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CONTENTS

OPENING ADDRESS – Air Mshl Ian Macfadyen	7
ONLY A SIDESHOW? THE RFC AND RAF IN MESOPOTAMIA 1914-1918 by Guy Warner	9
THE RAF ARMoured CAR COMPANIES IN IRAQ (MOSTLY) 1921-1947 by Dr Christopher Morris	20
No 4 SFTS AND RASCHID ALI'S WAR – IRAQ 1941 by Wg Cdr Mike Dudgeon	39
MORNING Q&A	58
SUBSTITUTION OR SUBORDINATION? THE EMPLOY- MENT OF AIR POWER OVER AFGHANISTAN AND THE NORTH-WEST FRONTIER, 1910-1939 by Clive Richards	63
THE JEBEL AKHDAR WAR (THE ROYAL AIR FORCE IN OMAN 1952-1959) by AVM Peter Dye	88
THE RAF AND ADEN, 1928-1967 by Dr Sebastian Ritchie	110
UTILISING JOINT FORCE HARRIER IN AFGHANISTAN'S COUNTER INSURGENCY CAMPAIGN by Wg Cdr Harvey Smyth	135
AFTERNOON Q&A	146
CLOSING REMARKS – Air Mshl Ian Macfadyen	153
SHAIBAH THEN AND NOW – a photographic essay by Gp Capt Clive Montellier	154
BOOK REVIEWS	160

SELECTED ABBREVIATIONS

AHQ	Air Headquarters
AMWD	Air Ministry Works Department
AP	Anti-Personnel
APL	Aden Protectorate Levies
ASF	Air Striking Force
C2	Command and Control
CAS	Close Air Support
CFI	Chief Flying Instructor
COIN	Counter Insurgency
HMAC	His Majesty's Armoured Car
IED	Improvised Explosive Device
IR	Infrared
ISAF	International Security Assistance Force
ISR	Intelligence, Surveillance and Reconnaissance
JFH	Joint Force Harrier
NTISR	Non-Traditional Intelligence, Surveillance and Reconnaissance
NAS	Naval Air Squadron
ORB	Operations Record Book (the RAF Forms 540 & 541)
ROE	Rules of Engagement
SAC	(USAF) Strategic Air Command
SAS	Special Air Service
TIC	Troops In Contact
TNA	The National Archives
VDU	Visual Display Unit

**FROM PALESTINE TO PESHAWAR
1915 TO DATE**

RAF MUSEUM, HENDON, 21 OCTOBER 2009

WELCOME ADDRESS BY THE SOCIETY'S CHAIRMAN

Air Vice-Marshal Nigel Baldwin CB CBE FRAeS

Ladies and gentlemen, welcome and good morning. It is a very encouraging turnout – about 135 of us.

I begin, as always, with my usual thank you to Dr Michael Fopp and his hardworking and very helpful staff here at the Museum. As a Society, we simply could not mount this sort of day without their considerable assistance.

He did not realise it until we were discussing it last week but I got the idea for today's subject from our Chairman today, Air Mshl Ian Macfadyen, when, on his computer screen in his house several years ago, he showed me some pictures of his father in the cockpit of a Siskin at Heliopolis in 1925, so Ian has a personal interest in the RAF's involvement in the geographical area that we are going to look at today.

Even more relevant perhaps, as an air commodore, Ian served as Sir Peter de la Billière's Chief of Staff during the first Gulf War, and then, from March 1991, as an air vice-marshal he succeeded him as Commander British Forces Middle East.

Before that, in 1982, as OC 29 Sqn, Ian flew the first Phantom into the Falkland Islands; he later commanded RAF Leuchars. For his last tour he was Director General of the *Al Yamamah* Project for the Saudi Armed Forces, so he has a well worn pair of desert boots.

Since retiring from the RAF, he has been the Lieutenant Governor of the Isle of Man, been President of the Royal British Legion, and Honorary Inspector General of the Royal Auxiliary Air Force. A couple of months ago, he became Constable and Governor of Windsor Castle. Whether that last responsibility will help him keep today's seminar in order, we shall see.

Ian, you have control.

