such good effect that on concluding his talk the whole audience, quite spontaneously rose to their feet and actually clapped their applause!*[32]

Bowyer goes on to recollect that: 'This unprecedented gesture of appreciation momentarily took Pink aback – in the words of one NCO present, "Pink became scarlet – but I don't think he was displeased really ..."'[33]

The Terror that Flies: Operations Commence

As the government was absolutely sure of the culpability of the tribes, activities began on 9 March with heavy attacks against all sections concerned; any movement, human or animal, seen within the proscribed area was liable to be bombed or machine-gunned from the air without warning. As expected, the main focus of activity during the initial stage of the operation was directed against the Abdur Rahman Khel, who had sensibly taken to the hills, moving everything they could. A number of villages in Dre Algad were set ablaze and a fortified watch-tower was completely destroyed in the Spli Toi area. Four days' later operations came to a temporary halt, as various hostile sections, after expressing contempt for the effects of the bombings, promised to comply with government demands. This was a ruse by the defiant tribesmen to buy time, and air attacks reassumed on 14 March.

The following day two captured Hindus were brought into Spli Toi Post, and on 17 March the Abdur Rahman Khel *jirga* arrived at Jandola for negotiations.[34] As was normal, operations against this section were immediately suspended to allow negotiation to take place. During the ensuing *jirga*, the Resident announced the terms to the tribesmen, 'and an agreement was in sight when internal dissentions caused a breakdown of negotiations.'[35] Operations against the Abdur Rahman Khel were immediately reinstated and those against the remaining intractable sub-sections continued.[36] However, under the tribal code of *pashtunwali*, and specifically the tenet of *nanawatai*, the obligation to offer open-handed sanctuary without thought of reward, it was found that various friendly villages were giving shelter to the hostile tribesmen and their flocks; these villages were promptly warned by the Resident to cease such support.

During the following days, the friendly section of the Abdur Rahman Khel departed the Spli Toi area altogether, convincing various hostile sections to return to their own tribal areas. R.A.F. operations had by this point forced the majority of unreceptive tribesmen into hiding and completely upset their routine pattern of life.

On 21 March, Flying Officer N.C. Hayter-Hames and E.J. Dashwood, while carrying out a bombing raid in a D.H. 9A biplane from No. 27 (B) Squadron, were forced to crash land in hostile tribal territory from an unknown cause; most probably accurate rifle-fire, although *The Times* reports simply that the 'machine caught fire.'[37] Flying Officer Hayter-Hames, 23, was killed during the heavy landing, which completely destroyed the aircraft. Flying Officer Dashwood, 22, the youngest son of Sir George and Lady Mary Dashwood, who was thrown clear, fell into the hands of Guri Khel friendlies and died shortly afterwards.[38] Chaz Bowyer recounts the incident:

Dashwood immediately went into the burning wreck attempting to extricate his pilot [Hayter-Hames] but suffered serious burns. Dashwood was then taken in hand by some friendly Guri Khel who lavished elaborate care on the mortally injured man, even slaughtering several of their precious goats and using the goat fat and skins to wrap the dying

Dashwood – an example of a form of chivalrous mercy for any brave man sometimes displayed by the mountain tribesmen even to his foes.[39]

Flying Officer Dashwood's body was brought into Sorarogha on 22 March, despite considerable opposition from the Karim Khel. Three days later, the Karim Khels, after serious haggling, recovered Flying Officer Hayter-Hames's body with a number of rifles. Subsequently, a *jirga* occurred at Jandola, where the Karim Khels surrendered their leading *malik* as security for the payment of the money fines.

Despite a number of small successes, it became clear that operations were likely to become drawn-out. Social fragmentation and economic backwardness made the efficient imposition of collective punishment difficult. It was, therefore, deemed prudent to restrict the intensity of the attacks in case further operations became obligatory, or that the present operations had to be conducted for an indefinite period. Attacks on the tribes now developed into an air blockade, conducted by a pair of aircraft patrolling a designated area. However, the Abdur Rahman Khel remained a focus of activity, particularly as rumours suggested that they were planning on migrating across the Afghan border for safety.[40] In addition, routine activity continued unabated against all hostile sections, but often with only limited short-term success. For example, the R.A.F. destroyed a prominent fortified watch-tower in a Maresai village, which proved to be a catalyst for negotiations. As was customary, bombing was suspended against the tribe for one day to allow their *jirga* to appear at Jandola. However, despite some positive signs of a breakthrough, nothing came of the meeting and operations resumed.

