The Troublesome 1930s: General Unrest, Intense Activity and Close Cooperation

By Colonel Andrew Roe

The precipitous and insecure North-West Frontier of India experienced a rapid advancement in the use of air power in the 1930s. It became increasingly evident, despite inter-Service rivalries, that there was plenty of room for both the RAF and Army on the frontier; their capabilities were not exclusive, but complementary and mutually beneficial. The best results in tribal management could only be obtained when both worked in close and constant cooperation with each other and this quickly became the modus operandi through necessity. Planning became local, with the air and ground planners sitting next to each other using a common map. And, by the late 1930s, the air and ground could talk directly with each other with reliable radios. This article looks at the growing 'cooperation' between the RAF and the Army on the frontier in the 1930s and 40s.

Introduction

> By the early thirties there was discernable a certain complacency about the North-West Frontier, a general and almost reluctant belief that the scales were by now so heavily loaded on the Government's side that the Frontier was not what it used to be, and Regular troops were most unlikely ever to suffer any more serious setbacks.
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> The Looker-on, 'The North-West Frontier in the Thirties – II'

The 1930s were characterised by an evolution in the use of air power along the rugged North-West Frontier. Hard-won lessons, combined with experimentation and trial, proved the growing necessity for Army Cooperation (A.C.) squadrons to integrate more fully with ground forces, particularly in support of slow-moving Army columns. This 'cooperation' between the RAF and the Army allowed for more precise targeting and greater effect by the integration of air assets in support of planned ground operations. It called for a sympathetic understanding of each other's powers, limitations, methods and requirements. The period was also influenced by several notable individuals, ranging from T.E. Lawrence, through Mizra Ali Khan – a religious firebrand known as the Fakir of Ipi – to Adolf Hitler; all of whom, directly or indirectly, affected the way that air power was used along the troublesome frontier. However, it was Europe's unavoidable march towards war with Nazi Germany that ultimately challenged the frontier's pre-eminence, relegating its magnitude to an almost peripheral but permanent headache.

The Lawrence Canard

The successful evacuation by air of 268 men, 153 women and 165 children from Kabul in 1928-29 had one attention-grabbing footnote.[1] On 8 January 1929 a curious airman, known as 338171 Aircraftman Thomas Shaw, departed Miranshah Fort.[2] Located deep in the Upper Tochi Valley, just ten miles from the Afghan border, the lion-coloured mud fort was enhanced by a dusty L-shaped airstrip (its two arms running along two sides of the fort). Shaw was in fact Colonel Thomas Edward Lawrence – better known as 'Lawrence of Arabia' – the eccentric amateur and unorthodox leader of the great Arab uprising in the Arabian Desert.[3] In September 1928 unfounded news in the press claimed that Lawrence was spying for Britain in Afghanistan, conducting a secret mission. This came to a head in January 1929 when unsubstantiated reports asserted that the Afghan authorities had ordered the capture of Lawrence. This time his alleged crime was assisting Afghan rebels to cross the frontier. 'Many newspapers reproduced prominently a report that the Afghan Government had ordered the arrest of Colonel Lawrence for complicity in the revolt. The *Vossische Zeitung* devoted half its front page to this report, and considered that the suggested implication of Colonel Lawrence "does not sound incredible." The *Börsen Zeitung*, whose readers, one must hope, are less credulous than itself, says: "It has long been known that Lawrence is the leader, or at least the organizer, of the revolt."'[4]

Lawrence was supposed to have dressed in the disguise of a holy man, wearing a turban and robes, in order to disseminate political propaganda across the border. The *Deutsche*

Allgemeine Zeitung went a stage further: '… the possibility that Lawrence has had his hand in the Afghan game is completely established,' suggesting that his next book should be titled 'Revolt in Afghanistan.'[5] However it was the made-up connection between the Shinwari revolt in the Khyber area and Lawrence which ultimately made his position untenable. With rumours gaining momentum, due to the suspicious combination of circumstances, an official *communiqué* cautioned:

> The Government of India had hoped that no credence would be given to fabrications so patently wicked, and that, if ignored, they would die a natural death. In view, however, of the increasing currency which they seem to be obtaining, the Government of India has instructed the local Governments to consider forthwith the prosecution of the principal offenders.[6]

Rumours remained rife and became gradually more colourful. Uncomfortable with Lawrence's coincidental presence so close to the Afghan border, Sir Francis Humphrys, the Minister, asked for his removal away from the frontier, due to the embarrassment being caused to the British Legation in Kabul. Not wishing to send him home, Salmond telegraphed Trenchard for his views and counsel. Trenchard suggested that a transfer to Aden, Somaliland or Singapore was appropriate, and asked Salmond to find out Lawrence's preference. Salmond wrote in reply:

January 10th, 1929

> Poor Lawrence! The whole thing is a tragedy. Directly I received your telegram I ordered him down by air to Lahore and sent up Colonel Turner with a personal letter from me explaining all the circumstances. He was very much upset … However, he understood the necessity. He felt it was no good going to Singapore as, as soon as there was some row there, it would be put down to him. He said he would always be hounded about wherever he went. He did not think it would be any good going to Aden or Somaliland as these places were too close to his former activities. He therefore decided on coming home.[7]

An official despatch stated simply that: '… in view of the currency obtained by the unfounded and preposterous rumours connecting the name of Aircraftman Shaw with events in Afghanistan, the Government had decided to transfer him from Miranshah.'[8] On 8 January 1929 Lawrence flew to Lahore and four days later boarded the P&O steamer S.S. *Rajputana* from Bombay bound for Plymouth.[9]

The New Cry – 'Cooperation'

> The schoolboy once birched does not become a reformed character for life.
> Violent crime continues in spite of Dartmoor and the gallows.
>
> Sir John Slessor, *The Central Blue*

As Lawrence knew only too well, the North-West Frontier was rarely calm for more than a few days at a time. The near-peaceful days of the late 1920s were to become a distant memory for those operating in hostile tribal territory. Unrest, violence and insurrection were to become the hallmarks of the 1930s. Large-scale operations and intense activity were frequently necessary, involving several brigades supported by aircraft from the Frontier Squadrons to quell general unrest. More regularly, the trouble was localised and called for a sliding scale of violence to control and subdue sporadic tribal disturbances. Political officers, dealing with the tribesmen on a man-to-man basis, were often able to manage these situations under the cover of armed force overhead or in the background. Regular support to small-scale disturbances, unopposed by enemy aircraft or effective anti-aircraft weapons, ensured that Frontier Units and Squadrons were ready and primed for larger outbreaks of tribal hostility.[10] Nonetheless, in order to maintain collective proficiency, all Bomber Squadrons in India competed annually for the Ellington Bombing Trophy, an impressive and highly sought-after prize, presented by Air Chief Marshal Sir Edward Ellington. Seen as the culmination of the year's training, each Squadron entered three crews: one to carry out high level bombing from 12,000 feet, a second to undertake medium level bombing from 6,000 feet, and the third for dive bombing. The competition tested both the pilot and air gunner over Peshawar bombing range, which was seen as 'neutral' by all Squadrons.[11]