OPENING ADDRESS

Air Mshl Ian Macfadyen CB OBE FRAeS

Nigel – thank you for that welcome and, ladies and gentlemen, welcome to you all.

I was intrigued to note that the Society had managed to arrange a seminar on Trafalgar Day! But that does give me the opportunity to congratulate naval colleagues who are with us today on that singular anniversary.

Today, in our continuing study of the Royal Air Force we shall be examining a very broad canvas. It is a region that roughly approximates the boundaries of today's US Central Command – CENTCOM, as it is known – arguably the key military player in that area, something of which we may hear more later. It is a region in which the RAF has also had a major part to play – historically. Britain has traditionally regarded the Middle East as an area of considerable importance, bridging, as it does, our links to India and the Far East.

It is a part of the world in which, I think it fair to say, we have generally been respected for our fairness and diplomatic expertise. It was, and is, of course the pursuit of our foreign policy aims that has brought British forces to this area from time to time over the past several hundred years. Since the dawn of the age of air power the RAF has been an active participant in the affairs of the region; indeed, during the 1920s, it proved to be a crucial factor in sustaining the independence of our air force. We shall begin today by looking at some early operations during the First World War and then move on to consider the famous Armoured Car Companies, about which far too little has, I think, been written. I am particularly looking forward to learning about them, not least because my father was very proud of the fact that he learned to drive on one of those big Rolls-Royces when he was serving in Iraq and Palestine between 1923 and 1927 on Nos 6 and 14 Sqns. I have another family connection with the Raschid Ali affair of 1941 of which we shall also hear more later. After lunch we will move east to examine early air operations over Afghanistan and the North West Frontier of India, an area of particular significance today, of course, and then south via Oman, to Aden – another outpost that my father got to know very well during the 1930s and the 1950s.

As we progress through the programme it may not become



In his introduction, AVM Baldwin referred to this photograph of the father of the Chairman for the day, Fg Off (later Air Mshl Sir Douglas) Macfadyen in the cockpit of a Siskin III at Heliopolis. It is a particularly interesting picture as this was probably the only Siskin to reach Egypt and it was there only briefly, for tropical trials between June and September 1925.

apparent, so I raise it now, that this region is subject to considerable climatic contrasts. It is, of course, very hot, but at night it can also be surprisingly cold. It is, therefore, harsh on one's body and sapping of one's energy but I have found that being obliged to cope with such conditions tends to bring out the best in our national character. Explorers and diplomats, like Sir Wilfred Thesiger and Middle East buffs like Colonel Sir Hugh Boustead thrived in this demanding environment and those of us who have been fortunate enough to have served there will also know something of the excitement of the desert and the mountains, which can, at times, be truly beautiful and awe-inspiring.

But enough preamble so I will move on to introduce our first speaker, Guy Warner, who has come all the way from Belfast to be with us today.

ONLY A SIDESHOW? THE RFC AND RAF IN MESOPOTAMIA 1914-1918

Guy Warner



Guy Warner, a teacher by profession, is a long-term member of the Ulster Aviation Society and has written extensively on various aspects of aviation, many of them focusing on regional activities, both military and civil. Of particular significance to the RAF Historical Society, he has published articles and books related to the histories of Nos 72 and 230 Sqns, the Wessex helicopter and RAF Aldergrove.

Hostilities commenced between Britain and Turkey in October 1914. One region of the sprawling and declining Ottoman Empire was formed by Mesopotamia, the land between the Rivers Tigris and Euphrates, which is now part of the modern state of Iraq. Britain's interests in this area were twofold; to protect access to vital oil supplies from the Persian Gulf and as a buffer guarding the route to India. There was also the aim of taking the war to the Turks, who, as would be proved, both in this theatre and in Gallipoli, were underrated and dogged opponents.