On 30 March a single Bristol Fighter from No. 31 Squadron, Ambala, commanded by Flying Officer Reginald Pyne and fitted out for night-time flying, arrived at Tank to carry out night bombing raids. With ground crew despatched to the landing grounds at Sorarogha and Khirgi, employing searchlights and paraffin landing flares, the first flight occurred on 4 April with notable results. Prior to this attack, the tribesmen had considered themselves relatively safe under the cover of darkness, and the discovery that the R.A.F. could operate effectively at night proved alarming, playing on the minds of the tribesmen. Confident by the success of this new tactic, two more Bristol Fighters were flown from Ambala to Tank for further night sorties. The arrival of these machines resulted in a partial re-organisation of the operational force.[41]

To achieve a greater effect and to give evidence of the force which lay behind the government's word, the government decided to launch a large offensive on 4 April immediately prior to the first hours of darkness raid. Accordingly, 38 aircraft raids were coordinated during the hours of daylight, totalling 52½ hours flying. The combined action resulted in numerous tribal casualties, with the night-time raid killing an infamous Faridai, named Tormarchai. However, the attack occurred with one incident of note involving Squadron Leader T.F. Hazell, who had only recently been appointed Officer Commanding

60 (B) Squadron.

… shortly after taking off from Miramshah he [Squadron Leader T.F. Hazell] noticed the engine cowling of his [de Havilland] DH9A coming loose. Jettisoning his two 230 lb bombs – which landed near an army scout post to the alarm of its troops – Hazell decided to land as quickly as possible and chose Sorarogha where its sloping landing strip ended abruptly in a sheer drop into a deep ***nullah*** *(valley). With no option but to land down the sloping strip Hazell skilfully ran his Ninak into a stone breastwork on the very edge of the precipice. The DH9A was a write-off but Hazell and his petrified gunner walked away from the wreck with minor bruises.*[42]

In addition, the official report recalls that on 4 April: 'A friendly ABDUR RAHMAN KHEL jirga appeared at TANK on this day with various irrelevant suggestions which were rejected.'[43]

Five days' later an afternoon patrol sighted a large gathering of Faridai tribesmen moving up the Dre Algad in open country. This slow-moving target was immediately engaged by bomb and strafing machine-gun fire, with additional aircraft from Miramshah reinforcing the ongoing assault. With numerous casualties inflicted on the dispersing tribesmen, and the opportunity for a rout at hand, the weather took an unexpected turn for the worse, making it impossible to press home the attack. The circling aircraft reluctantly returned to base. This was the only reported gathering of hostile tribesmen encountered in the open during the entire operation.[44]

By this stage in the operation, a number of friendly tribes were beginning to refuse refuge to the radical tribesmen and their flocks, but some still persisted in offering sanctuary, despite the dangers. As a result of multiple source information received from the political authorities, warnings were issued to the following villages: Galli Punga, Pasti Khan, Jullamdar Pari Khel, Jemadar Didai's village, Shinkai and Wazirgai. Intelligence reports also suggested that a large number of hostile Abdur Rahman Khel were sheltering with friendly tribesmen in the Sarela, and a warning was issued to the district on 12 April. At about this time information came to light to suggest that hostile families were sheltering in the Barwand area, and that the Abdur Rahman Khel were likely to move to the Baddar Algad *en route* to Afghanistan. Authorisation to extend the operation to all these areas was requested in writing; however, this was approved for the Baddar area only on 20 April.

With operations continuing at a brisk pace, representatives from the Abdur Rahman Khel proposed a peaceful conclusion to events on 12 April. These proposals were considered to be genuine by the Resident and, as a result, bombing of the Spli Toi area was stopped from 14:00 hour on 13 April to midnight on 14 April. A *jirga* subsequently appeared, but no agreeable outcome was obtained, despite extensive negotiations; calculating the tribesmens' bluff and sifting the wheat from the chaff during a *jirga* was a trying experience. Operations resumed the following day, with 57¾ flying hours expended. Two more night raids were also undertaken.

Around this time contradictory reports were being received of the proposed intentions of the Faridai and Maresai sections. To clarify matters and to avoid unduly prolonging operations, the political authorities despatched a representative to Ahmedwam to attend a tribal *jirga*. A brief message was received on 15 April from the envoy that the *jirga* would only convene under certain conditions, which were immediately dismissed. However, on the morning of 18 April, the fine of seven government rifles was met and three rifles looted from the Gomal Police Post were then turned in. At this point, operations ceased against these sections. Meanwhile, a constant reconnaissance was maintained over the Baddar area to identify signs of tribal migration. Constant bombing of the Abdur Rahman Khel hostiles continued.