Despite initiatives to enhance bombing accuracy and proficiency, the real advancement on the frontier in the 1930s was 'cooperation' – the balanced use of all arms and services in frontier warfare. The tribesmen had become accustomed to the old biplanes flying high above their tribal lands and bombing disobedient villages. The psychological effect had largely worn off and aircraft were no longer a novelty or an unfamiliar threat. Determined *lashkars* (tribal armed forces) learned to cope with air attacks and tribesmen became accustomed to protecting their bases from aerial bombardment by siting them in remote caves.[12] Other well-developed tribal techniques such as moving at night, exploiting ground shadows, moving through precipitous and broken country, utilising woods and taking advantage of urban cover afforded ample concealment from air observation.[13] Although the RAF remained relatively effective at encouraging wavering tribal sections into making a settlement, deterring tribal banditry and preventing tribesmen concentrating in unauthorised groups, it was becoming apparent that air power alone was increasingly insufficient to achieve an agreeable solution. Despite this reality, one flight commander based on the frontier in the 1930s boasted:

> If they went on being troublesome, we would warn them that we would bomb an assembly of people. An assembly was normally defined as ten people … indeed, in my case I can remember actually finding nine people and saying 'That's within ten per cent and that's good enough,' so I blew them up.[14]

Such an approach rarely had any enduring effect. However, combining traditional frontier methods with close support offered the most effective means of countering tribal rebellion. In direct support of the Army, instead of mere reconnaissance, aircraft were able to act on

intelligence and take direct action against errant tribesmen in support of ground forces. Of equal significance in an often-strained relationship, the RAF provided the expertise in its own area of speciality and was no longer seen as subordinate to the Army. One commentator noted:

> Perhaps the biggest development in Frontier warfare in these [operations in the Lower Khaisora Valley, Waziristan, 1937] and subsequent operations has been the great strides made in close liaison between troops and the Royal Air Force, particularly in the matter of really efficient close support by aircraft. As the infantry advanced on the 29th April and flushed the enemy from successive positions it was a wonderful sight to see the aircraft overhead take him on and add to his discomfiture. Reports coming in from the flanks of enemy movement were communicated to the aircraft in a few moments, either by radio-telephony or the Popham Panel, and off went the machine to deal with it. All this was done by the Air Force Officer standing beside the Brigade Commander and in the closest touch with him, and knowing exactly what was in his mind. When a withdrawal was about to take place, a fresh aircraft was usually ordered up, which kept a vigilant watch on the rearmost troops and the flank piquets and, on several occasions, prevented the enemy getting too close by machine gunning or bombing them.[15]

Air control, the replacement of land forces by air power alone, was fast becoming a dated concept on the frontier. Few, even among the RAF, trumpeted it as the optimum solution to tribal control. Airpower was not the answer to controlling the frontier. However, against the grain, the Government of India's Tribal Control and Defence Committee recommended in 1931 that greater reliance should be placed on air control, describing the tactic as 'an offensive weapon of the greatest importance … even against the most inaccessible tribe.'[16]

To provide more efficient cooperation the RAF improved and consolidated its various airfields throughout the frontier and enhanced available meteorological information, which proved a great advantage to pilots who were embarking on a long cross-country flight. Without repressive financial constraints, adequate supplies of spare parts and other essential items became increasingly available.[17] It also upgraded its long-serving and obsolete aircraft. In February 1931, No. 5 Squadron started to transfer from Bristol F.2Bs to Wapitis, completing its conversion by May. No. 31 Squadron also received its first Wapitis in February and was fully equipped by mid April. Other detachments followed suit, with the final Squadron completing its conversion in April 1932. Concurrently, Nos. 11 and 39 Squadrons converted from Wapitis to Hawker Harts.[18] 'The Hart offered its crews higher cruising and maximum speeds than the Wapiti, coupled with increased range, though armament and bomb load capacity remained the same.'[19] The arrival of modern, twin-engined monoplane bombers quickly followed, with improved power, performance and offensive load. The first squadron to convert to Blenheim I's in India was No. 11, beginning in July 1938. 1939 saw the next two units begin conversion and No. 60 Squadron followed suit from March to September.

To complement new and improved aircraft, the RAF introduced enhanced communications systems to facilitate greater cooperation and situational awareness – both between air and ground and between column headquarters and the airfield. This included the employment of better wireless transmission (W/T) and radio telegraphy (R/T) sets and, when employed, two Air Force operators with a pack wireless set were attached to the headquarters of the column the aircraft were supporting. However, while W/T, utilising Morse Code, proved relatively successful in the mountains, R/T procedures proved less effective. Apart from the technical difficulties and limited range of airborne R/T, air gunners found R/T sets too bulky, unreliable and cumbersome to operate. Moreover, ground operators faced technical problems, atmospheric interference, and the reality that sets had to be unloaded and erected before they could transmit messages, thus limiting their effectiveness.[20] Many regarded these new radio sets with suspicion and loathing. Experience suggested that for close support duties, the quickest and most reliable methods of ground-air communication were the tried and tested procedures of ground strip codes, message dropping and the Popham Panel, which if practised carefully beforehand was a most comprehensive code.[21] This was to be challenged in the late 1930s with the arrival of the Hawker Audax. This aircraft possessed a reliable two-way radio allowing the pilot to keep in regular contact with his base and the ground forces he was supporting. The airframe offered other benefits:

> In many ways this type of machine was far more efficient in Frontier warfare than the heavier, faster aircraft like Spitfires and Tempests used ten years later. The Audax could turn and twist in a small space and fly slow enough to allow sufficient time for detailed observation of the terrain. At the same time it had a good enough turn of speed to make it a difficult target for snipers. From the Audax the crew might get glimpses of lurking tribesmen and the pilot would drop down on them in a power-drive to release a couple of bombs while the observer raked the ground with his machine-gun.[22]

In addition to modern aircraft and communication upgrades, tactics, organisational structures and control systems were also enhanced.[23] Acknowledging that the sealed-pattern 'Aldershot model' of cooperation, devised for conventional European warfare, was for the most part ineffective in mountainous terrain, the development of cooperation theory was carried forward by experienced frontier pilots. Through growing know-how and experimentation they recommended best practice and novel solutions to everyday challenges:

> We recommended the standardization of a system whereby reconnaissance areas should be sub-divided into lettered zones bounded by easily identifiable features such as deep *nullahs* [ravines], and said that if aircraft were to be able to intervene immediately in an emergency they must be already in the air, capable of being called down by signal when required – a foretaste of the 'cab-rank' system of later years.[24]

Others also recognised the utility of airpower and wished to exploit its usefulness. The Army Medical Service requested aircraft for aeromedical evacuation in 1937. The RAF agreed to the

back-loading of casualties on Valentia Bomber Transport aircraft brining in troops and supplies. The aeromedical flights reduced a hazardous journey that could take days to less than a five hour flight; casualties who would not have survived a gruelling journey by other traditional means reached better medical facilities safely.[25] Furthermore, thought was given to writing cooperation doctrine and producing a combined manual of frontier warfare, recognising the radical change to cooperation used on the frontier in India. In 1930 Slessor authored the *Manual of Army Cooperation*, stressing the importance of good communications between the RAF and Army, the need for timely and accurate intelligence, and the ability to communicate in a well-timed manner. Regrettably, as such an instruction was long overdue for the A.C. Squadrons, the manual was not implemented. But, by 1935, the Air Staff released clear instructions that RAF training should be directed towards efficiency in tribal warfare, pending formal written doctrine on the subject.[26] To cover the gap *Close Support Tactics – Provisional* was distributed to Frontier Squadrons to supplement a draft chapter of the *Frontier Operations Manual*. This was followed by an approved version of the manual in 1937 that stated that:

> For a land operation in frontier warfare, army co-operation aircraft will be placed under the command of the force commander in the field, and an air force officer will be appointed to the headquarters of the force to advise the force commander regarding their employment.[27]

However, it was not until 1939 that the comprehensive *Frontier Warfare (Army and Royal Air Force)* was published. This provided unambiguous and up-to-date written guidelines to both Services, containing a detailed description of all methods of frontier warfare. It also underlined the increasing interdependence between the Army and RAF.

Despite a deficiency of written doctrine, routine activity continued unabated throughout the period. Tribal reconnaissance, usually undertaken by a flight of three aircraft, was a welcome duty for many. So too were demonstration flights. 'For the purpose of showing the flag and ensuring that the tribes remained constantly aware of the presence of British forces, all the Frontier Squadrons participated in a regular series of demonstration flights, planned to cover the whole Frontier at frequent intervals.'[28] Each route was carefully planned to ensure that tribes and villages well-known for disturbances were covered; aircraft would often descend to lower altitudes to leave a village in no doubt that they were being watched. Likewise the more isolated posts and garrisons were circled by one or more of the aircraft to instil confidence. Reconnaissance flights were often lengthy undertakings – frequently three hours or more in duration.[29] Aircraft were fitted with cameras to enable photographs of any unusual activity, such as damage to a landing ground or the construction of a new road. Aircraft were also used to conduct photographic surveys of specific areas or villages in an attempt to accurately map the frontier and to update the 'Tribal Directory.' Requiring constant revisions, the directory was a detailed account of the resources, population and other data of every known village in the frontier region.

> Many of the villages were virtually unapproachable by road or on horseback, either because they lay in inaccessible areas or because the inhabitants were known to be hostile. The obvious way to reconnoitre such villages was to fly round them, assess their size and count the houses, haystacks, cultivated areas and note any fortified towers etc.[30]

When not conducting tribal reconnaissance, crews spent time maintaining familiarity with the equipment, armament and general flying characteristics of the aircraft under their charge. Routine flights included dropping practice bombs on designated ranges, firing the aircraft's guns, taking vertical and oblique photographs and practising forced landings. More advanced flights included night-flying practise, employing makeshift flare-paths to border the runway to assist with landings.

Column protection was a routine task. It was normal for any column of men, horses and vehicles to receive 'continuous' or 'in readiness' support from one of the Frontier Squadrons. For example, it was more often than not the responsibility of Miranshah to look after columns operating from Razmak and Wana. Air Chief Marshal Sir David Lee recalls: 'To ensure good communication and understanding between the column and aircraft overhead, we nearly always sent a junior officer out with the column as a Liaison Officer.'[31] The liaison officer's responsibilities were to sit at the elbow of the Brigade Major providing timely advice, planning support, communication assistance and technical know-how. He also supervised the exchange of messages by Popham Panel and message bag and provided instruction on this form of communication. Experimentation proved the importance of RAF Liaison Officers at column headquarters. In addition to this, a small number of farsighted officers also attached pilots to ground formations:

> An essential part of [training crews for cooperation flights] … was to give my officers a really practical idea of the soldier's job, the sort of things he had to do and what he was likely to want from the man in the air. To this end I arranged for my pilots to be attached each for a month to a battalion or battery, on the understanding that they really did have an executive job to do and did not merely sit about on shooting sticks watching other people do it. The soldiers co-operated most nobly in this – so much so that one young officer, Flying-Officer Lees, who was unfortunately killed in action in the air later on, actually led a platoon of Indian Infantry in action (no doubt under the benign tutelage of his Havildar [sergeant]) in a minor show in Waziristan.[32]

'TEWTs' (Tactical Exercise Without Troops) were also undertaken to enhance cooperation procedures and to exchange best practice. Pilots, under the close supervision of their Squadron Commanders, studied the challenges of close support in mountain warfare from the point of view of the soldier on the ground.

However, prior to any column, a preliminary conference was attended by the Squadron Commander, his Air Intelligence Liaison Officer (AILO) and the RAF Liaison Officer (RAFLO)

accompanying the column. Also present at the conference, to enable integrated planning, was the column commander and his staff. It was acknowledged in the 1930s that mutual trust and understanding between the Services was key to success.[33] The conference discussed the time and nature of the support required and the objectives and the route that the column was taking, including a rough picquetting plan. Any pertinent information about the tribesmen and special areas to observe were also discussed. Owing to the difficulties of communication, once a column had left its base, daily operational orders sent to the RAF were short and to the point.[34] It fell to the AILO to brief the pilots on:

- The time his 'sortie' begins and ends.
- Where the column is going, and where he may expect to find column headquarters, picquet positions and advanced and rear guards.
- Information about the tribesmen and any special areas to watch.
- Details with regard to 'call signs' and frequencies.

Once over the area, the pilot formally relieved the on-station aircraft and informed column headquarters that he had done so. The aircraft was then responsible for circling over the column at a height of 2-3,000 thousand feet, scanning the mountainous terrain approximately two miles on both sides of the planned route for unusual activity. Picquets, denoted by an 'X' on the ground, were noted and annotated on the pilot's map. If all was well then reports to column headquarters occurred every half-hour. Anything untoward was reported immediately. Moreover, air photographs were often taken of each attack at the end of the day's activities. These were used to gauge the effect of air power on the tribesmen and allowed the RAF to be first with the truth. Compensating for a lack of human (local) intelligence in some cases, such detailed information proved invaluable over the coming years.

Political Agitation and Widespread Tribal Unrest – 'Everyone Flew Like Mad'

Troubles started in late April 1930 when Mahatma Gandhi's Civil Disobedience Campaign, instigated in 1929 and supported by the well-known anti-British agitator Abdul Ghaffar Khan, reached the administered area of the Vale of Peshawar, a focal point in the commerce of the day.

> An educated intellectual Pathan giant, Abdul Ghaffar Khan of Utmanzai, had interested himself in provincial politics for years and was already known as a staunch supporter of the Hindu Congress. In 1929 he organised his own Frontier Youth League, a semi-military body whose programme aimed at complete independence for India and unity with the Hindus. Many young city-bred Pathans saw in it an opportunity for lettering off steam and donned its red uniform with eagerness. They were organised into companies at various centres where they were drilled and given military training. These Khudai Khidmatgars – 'Servants of God' – [or known sometimes as the Red Shirts] even had their own bands and a drill-book which laid down the badges to be worn by various ranks.[35]

While inciting anti-government hatred during a large rally in Peshawar, Abdul Ghaffar Khan was arrested along with nine other leading figures in the movement on 23 April.[36] A serious disturbance followed for the next eight days, which was only subdued once the army had taken full control of the city. Aircraft from No. 20 Squadron cooperated with the troops during the re-occupation of the City. The squadron also undertook a series of reconnaissance flights due to an unsubstantiated report of a planned Afridi attack on Peshawar. The operation to reassert security in Peshawar resulted in 30 civilians killed and 33 wounded.

Further unrest followed in Kohat, particularly in the Mian Khel quarter and other population centres, resulting in the arrest of six congress leaders on 12 May after a successful raid on the Congress building in Kohat. General unrest followed, fuelled by fallacious rumours of atrocities committed by British troops, the imminent evacuation of the whole North-West Frontier and the general downfall of British Rule. As a result, the whole tribal territory became restless. Telephone and telegraph wires were cut, roads were blocked and tribal mobs dominated the countryside. The frontier squadrons were involved in operations against the various centres of unrest, mainly attempting to disperse tribal *lashkars*. One such illegal gathering occurred in early May, controlled by Badshah Gul. Estimated to be 700 strong and on the move, the RAF began frequent reconnaissance to monitor its progress. No offensive action was taken, but on 7 May reports suggested the movement of the *lashkar* towards the border. Since the situation appeared to be deteriorating, a demonstration of 41 aeroplanes was carried out over the area to check the advance of the *lashkar* and to deter neighbouring Mohmand sections from joining the gathering.[37] This had limited effect and offensive operations were deemed necessary. The normal procedure of bombing the villages from which the *lashkar* came could not be followed as the war party was drawn from such a large area. Air attacks were therefore confined to the *nullahs* and caves in which the tribesmen were located. After due warning air operations commenced on 11 May. Attacking by day and night, the aim was to harass the *lashkar*, causing casualties and preventing the gathering from assembling for hostile action. 'During these operations, all personnel seen were bombed or attacked by machine-gun fire, and, although targets were few, casualties began to mount up. The *lashkar* by this time had scattered to avoid losses and now occupied caves in an area approximately 11 miles deep and 2 miles wide.'[38] It was during an afternoon attack on 17 May that Flying Officer P.W.A. Stroud, descending to a low altitude in order to use his rear gunner effectively, was shot from the ground and died almost immediately.

July provided little respite for the squadrons. Pockets of unrest persisted across the frontier, but this time the torch of rebellion was held aloft by the Mahsuds in the tribal homelands of Waziristan. On 6 July a *lashkar* mounted a loose and unproductive investment of Sorarogha Post. The following day a *lashkar* totalling 1,500 tribesmen attacked Ahnai Post (five miles south of Sorarogha) without success, although a neighbouring *khassadar* (tribal levy or police) post was severely burnt. On 8 July a reinforced *lashkar* of 3,000 tribesmen attacked Sorarogha Post again. Equipped with scaling ladders and supported by a home-made gun, the tribesmen succeeded in putting the water pumps which supplied the post out of action.[39]

'Bombed and strafed daily from the air for the next six weeks, these Mahsuds eventually scattered to the hills and their leaders were imprisoned. Only the Badinzai Mahsuds remained hostile and these held out against continuous bombing until their final surrender on 27 July.'[40]

August experienced a second Afridi incursion into Peshawar. With between 4,000 and 5,000 tribesmen attacking the city, the situation required drastic measures and martial law was declared in Peshawar District on 15 August. Despite repeated bombing, almost continuous reconnaissance aerial flights and skilful cooperation, it was not until the end of the month that the uprising fizzled out. The official despatch notes:

> The exceptionally enclosed nature of the country, round Peshawar, with its numerous villages, large gardens, standing crops and intricate *nullahs* and water channels, was an immense assistance to the Afridis. When, combined with this, they had the assistance of the local population who concealed and fed them, while tribesmen could hardly be distinguished from presumably peaceful villagers, it is no wonder that the odds were heavily in favour of the Afridi gangs in their game of hide and seek with the troops and air force.[41]

Widespread rebellion occurred across the frontier throughout 1930-31, calling for close cooperation, reconnaissance and demonstration flights, re-supply drops and propaganda flights. Matters were made worse in March 1931 when Abdul Ghaffar Khan was released from prison. At once he set about inciting further civil unrest by reintroducing his civil disobedience movement. Having achieved only limited success, he was re-arrested on 24 December and was immediately deported with four of his chief lieutenants.

1932 brought more unrest and revolt, with operations against recalcitrant tribesmen becoming an almost everyday occurrence. This was compounded by a localised uprising led by the Fakir of Alingar, while elsewhere action had to be taken against the Nawab of Dir's forces in the Milan Kalai area. Both disturbances were countered by focused bombing raids. These actions were followed by an inter-tribal dispute between the Upper and Lower Mohmands, with the frontier squadrons supporting the latter tribe.[42] September also saw the regular bi-annual relief of Chitral, an Army outpost in the eastern hills of the Hindu Kush.[43] 1933 was equally troublesome and challenging. This time the location was the Tochi valley, where supporters of the ex-Amir of Afghanistan, Ammanullah, attempted to incite Mahsud and Wazir tribesmen to conduct a shock attack on the Afghan capital. Focused bombing quickly dissuaded the tribesmen from the proposed course of action. However, within weeks, further uprisings occurred in the same region, 'where a pretender to the Afghan throne sheltering with the Khan of Kotkai was attempting to raise the tribes to depose Nadir Shah, the incumbent Amir, who immediately requested action by the Indian authorities.'[44] Offensive air actions resulted in the Khan submitting to government terms, which included banishing the pretender. Nevertheless it was during these operations that inter-tribal feuding between the Lower and

Upper Mohmand transitioned into open conflict. The Lower Mohmand had agreed a road-building initiative and as such received government support. Government ground forces and air support were used to inflict heavy casualties on the Upper Mohmand, resulting in a cessation of hostilities.