On 17 April, a deputation of Abdur Rahman Khel mediators presented peace terms to the authorities, but their proposals were deemed unrealistic and, therefore, unacceptable. They returned at night-time on 20 April, this time was an agreeable promise of security, and they were granted a 24-hour lull in operations. The official report notes:

It was now discovered that the hostiles had actually left the SPLI TOI for BADDAR, but had been turned back by sections living ***en route*** *who were afraid of being bombed. This forced them to return either to SPLI TOI or BARWAND, and it was reported that, if peace was not concluded, they intended to go direct to AFGHANISTAN* ***via*** *KHAISORA, to avoid further bombing. The three security rifles were not produced by the time allocated, and bombing was begun again, only to be suspended the same evening on the receipt of the rifles.*[45]

This was followed by a preliminary meeting with both hostile and friendly members of the tribe at Sarwekai on 23 April, followed by a representative *jirga* on 28 April at Jandola. After three days' of prolonged and exhausting discussion, due to the conflicting interests of all parties, terms were agreed on 1 May in Jandola, with practically no ill-will.[46] The full fine of 16 rifles was accepted and guarantees for payment within a practical timeframe given. An honourable – if fragile – peace ensued.

After 54 days of unremitting air action, and with all government terms accepted, except for one rifle which was remitted to the Biland Khel as a reward for their assistance in recovering Flying Officer Dashwood's body, R.A.F. operations ceased against all hostile sections. Having barely covered the campaign, *The Times* reported: 'The operations of the Royal Air Force in Waziristan have been crowned with complete success.'[47] The total number of casualties inflicted on the tribesmen was never officially quantified, not least as tribal losses were usually concealed and there were no reliable means of confirming rumours. However, in a despatch from the government to the Secretary of State from India dated 15 October 1925, it was 'estimated' that there were '11 human casualties only, killed and wounded, caused by 154 tons of bombs and 100,000 rounds of ammunition,' as most tribesmen left their villages and took shelter, with their livestock, in caves, only allowing their cattle to graze under the cover of

darkness.[48] Additionally, there was considerable damage to tribal flocks, but only moderate harm to houses; although constructed only of mud brick, tribal homes were remarkably resilient against even the heaviest bombs. In comparison, *The Times* report of a routine punitive reprisal in 1922 notes: 'On the 17th [December] a column of ground troops from Kotkai attacked a hostile Mahsud gathering two hundred to three hundred strong. At least eight Mahsuds were killed and twelve wounded. Our casualties were six killed and twenty-eight wounded, all Indian.'[49] The contrast was stark. Moreover, operations in Waziristan over six-months in 1919-1920 alone cost the government 1,800 lives, 3,675 wounded and 40,000 sick casualties.[50]

The wider psychological effect of the action on the tribesmen was also difficult to determine, but the inconvenience of denied access to his villages was great, 'especially when some vigorous and unforeseen allies of the Raj, myriads of fleas, made life in the caves unendurable.'[51] A feeling of helplessness and an inability to reply effectively to the constant attacks was particularly soul-destroying. Moreover, the official report notes with some assurance: 'The moral effect of the bombing on tribesmen not included in the actual area of operations has also been considerable: various fines which were imposed before and during the present operation have been paid up, and the decision of the Political Authorities have been carried out with exemplary promptitude.'[52] This included the Bahadur Khel and Shabi Khel paying outstanding fines, and a section of Malikdinai, led by an infamous outlaw, Shamdai, handing over 13 rifles as well as paying an outstanding fine. Therefore, there appeared little doubt in the effectiveness of becoming subject to air operations. In summarising the R.A.F. operations of 1925, the *Official History of Operations on the N.W. Frontier of India, 1920-35* notes: 'They were an instance of complete success being achieved in securing submission of N.W. Frontier hostiles by air action alone, thus achieving the desired result at very small cost in casualties and money by comparison with a punitive expedition carried out by the Army ...'[53]

As was to be expected from an operation of this magnitude, a number of gallantry and distinguished service awards were approved by the King and officially gazetted. Squadron Leader A.J. Capel, later to reach the rank of Air Commodore, was awarded the Distinguished Service Order. Flight Lieutenants J.W. Baker, already in receipt of a Military Cross, W.N. Cumming, and Flying Officer R. Pyne all received the Distinguished Flying Cross.[54] Three sergeants, of whom two were pilots, a corporal, and a leading aircraftsman, were awarded the Distinguished Flying Medal. In addition, 14 R.A.F. personnel were mentioned in dispatches, including Wing Commander R.C.M. Pink C.B.E. In addition, he was granted accelerated promotion to Group Captain as a reward for his skilful handling of the campaign,[55] 'apart from being accorded a form of immortality in RAF annals by having these operations thereafter referred to as 'Pink's War.''[56] Moreover, all those who had served under Pink during the period 9 March to 1 May 1925 inclusive became entitled to wear

the India General Service Medal, 1908 with a clasp imprinted 'Waziristan, 1925.'[57] This was by far the rarest clasp given with the medal and was only awarded after Sir John Salmond succeeded in overturning the War Office decision not to grant the decoration. Forty-seven officers and 214 airmen received the award.