1934 was less troublesome, with a greater emphasis on training, familiarisation and reconnaissance patrols. Nonetheless, the following year, trouble erupted again in Mohmand territory. Under the guidance of the Hadji of Turngzai, a *lashkar* of 2,000 tribesmen gathered with the intention of destroying a recently completed military road. Having warned the *lashkar* to disperse, a 38-aircraft demonstration was executed over the area. Following little observable change in the *lashkar's* behaviour, a phased bombing programme commenced on 20 August in support of ground operations. However, close support was restricted throughout the period. Both Nos. 27 and 60 Squadron had a Flight each at the Hill Deport, reducing aircraft availability considerably. More significantly, a severe earthquake, consisting of two main shocks, struck the native city of Quetta and the nearby RAF Station on 31 May 1935, causing widespread devastation to aircraft and infrastructure alike. Air Chief Marshal Sir David Lee recalls:

> … as we began to taxy [sic] slowly towards the tarmac it soon became clear that the station [Quetta] had suffered immense damage. Hangers were still standing but the other buildings appeared to be heaps of rubble with clouds of the choking dust still floating upwards. An airman with a bandage round his head came limping out to meet me as I turned into line with about a dozen other aeroplanes which had arrived before us. While undoing my straps, I looked around; every airman in sight had some part of his body bandaged and, in fact, I don't think I saw a single airman without some injury during our brief stay.[45]

Immediate relief was transported by air assets, with doctors, nurses and urgent supplies arriving in short order. Ultimately the RAF Station was abandoned: No. 5 Squadron relocated to Chaklala and No. 31 Squadron moved to Karachi.[46] It was to be months before the RAF could be declared fully operational again.

1936 was to see the frontier erupt once again, but not before the first reinforcement flight to Singapore occurred. Based on a new policy that required Indian-based units to reinforce British forces in the Middle and Far East in the event of war, No. 60 Squadron despatched its 12 Wapitis, accompanied by two transport aircraft, to the Far East on 7 February. Only 10 Wapitis reached their destination in Singapore on 13 February; two crashed *en route*.[47] Nonetheless, the real headline of 1936 was an outwardly insignificant clash of religions. The abduction of a Hindu girl, re-named Islam Bibi in accordance with Islamic custom, by a young Moslem student for marriage was the catalyst for a series of events that would reach to India's independence and beyond. The authorities returned the girl to her Hindu parents but, since Islam Bibi was now a Moslem, the tribesmen took exception and the Fakir of Ipi (Mizra Ali Khan) called for a

Jihad or Holy War against the British.[48] His religious influence quickly galvanised the tribes in Waziristan, who put aside their ages-old differences to unite under the Fakir's banner as the Champion of Islam. As the fighting abandoned all thought of systemic opposition in favour of guerrilla warfare,[49] the government would have been wise to heed Major General Sir Charles Edward Caldwell's hard-won lesson: 'Guerrilla warfare is what the regular armies always have to dread, and when this is directed by a leader with a genius for war, an effective campaign becomes well-nigh impossible.'[50]

With conditions rapidly deteriorating, Major General Sir John Coleridge, General Officer Commanding Northern Command, took over military control of Waziristan on 29 November, a clear sign of the severity of the situation. The first major clash with the Fakir's forces occurred in November, resulting in the death of 24 government soldiers and over 100 others wounded. Supported by Nos. 5 and 27 Squadron, in air supply roles, the combined force succeeded in forcing the Fakir into the surrounding hills. By late December the Fakir was located in Arsal Kot, a remote and inaccessible village, some 20 miles south of Miranshah. After customary warning by coloured leaflet, his hideout – measuring 132 yards by 66 yards – was bombed and destroyed by No. 60 Squadron over the New Year. Taking heed of the warning, the Fakir had moved to nearby caves.

With the Fakir still instigating widespread trouble, operations against his determined followers reached a peak in April 1937. There were some 45,000 regular (Indian and British) and scout units, supported by the frontier squadrons, engaged in operations. Open and bloody conflict ensued. Despite the British initiative, tribal attacks on scout posts, convoys and army formations continued apace. The difficulties for all air crews in locating and accurately bombing a target proved challenging:

> Unfortunately no one knew exactly what the situation was, nor where the forward troops of 2/2 Punjab were. It was therefore impossible to give the Air clear orders very quickly, or to put on the panel more than an indication of the range; and to avoid risk of hitting our own troops, a range was given which was actually considerably longer than it need have been. Also there was an unfortunate delay in drawing the pilots' attention, owing to the first two smoke candles failing to ignite. The close reconnaissance pilot was ordered by R/T to attack enemy in square 1937, and eventually both pilots attacked at about 1445 hours; they could neither of them see the enemy, but they put down their fire about where the shells were bursting.[51]

Routine air-dropped re-supply was equally complicated. With targets often surrounded by towering ridges and strong air currents, parachutes were prone to drifting into tribal hands. However, there were other more profound dangers: 'One lightly loaded parachute instead of dropping on the Plain was carried 3,000 feet *above* the aircraft before finally coming to the ground.'[52] More routinely, aircraft were shot at and engine failures and crashes resulted in a number of deaths and casualties. The RAF suffered four killed and three injured between

January and September 1937 alone.[53] Routine operations continued throughout 1938, despite the detachment of a complete squadron to Singapore.

The region's affairs became even more complicated with the arrival of Muhammad Saadi al Kailani, better known as the 'Shami Pier,'[54] who claimed direct descent from the Prophet and was a member of the Gilani clan. He was also the first cousin of ex-Queen Souriya, Amir Amanullah's wife, who had abdicated in 1929. A 34-year-old revolutionary of Syrian extraction from Damascus and purportedly pro-Nazi, he attempted to persuade the tribes of South Waziristan that it was their duty to restore Amir Amanullah to the Afghan throne. Raising a *lashkar* of 3,000 tribesmen in Kaniguram, the tribesmen advanced towards Afghanistan on 23 June. Despite clear warning, which was duly ignored, the *lashkar* continued on course and was bombed and attacked repeatedly by military forces predominantly from the Ghazni District. Following these actions, Kailani sought a peaceful outcome. With a sizable payment (£25,000) to guarantee his removal from the frontier, Kailani was deported back to Syria, leaving India on 4 July in an Imperial Airways flying boat.[55]

In the meantime the Fakir, who refused stubbornly to support Kailani's invasion of Afghanistan, continued to incite insurrection. As a result, operations against Mizra Ali Khan and his supporters took place in the burning heat of July 1938, during which a number of troops (both British and Indian) became heat exhaustion casualties. Executed by the Razmak Column, the 3rd Indian Brigade, several platoons of Tochi Scouts – with their invaluable local knowledge – and No. 20 Squadron, the all-arms grouping was known collectively as 'Wastrike Force.' The force was commanded by Brigadier Maynard, a seasoned frontier veteran, and the aim of the operation was the destruction of the Fakir's isolated headquarters in a cave in the wild Kharre Mountains of North Waziristan. With the prospect of a military assault against the Fakir's lair highly likely, but the exact timing unknown, a large number of his hardened supporters formed in a *lashkar* and prepared robust defensive positions, stockpiling food, water and ammunition. Major J.S.G. 'Foghorn' Branscombe recalls in a letter to his wife: 'I must say that the secret had been well kept (at any rate from us) and I hear that Ipi didn't know we were going for him until we set off.'[56] With strong intelligence regarding the exact location of the Fakir's headquarters in caves at Burman Sar, about 9,000 feet above sea level and hidden by thick pines, No. 20 Squadron set about providing aerial photographs of likely approach routes, air reconnaissance of water sources and continuous close support for columns moving to the large concentration area in the plain at Degan.[57]

By 12 July, with all troops located in the concentration area, the Squadron Commander and his small staff moved to Degan with a supply convoy and formulated the air plan for the move to Kharre. Advancing in two columns, with a jumping-off point at Wuzhgai, about 10 miles north-west of Degan, they planned that both ground formations would be given continuous close support during their move forward to the objective and withdrawal, and that separate aircraft would 'deal with any tribesmen approaching the column after the "Closed H" had been displayed.'[58] This meant that once instigated by ground signal, aircraft could take action

against anyone within two miles of the forward troops or picquet positions. In addition, a dedicated reserve was kept on the landing ground in a high state of readiness in order to relieve those who had run out of ammunition or for any emergency. On the afternoon of 12 July the two column commanders were flown over their objectives from Miramshah, returning to Degan in armoured cars. On 14 July the force left the concentration area to evict the Fakir from his hideaway while concurrently dispersing his following of hostile tribesmen and destroying his supply dumps.

All went according to plan, despite incessant sniping and sporadic indirect fire from two homemade field artillery pieces. Numerous 'Vs' (indicating that enemy forces were in the direction in which the apex of the V was pointing) provided excellent target indications to the circling aircraft above. During a local withdrawal a 'T' (a call for help when a position is likely to be overwhelmed or a sign that the enemy are following up a withdrawal so closely that it is impossible to get away) was displayed when approximately 50 tribesmen tried to rush a small party. As usual, the tribesmen collected in force during any retirement and were quick to bring accurate fire to bear on the retiring troops. The attack was thwarted by an immediate 'V.B.L.' (Vickers, Bomb, Lewis) attack, which deterred further attempts, allowing the column to continue its advance. That evening, with fierce fire from over 100 tribesmen holding up the operation, it became clear that the force would have to remain in situ for the night in hastily-constructed battle positions, known as stone *sangars*. In response, the number of close support aircraft was increased to four to provide additional top cover. These watched the *nullahs* and approaches to the picquet positions until dark and prevented concentrations gathering to attack at nightfall.

The objective was finally secured the following day and the Fakir's headquarters destroyed, including a cache of food and ammunition. The tribesmen followed-up Wastrike's planned withdrawal to Degan half-heartedly and aircraft were able to locate parties of long-range snipers by means of well directed 'Vs.' The speed and precision of the withdrawal, combined with the effective integration of close support aircraft, kept causalities to a minimum. 'A.I.L.O.' summarises: 'The valuable assistance rendered, and the excellence of the results obtained by air attack were mainly due to careful planning, good co-operation and the fact that both troops and pilots had worked together and had gained considerable experience of the close support code throughout the summer.'[59] However a number of factors, including the difficulty of the terrain, resulted in a less than successful operation. Despite killing many tribal malcontents and scattering the Fakir's remaining followers deeper into the mountains, no doubt across the Afghan border, the raid failed to achieve surprise and Mirza Ali Khan slipped effortlessly across the border into Afghanistan. Once again the Fakir had managed to escape a two-pronged movement closing in on him. On this occasion, the troops that cleared his cave found food still cooking in pots over a fire. He had fled with a few of his followers approximately thirty minutes before the leading troops arrived. For many years this was to be the pattern of the Fakir's efforts in eluding his pursuers.

The combined efforts of the Army (Indian and British) and RAF won a series of hard-fought skirmishes throughout 1938 and beyond, but failed to pacify the region to a standard expected by the government. With greater problems elsewhere, the frontier was increasingly relegated in importance as events in Europe started to influence India. For example, the defence of the naval base in Singapore gained primacy, resulting in the transfer of some RAF assets from the frontier during 1939-40. However, with the growing prospect of hostilities, the government decided to put an end to the Fakir's rebellion once and for all, even offering him a free pardon in September 1938, which the Fakir flatly refused. Despite multiple attempts to kill or capture the Fakir, he continued to spread and support rebellion, although his influence started to ebb, a trend that continued throughout World War II. Fortunately for all the allies, Mizra Ali Khan remained aloof from major Axis initiatives, preferring to sit on the sideline. He finally died in April 1960[60] and was accorded a long obituary notice in *The Times* of 20 April 1960. His passing brought to an end one of the great acts of drama on the frontier.

With the tribal situation steadily improving in the late 1930s, frontier assets were relocated to theatres of greater priority. Squadron Leader A.J. Young, who served in No. 60 Squadron on the frontier from 1936-1938, recalls: 'August 1939 saw the beginning of the end of the Royal Air Force "Watch and Ward" duties on the North-West Frontier; for Nos. 11 and 39 Squadrons flew to Singapore, No. 27 Squadron became a training unit for British and Indian volunteers and other units prepared for World War II. The one Indian Air Force Squadron was rapidly expanded into several more squadrons and the Indian Air Force took over responsibility for the North-West Frontier.'[61] When India gained its independence on 14 August 1947, with the partition of the sub-continent, the North West Frontier Province became a part of a newly-created Pakistan. On the same day the Pakistani Air Force assumed joint responsibility for the troublesome frontier with the Pakistani Army and political authorities, implementing an indirect approach to control that was unsurprisingly well-received by the educated *maliks* (tribal leaders or elders), who immediately grasped its religious significance. However, it took somewhat longer for the full meaning of partition to become apparent to the average tribesman.