Events in Perspective

Although the campaign was a success, it was not without its lessons. The first important deduction was that the period of time over which the campaign was conducted was unfavourable. Final approval for the start of operations was issued by the government on 25 February, with the first attacks against the tribesmen occurring on 9 March. By early March the worst of the cold weather was over, and flying had to be undertaken in ever-increasing temperatures (April was unusually hot) and seasonable storms added considerably to the strain on the aircrew and supporting ground personnel.[58] The timing also made the blockade more bearable for the tribesmen and their families, as daily conditions were ever more pleasant and agreeable. Likewise, as the passes into Afghanistan were now open, those who owned land or had somewhere to stay in Afghanistan could simply leave the area in question uncontested.

However, there were more profound challenges with the timing of operations. By early March the R.A.F. was nearing the end of a particularly busy training season, which had made considerable demands on aircrew and on the reserves of ageing fabric-covered machines, engines and technical stores. The official report notes poignantly: 'This [the training season], combined with an under-estimate of the financial requirements of the R.A.F. in India for the year 1924-25, resulted in a shortage in the necessary number of serviceable aeroplanes and engines: on the eve of the operations this amounted, for the R.A.F. as a whole, to 27 aeroplanes and 40 engines, the former being due to the latter.'[59] Cannibalisation and local improvisation were commonplace in order to bring a single aeroplane up to flying standard for operations, and workshop shifts were kept going day and night to enable the squadrons to have aircraft available. Despite these challenges, 2,700 hours were flown during the campaign over a demanding 54 day period; a significant achievement by

Operational Statistics[60]

Squadron	Total hours flown inclusive, *plus* one hour to operating stations		War flying including travelling flights		Machine flights
	Hours	Minutes	Hours	Minutes	Number
5	671	5	463	20	363
20	558	35	405	55	139
31 (night flying)	97	0	46	20	29
27	661	45	554	50	333
60	724	45	600	30	358
Totals	2713	10	2070	55	1222

any standards.[61] Nevertheless, by 1 May this shortage had increased to 85 aeroplanes and 44 engines. A breakdown of flying hours over the period of operations by squadron is shown in the table on page 110.

Equally, there were challenges with the number and experience of available aircrews. All the knowledgeable pilots due to be rotated out of India in the trooping season of 1924-25 had departed, and those who had replaced them were not available to take part in the operations, 'since they had not had time to complete their training under Indian conditions, which differ from those at Home on account of the low density of the air and the height of the landing grounds.'[62] For those travelling by troopship to India a flying break of over two months needed rectifying. This initially occurred at the Aircraft Depot at Karachi, before transferring to the squadrons and the mentorship of an experienced pilot, enabling the aircrew to become familiar with the aircraft, local conditions and the unusual layout of the frontier stations. This could take up to a month to complete, including a series of solo flights, until deemed ready for operations.

Despite such practical challenges, a total of 2,700 flying hours in antiquated aircraft only resulted in one fatal incident on 21 March, resulting in the death of Flying Officers Dashwood and Hayter-Hames. However, there were a number of recorded crash landings. In addition to Squadron Leader Hazell's heavy landing on 4 April at Sorarogha, Flight Lieutenant R.C. Savery also made an emergency landing at Sorarogha on 8 April, while on 15 April a third aircraft force-landed with engine trouble in open country. Although exclusively referring to death of Flying Officers Dashwood and Hayter-Hames, the official report notes positively: '… previous experience of frontier fighting shows that this is a small price to pay for enforcing our will on such hardy mountaineers as the tribes concerned, living in the difficult country of WAZIRISTAN. Nor do I believe that the cost would have been less had any other method of coercion been employed, indeed I think it must have been much more.'[63]

In spite of the impressive tally of flying hours, on several occasions during the campaign, bombing was temporarily stopped to conduct peace *jirgas* or to allow property to be collected as security; primitive methods of tribal communication and transport often resulted in significant breaks in operations to permit effective dialogue with tribal emissaries. In a number of these instances, the sections failed to comply with the stated conditions within the specified timeframe and attacks resumed. The official report notes: 'The disadvantages of such respites are obvious; they enable the enemy to recover from the strain which the bombing attacks inflict, they facilitate the removal of valuable property [and flocks to a place of safety], they give the tribesmen the impression that our resolution is weakening and provide opportunities for those who wish to do so, to slip away out of reach of further attacks.'[64] Of significance, on more than one occasion the tribes came to terms without any initial break in activity, or after bombing had been resumed

on the cessation of a respite. For example, between 15-18 April the Faridai and Maresai complied with government terms without a pause of operations against them. Similarly, the Abdur Rahman Khel surrendered three rifles required as a guarantee of peaceful behaviour on 21 April after bombing had recommenced against them. These examples demonstrated to the authorities that a lull in activity was not always necessary and, whenever possible, that operations should continue unabated, until the initial terms had been complied with in whole or adequate security for the fulfilment of the conditions given. However, as soon as the period of apprehension and the initial shock waves are over, evidence suggested that it was not the way force was applied but its effectiveness that was feared the most.

As to be expected 'with a method that was often criticized on the score that it was brutal …,'[65] the thorny issue of the delineation between hostile and friendly tribesmen reared its head in the official report. This was noteworthy as the operations appeared to have few constraints placed upon them; the idea was simply to get the tribesmen to come to terms in the quickest time possible. Pushing the issue firmly to one side with a preamble that states: 'It is unnecessary to deal at length with the difficulties which are created for the Royal Air Force by the division of the MAHSUD tribes into hostile and so-called friendlies,' the official report notes, 'all are agreed that such differentiation is undesirable, and that full tribal responsibility should be enforced.' The issue is concluded simply by saying: 'It is hoped that such a policy will prove practicable in the future.'[66] However, the reality was that the well-disposed elements of the tribe suffered by necessity with those whose transgressions had brought about the operations in the first instance. This was despite a perceived familiarity of the terrain and tribesmen. *The Times* notes optimistically: 'In consequence of the detailed knowledge of the country acquired since the occupation, it has been possible to isolate the offending tribes, and the result has been greatly to increase the effect of the operations.'[67] However, this was not always true. A lack of information was an important factor in prolonging operations. As this was the first time that independent air action was used on the frontier, the inadequacy of the R.A.F. intelligence structure and poor mapping and photographic intelligence played a major role in the extended duration of operations.

Conclusion

In 54 days the R.A.F. demonstrated that a proven alternative to costly, protracted and elaborate punitive expeditions existed to control the frontier tribes: no ground troops were used. Against a particularly intractable section of the Mahsuds, the continuous operations of the air arm, despite severe aircraft and engine shortages, also secured considerable respect from the army and the civil authorities. This was particularly noteworthy as air control was often opposed in that it was thought to be solely punitive and contrary to a policy that aimed to 'civilize' the tribes through personal contact.[68] Many senior British officers, including some viceroys, disliked the concept of airpower

for this reason alone.[69] Moreover, the lessons learnt from operations against the Abdur Rahman Khel and other Mahsud tribes ensured that the technique of air control in the future would be even more effective and efficient. The official report concludes by stating:

This is the first occasion in INDIA that the R.A.F. has been used independently of the Army for dealing with a situation which has got beyond the resources of the political officers. It is at present too early to judge how lasting will be the effect or how permanent will be the impression of this display of air power on the stubborn tribesmen of the North-West Frontier, but it is claimed that the operations prove that in the R.A.F. the Government of INDIA have a weapon which is more economical in men and money and more merciful in its action than other forms of armed force for dealing with the majority of problems, which arise beyond the administrative frontier. That they have not been without effect on sections of the MAHSUDS who were not included in the area of operations is shown by a number of settlements which have been effected during the progress of the operations, notably the case of the surrender of the rifles looted from the GOMAL Police Post.[70]

It is significant that during the next eleven years, a combination of regular troops, scouts, *kassadars* (tribal policemen) and the R.A.F. succeeded in substantially reducing the violence in Waziristan, with only minor tribal raids to upset the peace. The political authorities realised that air power, when properly employed, provided an effective means of helping control the tribesmen. However, despite a number of well-argued proposals, the army high command never again gave the R.A.F. responsibility for an independent air campaign on the frontier, confining Pink's War to the chronicles of history.