Harmonious Interconnection

There was plenty of room for both the RAF and Army on the frontier; their capabilities were not exclusive, but complementary. The best results could only be obtained when both worked in close and constant cooperation with each other and this quickly became the *modus operandi* through necessity. General Sir Sydney Muspratt, referring to the North-West Frontier, suggests: 'I should say that nowhere else in the British Empire, except possibly in Palestine at the moment [1939], is the ordinary day-to-day work in the two Services so closely and harmoniously interconnected.'[62] Planning was local, with the air and ground planners sitting next to each other using a common map. And, by the late 1930s, the air and ground could talk directly with each other with reliable radios. Nevertheless, the RAF was unique in preventing widespread rebellion and unrest. Only the frontier squadrons had the ability to see thousands of square miles of tribal territory and possessed the means to react effectively to tribal disturbances in a timely manner. Air reconnaissance allowed the strength, composition

and routes of hostile *lashkars* to be identified. It also assisted in identifying which villages were giving shelter to hostile tribesmen. Aerial demonstrations, propaganda flights or targeted bombing could quickly follow. It fell to the Army to put 'boots on the ground' to help pacify and control areas, so that roads could be built, political officers could be protected and tribal difficulties could be addressed.

While the A.C. Squadrons had an increasingly jack-of-all-trades role under the charge of the force commander, bomber squadrons possessed less flexibility, remaining under RAF control. This resulted in an atmosphere of superiority in the A.C. Squadrons and a good deal of leg pulling when in the company of 'bomber boys:'

> Army co-op people not only do as much bombing as you bomber boys do, they have this relationship with the army. We patrol roads to keep them clear of road blocks, we cover picquets when a regiment withdraws. We keep accurate logs of our sorties on a knee pad. We keep touch with the people on the ground by picking up messages. All this is Greek to you, I'm afraid …[63]

This was not strictly true. Bomber Squadrons engaged targets that the Army or Scouts could not tackle and acted as a wide-ranging aerial fire brigade across the frontier. They also assisted in the evacuation of dangerously sick cases and the delivery of serums and medicines. Throughout the operations of 1937, 5,000 men were transported by the RAF in Waziristan, many of them casualties taken to hospital.[64] In addition to their principal role, bomber squadrons also provided assistance with photographic reconnaissance and the delivery of limited supplies by parachute. During the surprise advance on the Sham Plain in 1937, when it was impracticable to employ pack transport, the RAF dropped 13,000 pounds of supplies in loads of approximately 100 pounds each.[65] However, the line between peace and war on the frontier was ill defined, and the duties of the A.C. and Bomber Squadrons were often blurred by requirement. Pragmatism routinely trumped frontier doctrine – demonstrating the flexibility and growing maturity of air power. The theory of air control of the tribes died in the 1930s, but was replaced by a growing realisation of the need for true air-ground operations – a concept that would expand in the coming war.

Nevertheless, events on the world stage were to weaken hard-won frontier relations and operating procedures. The growing Indianisation of the RAF (and creation of the Indian Air Force (IAF)), the coming of the Second World War and Indian's march towards independence all challenged Britain's accountability for tribal control. When the Union flag was lowered for the last time on the frontier, '… the tribesmen in the northern provinces were frankly bewildered, unable to fully understand why their traditional fighting opponents, the British Army, was now relinquishing territories it had occupied, bloodily defended, and never been decisively defeated in for more than a hundred years.'[66] In its place fluttered the large dark green and white flag of the new Dominion of Pakistan. As the flag broke from masthead shouts of '*Pakistan zindabad*' ('long live Pakistan') erupted. However, such euphoria was to be

short lived and the frontier was not quiet for long. Unrest, rebellion and open conflict were just round the corner.

> With a unanimity dear to patriot hearts
> All those hairy gentlemen out of foreign parts
> Said: 'The good old days are back – let us go to war!'
>
> *What Happened*

Notes

[1] Air Power Review Volume 15 Number 1, *Evacuation by Air: The All-But-Forgotten Kabel Airlift of 1928-29*, Lieutenant Colonel Andrew Roe, p21.
[2] D. Garnett (Ed), *The Letters of T.E. Lawrence* (London: Jonathan Cape, 1939), 609-10, 626, 633.
[3] For an overview of T.E. Lawrence's role in the great Arab uprising see J. Barr, *Setting the Desert on Fire: T.E. Lawrence and Britain's Secret War in Arabia*, 1916-18 (London: Bloomsbury, 2006).
[4] 'False Reports Published in Germany,' *The Times*, 7 January 1929.
[5] 'German Interest,' *The Times*, 11 January 1929.
[6] 'Great Britain and Afghan Rising,' *The Times*, 7 January 1929.
[7] A. Baker and R. Ivelaw-Chapman, *Wings Over Kabul: The First Airlift* (London: William Kimber & Co. Ltd., 1975), 119-120.
[8] 'Afghan Rising,' *The Times*, 9 January 1929.
[9] Ibid.
[10] A.G. Dudgeon, *The Luck of the Devil: Air Vice-Marshal A.G. Dudgeon CBE DFC an Autobiography 1934-41* (Shrewsbury: Airlife Publishing Ltd., 1985), 74.
[11] R. Lee, *Never Stop The Engine When It's Hot* (London: Thomas Harmsworth Publishing, 1983), 168-75.
[12] A. Warren, *Waziristan, The Faqir of Ipi, and the Indian Army* (Oxford: Oxford University Press, 2000), 285. Lieutenant Colonel de Watteville notes that: 'A peculiarity of very many of the Wazir villages is their close proximity to large caves, to which the tribesmen have recourse as dwelling-places in winter for the sake of obtaining greater warmth. These caves were to form admiral "air raid shelters" during the aerial bombardment of the country.' H. de Watteville, *Waziristan, 1919-1920* (London: Constable & Co., 1925), 20.
[13] 'The Action of the 1st (Abbottobad) Infantry Brigade Near Damil on the 29th March 1937,' *Journal of the United Services Institution of India* 68, no. 290 (1938), 34.
[14] R. Cross, *The Bombers: The Illustrated Story of Offensive Strategy and Tactics in the Twentieth Century* (New York: Macmillan, 1987), 70.
[15] D.A.L. Mackenzie, 'Operations in the Lower Khaisora Valley, Waziristan, in 1937,' *Journal of the Royal United Service Institution* 82, no. 528 (1938), 820.
[16] C. Townshend, *Britain's Civil Wars: Counterinsurgency in the Twentieth Century* (London: Faber & Faber, 1986), 152-3.
[17] B. Hoffman, *British Air Power in Peripheral Conflict*, 1919-1976 (The Rand Publication Series), 22.
[18] The Hart was designed in 1926 as a high performance bomber to replace the D.H. 9A, which

had been in use in the RFC/RAF since 1918 both as a fighter and light bomber. It had a top speed of 184 mph.