Notes

[1] A.M. Roe, "Friends in High Places: Air Power on The North-West Frontier of India," *Air Power Review*, vol. 11, no. 2 (summer 2008): 31.
[2] H.L. Nevill, *North-West Frontier: British and Indian Army Campaigns on the North-West Frontier of India, 1849-1908* (London: Donovan Publishing, 1912), 21; A.M Roe, *Waging War in Waziristan: The British Struggle in the Land of Bin Laden, 1849-1947* (Kansas: University Press of Kansas, 2010), 71-75.
[3] Hostilities against aircraft were poor sport, resulting in few casualties. Although one flying officer wrote in 1928 that 'their [Mahsud] rifle fire … was uncomfortably like that of a machine-gun, and almost as effective.' _____, "The Mahsud Operations, 1920 (No. 31 Squadron)," *The Hawk: The Annual Journal of the R.A.F. Staff College*, vol. 1, no. 1 (1928): 127.
[4] This generally followed a predictable pattern. Initially the tribesmen were excited, defiant and boastful of the revenge they would take afterwards. Next came internal quarrels, blaming each other for having caused the trouble in the first instance, and fierce protests at the injustice of the government. This was followed by boredom and frustration as the tribesmen watched their homes being destroyed and crops deteriorate from the relative safety of their caves. Finally came the stage of reluctant – but often good-natured – peace offers, generally by sections in order to save face and avoid complying with

government terms.

[5] As a means of controlling the Empire's outer reaches within the economic constraints of the day, air control became the system by which an area was dealt with primarily by air action, in which the R.A.F. was the predominant arm and the responsible commander an airman. This method was honed over time in response to complex situations on the frontier, disorder and banditry in Iraq, disturbances in Aden, and uprising in Palestine and Transjordan.

[6] C.J. Mackay, "The Influence in the Future of Aircraft upon Problems of Imperial Defence," *Journal of the Royal United Service Institution*, vol. LXVII (February to November 1922): 299; Roe, *Waging War in Waziristan*, 23-28.

[7] For example, consecutive British Ministers in Kabul disputed the effectiveness of air control and questioned the morality of its employment. Sir Francis Humphrys believed that aerial attack would increase the extreme dislike and bitterness of the British amongst the tribes. Sir R. Maconachie, Humphry's successor, believed that the R.A.F. was simply unable to distinguish from the air between friendly and unfriendly villages.

[8] C.F.A. Portal, "Air Force Co-operation in Policing the Empire," *Journal of the Royal United Service Institution*, vol. LXXXII, no. 526 (May 1937): 350.

[9] To open up the country a central road was built from Bannu to Razmak, headquarters of a brigade group; then to Wanna on the west of the Mahsud territory, and from Wanna a circular road to connect up with the Derajat frontier.

[10] See B. Robson, *Crisis on the Frontier: The Third Afghan War and the Campaign in Waziristan 1919-20* (London: Spellmount Ltd., 2004); G. Molesworth, *Afghanistan, 1919* (London: Asia Publishing House, 1962); and *The Third Afghan War, 1919: Official Account* (Calcutta: Government of India Central Publishing Branch, 1926).

[11] The British were compelled to retire from Wana Fort, where a small element of the South Waziristan Militia mutinied and seized the armoury, capturing 1,200 rifles and approximately 700,000 rounds of ammunition.

[12] *Official History of Operations on the N.W. Frontier of India, 1920-35* (Manager of Publications, Delhi, 1945), 33-35.

[13] Of note, during 1910 1,000 Mahsuds were allowed to enlist in the Regular Army and in 1911, owing to a drought that resulted in the failure of the autumn harvest, 2,000 Mahsuds were given work on the construction of the Pezu-Tank branch of the Kalabagh-Bannu railway.

[14] E. Ellington, *The London Gazette*, supplement, 17 November 1925, 7596.

[15] The head of the political hierarchy on the frontier resided in Peshawar. He wore two hats: he was Chief Commissioner (in 1932 upgraded to Governor) of the cis-frontier districts, but in his dealings with Tribal Territory he was Agent to the Governor General (AGG), having under him the Resident, Waziristan (Waziristan had been under military command since 1919 but on 31 March 1924 a political resident was appointed), established in Dera Ismail Khan, and Political Agents for North Waziristan in Miramshah, South Waziristan in Tank, and the Kurram in Parachinar. Under the Political Agents were Assistant Political Agents in Wana, Sararogha and Miramshah.

[16] A. J. Young, "Royal Air Force North-West Frontier, India, 1915-39," *Journal of the Royal United Services Institute* 127 (1982), 61.
[17] Ellington, *The London Gazette*, 7596.
[18] Ibid., 7596-7.
[19] Built at the end of 1924 as an extension to a scouts' fort, Miramshah was to become a favourite outpost with the air and ground crews. A fort strongly reminiscent of the film 'Beau Geste,' with strong outer walls and battlements, it had an inner 'keep' into which aircraft were wheeled at night and secured. The ground outside the fort was levelled on the north and west to give an L-shaped landing area, the surface being fines stones on rock.
[20] The force was located as follows: No. 5 (A.C.) Squadron – Bristol Fighter – Tank (10 airplanes, 14 officers and 69 airmen); No. 27 (B) Squadron – D.H. 9A – Miramshah (8 airplanes, 15 officers and 58 airmen) and; No. 60 (B) Squadron – D.H. 9A – Miramshah (8 airplanes, 13 officers and 67 airmen). Including the Headquarters in Tank (5 officers and 20 airmen) the total force consisted of 26 airplanes, 47 officers and 214 airmen.
[21] The Bristol F.2 B Fighter was a two-seat biplane fighter and reconnaissance aircraft, which had seen service on the Western Front. Often referred to as the 'Brisfit' or 'Biff,' the F.2 B proved to be an agile and manoeuvrable aircraft, with a maximum speed of 123 miles per hour. It was capable of carrying 240 pounds of bombs and had a forward-firing Vickers .303 machine-gun and a movable Lewis gun in the observer's cockpit. The de Havilland D.H. 9A, also known as the 'Ninak' (from the designation 'nine-A'), was a single-engined fighter and reconnaissance biplane powered by a 400 horse power Liberty engine. In contrast with its predecessor, the D.H. 9, the D.H. 9A had an enviable reputation for reliability. The aircraft had a maximum speed of 123 miles per hour and could carry up to 740 pounds of bombs on under-wiring and fuselage racks. It also had one Vickers gun facing forward and a Lewis gun mounted aft.
[22] This included a warning that long-delay action bombs would be used (set to explode at uncertain intervals), and that it was advisable to remove woman and children from tribal villages should operations commence.
[23] Ellington, *The London Gazette*, 7596.
[24] C. Bowyer, *RAF Operations, 1918-38* (London: William Kimber & Co., Ltd., 1988), 172.
[25] "The Air Campaign in Waziristan," *The Times*, 21 November 1925.
[26] Roe, *Waging War in Waziristan*, 37.
[27] After a number of experiments, the best bomb-load for the purpose on the D.H. 9A was found to be eight 20 lb bombs under each plane and two 112 lb bombs under the centre section. The 20 lb bombs were used for harassing action generally, and the 112 lb bombs against any major targets observed.
[28] Blockade action was frequently extended to include 'wireless telegraphy' patrols, which signalled back news of any important activity to reinforcing flights standing by at ten minutes notice to move.
[29] Ellington, *The London Gazette*, 7597.
[30] Ibid.
[31] H.C. Wylly, *The Green Howards in The Great War* (London: Butler and Tannes Ltd., 1926), 26.
[32] Bowyer, *RAF Operations*, 1918-38, 171.
[33] Ibid.

[34] This was relatively unusual occurrence, but it was far from unique. Frank Baines recalls a more common outcome: 'And then there was the story of the Hindu *baniya* who was caught outside Mirali …. He had the skin from the soles of his feet slit off, and, having been deprived of his sandals, was sent back sixteen miles into camp where he arrived after two days, covered in flies, having crawled every inch of the way, in a temperature of 105° in the shade, on his hands and knees and his belly.' F. Baines, *Officer Boy* (London: Eyre & Spottiswoode, 1971), 145.
[35] Ellington, *The London Gazette*, 7598.
[36] One flight from No. 20 (A.C.) Squadron was sent to Tank on 18 March to reinforce No. 5 (A.C.) Squadron.
[37] "Two R.A.F. Officers Killed," *The Times*, 24 March 1925.
[38] The R.A.F. made it a principle 'never to relax pressure' against a wayward section just because they had hostages in tribal territory. J. Slessor, *The Central Blue: Recollections and Reflections* (London: Cassell & Co. Ltd., 1956), 67.
[39] Bowyer, *RAF Operations, 1918-38*, 172.
[40] The international border, marked along its length by infrequent white stone markers, was inviolate to government troops or aircraft, except in an emergency.
[41] The redistribution was as follows: Operational Headquarters – Tank; 1 Flight – No. 31 (A.C.) Squadron – Bristol Fighter (for night flying) – Tank; 1 Flight – No. 5 (A.C.) Squadron – Bristol Fighter – Miramshah; 1 Flight – No. 20 (A.C.) Squadron – Bristol Fighter – Miramshah; 2 Flights – No. 27 (B) Squadron – D.H. 9A – Miramshah; 2 Flights – No. 60 (B) Squadron – D.H. 9A – Miramshah; Searchlight Party – Sorarogha; and Searchlight Party – Khirgi.
[42] Bowyer, *RAF Operations*, 1918-38, 175.
[43] Ellington, *The London Gazette*, 7598.
[44] Ibid., 7599.
[45] Ibid.
[46] The tribesmen regarded the aeroplane as an impersonal agent of government. It is worthy of note that throughout the campaign the attitude of the *jirgas* was relatively friendly, and for officers of the R.A.F. the Mahsuds showed a marked respect based on admiration for the work they conducted.
[47] "Pacification of Waziristan," *The Times*, 4 May 1925.
[48] Air Historic Branch, Principles to be adopted in flying on the frontier, Despatch from the Government of India (Foreign and Political Department), (No. 11 of 1925), to the Secretary of State for India, 15 October 1925, 1.
[49] "Sharp Fight with Mahsuds," *The Times*, 23 December 1922.
[50] J. Slessor, *The Central Blue: Recollections and Reflections* (London: Cassell & Co. Ltd., 1956), 54.
[51] 'The Looker-On,' "The North-West Frontier in the Thirties–I," in *The Army Quarterly* (January 1969): 253.
[52] Ellington, *The London Gazette*, 7599.
[53] *Official History of Operations on the N.W. Frontier of India, 1920-35* (Manager of Publications, Delhi, 1945), 34.
[54] Baker performed 69 hours of war flying, including 35 bombing raids; Cumming undertook 72 hours of war flying, including 41 bombing raids; and Pyne conducted 9 night-time raids.
[55] In July 1931 Pink was promoted to Air Commodore but was taken ill shortly after and eventually died of cancer on 7 March 1932.