[19] C. Bowyer, *RAF Operations 1918-38* (London: William Kimber & Co. Ltd., 1988), 210.

[20] A. Warren, *Waziristan, The Faqir of Ipi, and the Indian Army*, 107.

[21] Air Intelligence Liaison Officer, 'Close Support by Aircraft on The North West Frontier,' *Journal of the United Service Institution of India* 74, no. 16 (1944), 21.

[22] F. Leeson, *Frontier Legion: With the Khassadars of North Waziristan* (Ferring: Selwood Printing, 2003), 92.

[23] In the 1930s, the RAF began the process of 'Indianisation' of the Service. As a result, the Indian Air Force (IAF) came into being on 8 October 1932. Its first operational deployment occurred during the Waziristan operations of 1937. Based in Miranshah, the detached IAF Flight carried out a record number of operational flying hours during the period September-November 1937.

[24] J. Slessor, *The Central Blue: Recollections and Reflections* (London: Cassell & Coy Ltd., 1956), 129.

[25] M. Hudson, 'A History of Military Aeromedical Evacuation,' *Air Power Review* 11, no. 2 (2008), 78-80.

[26] Doctrine: the means by which guidelines for military action are articulated, providing tactical confidence and intellectual consistency. It is derived from a combination of history, theory and technology. It is refined by practice and experience, and thus is always evolving.

[27] AIR2/2065 *Frontier Operations Manual*, 1937, 57.

[28] R. Lee, *Never Stop The Engine When It's Hot*, 46.

[29] Sorties were used to locate and monitor hostile *lashkars*. Information from these patrols enabled column commanders to site protective picquets and to direct long-range artillery fire. It also assisted in identifying forming-up places and lines of departure for an attack.

[30] R. Lee, *Never Stop The Engine When It's Hot*, 108.

[31] Ibid., 116.

[32] J. Slessor, *The Central Blue*, 126.

[33] Liaison was also maintained by army officers attached to A.C. squadrons. They acted as operational staff officers to the Air Force commander, dealing with demands for air photographs and distributed daily intelligence summaries.

[34] A.M. Roe, *Waging War in Waziristan: The British Struggle in the Land of Bin Laden, 1849-1947* (Lawrence: University Press of Kansas, 2010), 137.

[35] F. Leeson, *Frontier Legion*, 78.

[36] A.M. Roe, *Waging War in Waziristan*, 100.

[37] H. Le M. Brock, 'Air Operations on the N.W.F., 1930,' *Journal of the Royal Central Asian Society* 19 (1932), 27.

[38] W.R Birdwood, 'Disturbance on the North-West Frontier of India from 23rd April to 12th September, 1930' (Army Headquarters, India, 14 November 1930), 8.

[39] Ibid., 27.

[40] C. Bowyer, *RAF Operations 1918-38*, 205.

[41] W.R Birdwood, 'Disturbance on the North-West Frontier of India from 23rd April to 12th September, 1930', 41.

[42] C. Bowyer, *RAF Operations 1918-38*, 210.

[43] This operation involved a five-week march for about 1,500 men (and approaching 1,000 animals) with an even larger escort. As the 1930s progressed the RAF's participation in this enterprise steadily increased, starting with the daily air dropping of previsions in 1930. In 1936 the Army was able to make limited use of motor transport and some of the men were moved by air. In 1938 about 20 percent of the exchange was carried out by air and in 1940 it was done by air alone.
[44] C. Bowyer, *RAF Operations 1918-38*, 211.
[45] R. Lee, *Never Stop The Engine When It's Hot*, 161.
[46] A.J. Young, 'Royal Air Force North-West Frontier, India, 1915-39,' *Journal of the Royal United Service Institution* 127 (1982), 62.
[47] The policy worked both ways. By the 1930s the Empire was suffering from a serious case of imperial overstretch. It was virtually impossible to defend and certainly far too big to garrison on a permanent basis, so reliance began to be placed on inter-regional air reinforcement. Thus while this concept was exercised by deploying squadrons from India to Singapore, units from Egypt went to Iraq, and *vice versa*, and even as far as India. For example, in January 1937 No. 45 Squadron flew its 12 Vincents from Egypt to India where they flew patrols over the tribal areas and took part in bombing exercises from Kohat to Miranshar.
[48] M. Hauner, 'One Man Against the Empire: The Faqir of Ipi and the British in Central Asia on the Eve of and During the Second World War,' *Journal of Contemporary History* 16, no. 1 (1981), 374-404.
[49] This included: sniping, sudden small raids, constant harrying of rearguards and convoys, the cutting of telegraph and telephone wires, the re-routing and poisoning of water sources, and the destruction of culverts and bridges.
[50] C.E. Caldwell, *Small Wars: Their Principles and Practices* (London: Harrison & Son, 1906), 105.
[51] J. Slessor, *The Central Blue*, 658.
[52] C. Bowyer, *RAF Operations 1918-38*, 224; N.H. Bottomley, 'The Work of the Royal Air Force on the North-West Frontier,' *Journal of the Royal United Services Institute* 193 (1939), 778.
[53] A.J. Young, 'Royal Air Force North-West Frontier, India, 1915-39,' 63.
[54] A 'Pier' is a holy man.
[55] A.M. Roe, *Waging War in Waziristan*, 180-1.
[56] R. Chapman, 'Afghanistan and The North-West Frontier: The Green Howards During the Third Afghan War 1919, and the Waziristan Campaigns of 1936-1937, 1937-1939,' *Friends of the Green Howards Regimental Museum Newsletter*, no. 14, September 2002, 16.
[57] Very little water was available in the area, and the water that could be found was a pale brown-grey colour with a disagreeable taste. This was a regular difficulty in Waziristan. In order to prevent cholera, dysentery and minor ailments, all local sources had to be 'treated.' It was the combined responsibility of the sappers and doctors to pronounce a source fit for use.
[58] 'AILO,''Close Support by Aircraft on the North West Frontier,' *Journal of the United Service Institution of India* 74, no. 16 (1944), 23.
[59] Ibid., 24
[60] A.M. Roe, *Waging War in Waziristan*, 190.
[61] A.J. Young, 'Royal Air Force North-West Frontier, India, 1915-39,' 63.

[62] N.H. Bottomley, 'The Work of the Royal Air Force on the North-West Frontier,' 780.
[63] G. Morley-Mower, *Flying Blind*, 124.
[64] N.H. Bottomley, 'The Work of the Royal Air Force on the North-West Frontier,' 778.
[65] Ibid.
[66] C. Bowyer, *RAF Operations 1918-38*, 235