[56] Bowyer, *RAF Operations, 1918-38*, 178; G. Torpy, "Counter-Insurgency: Echoes from the Past," in *Journal of The Royal United Services Institute*, vol. 152, no. 5 (October 2007): 20.
[57] The British Government awarded a campaign medal, or a 'clasp' to an existing medal, for the following campaigns: Waziristan, 1894-95; Chitral, 1895; Malakand, 1897; Samana, 1897; Tirah, 1897-98; Waziristan, 1901-02, Mohmand, 1908; Third Afghan War, 1919; Mahsud, 1919-20; Waziristan, 1919-21; Waziristan, 1921-24; Waziristan, 1925; North-West Frontier, 1930-31; Mohmand, 1933; North-West Frontier, 1935; Waziristan, 1936 and; Waziristan, 1937-39. The Waziristan campaign of 1925 was the only one to be conducted solely by the R.A.F., without army participation.
[58] Except in the morning and evening, atmospheric turbulence made accurate bombing problematic. The official report notes: 'MIRAMSHAH is 3,000 feet high and is surrounded by hills. It is liable to very sudden and serve storms, which, when accompanied by hail, made flying both difficult and dangerous. These storms usually came up about 12 noon and lasted until 3 p.m.
The aerodrome was rendered unserviceable for a long or short period after such storms according to their intensity and endurance. TANK was not affected by these storms, but was very much hotter than MIRAMSHAH, recording shade temperatures over 100 degrees during part of March and April. Operations were interfered with on 6 occasions by rain and hail storms. Atmospherics interfered considerably with the W/t communications between MIRAMSHAH and TANK.' E. Ellington, *The London Gazette*, supplement, 17 November 1925, 7597.
[59] Ibid., 7600; Philip Towle recalls: 'One officer who arrived in India about this time found that tyres, inner tubes, shock absorbers and other essential spares were all in short supply. He also noted with indignation someone from another squadron trying to steal wheels from one of his aircraft.' P.A. Towle, *Pilots and Rebels: The Use of Aircraft in Unconventional Warfare, 1918-1988* (London: Brassey's Defense Publishers, 1989), 40.
[60] Ellington, *The London Gazette*, 7601.
[61] Captain J.B. Glubb notes that '…. like all mechanical devices, aeroplanes require a certain amount of time for overhaul or repair. Should the minimum time necessary for such attention not be allocated to the machine, their efficiency very rapidly decreases.' J.B. Glubb, "Air and Ground Forces in Punitive Expeditions," in *Journal of the Royal United Service Institution*, vol. LXXI (1926): 779.
[62] Ibid.
[63] Ibid.
[64] Ibid. However, breaks in operations also allowed the squadrons to: conduct necessary aircraft maintenance, complete a multitude of routine – but important – administrative tasks and; bring their intelligence up-to-date.
[65] Slessor, *The Central Blue*, 66.
[66] Ellington, *The London Gazette*, 7601.
[67] "Pacification of Waziristan," *The Times*, 4 May 1925.
[68] Slessor, *The Central Blue*, 54.
[69] Towle, *Pilots and Rebels*, 40-43.
[70] Ellington, *The London Gazette*, 7600.