The first troops on the ground came from the Indian Army, under the command of General Sir John Nixon, and they captured Basra in November. In January 1915, Captain P W L Broke-Smith, Assistant Director of the Indian Flying Corps, set to work to establish an airfield there. The first aircraft to arrive were Farmans, Longhorns and Shorthorns, flown by four Australians and a New Zealander. By May the bridgehead had been enlarged by advancing a force of two divisions some 100 miles along the route of the two rivers, which in themselves were a boon to aerial navigation. Air reconnaissance proved useful in this flat terrain, where the exceedingly hot conditions were very taxing on the cavalry's horses – though the heat also warped the wings of the aircraft, caused the engines to overheat and reduced their performance. The consequent maintenance effort was nothing short of heroic. Moreover the heat haze and sandstorms encountered while in the air were a considerable hazard. The Farmans

were joined in August/September 1915 by the Martinsyde S.1 Scouts and BE2cs of No 30 Sqn and then by a handful of RNAS Shorts and Voisins.

As well as reconnaissance, the aircraft were used for photography, bombing, contact patrols; artillery spotting, supply dropping and air combat (Lewis guns replacing rifles in March 1916).

A major setback occurred in April when Major-General Sir Charles Townshend's division was forced to surrender at Kut, despite the valiant efforts of 30 Squadron, which had dropped some 13 tons of food and ammunition over a period of a fortnight in what was, in effect, the world's first air supply operation.

Additional aircraft arrived later that year and through into 1917, including Bristol Scouts, Martinsyde G.100 Elephants and Spad S.VIIs. The offensive was renewed by General Sir Frederick Maude who captured Baghdad in March with the aid of battle maps furnished from aerial photographs. Substantial reinforcement was provided on 13 August 1917 with the arrival of No 63 Sqn and its RE8s, under the command of Major J C Quinnell, though at first squadron personnel were badly affected by heatstroke and sandfly fever, not having been given any time for acclimatisation. The aircraft also suffered with wooden components warping in the heat. The spruce engine-bearers split and had to be replaced by new ones made from ash in local workshops. The first reconnaissance flight was made on 25 September and initially the squadron had ill fortune, losing three aircraft in short order. In October Major R A Bradley succeeded in command.¹

The overall aim on the ground was now to advance north-west along the Tigris and Euphrates and north to link with the Russians in Persia, where the countryside consisted more of hills, ravines and broken ground. Captains R D Simpson and J H Caldwell contributed to the supply problems facing the Turkish army by dropping fifteen 20lb bombs and firing ten drums of ammunition at a large camel convoy, which scattered under the surprise attack. No 63 Sqn had been ordered to make itself rude to the convoy and may therefore be judged to have been successful in this aim.²

Air supremacy over the previous two years had ebbed and flowed back and forth between the RFC and the Imperial German Air Service which was equipped in turn with Pfalz parasol monoplanes, Fokkers, Albatros single and two-seaters and Halberstadt scouts.

A flavour of the spirit of the two air services may be gained from the words of *Oberleutnant Schüz*, commander of the German air force unit supporting the Turks in Mesopotamia:

‘In order to confound the English by the unexpected appearance of a new type, I covered the 300-odd miles from the railhead of the Baghdad line to the front in one day. But even this rapidity was of no use. On the same day an English machine appeared at a great height and dropped a tin of cigarettes with the following message: The British airmen send their compliments to Captain S, and are pleased to welcome him back to Mesopotamia. We shall be pleased to offer him a warm reception in the air. We enclose a tin of English cigarettes and will send him a Baghdad melon when they are in season. Au revoir. Our compliments to the other German airmen. The Royal Flying Corps.’³

Some rather less jovial compliments were exchanged over the festive season as two German aircraft bombed 63 Squadron’s cookhouse while the officers and men were enjoying their New Year’s Eve dinner. A few days later twelve aircraft from Nos 30 and 63 Sqns paid a visit to the German aerodrome and deposited there a ton of bombs.⁴

At the turn of 1917/18, the British and Indian forces began to advance again and would soon receive further reinforcement in the form of another RFC squadron.

No 72 Sqn was formed at Upavon on 28 June 1917 under the command of Captain H W von Poellnitz, being initially in the training role with three Avro 504s and a Sopwith Pup. These were on strength for less than six months at nearby Netheravon, where thirty-three officers were trained as scout pilots. In November the squadron moved to Sedgeford and the junior officers were posted to France. Seven replacement officers arrived and the newly promoted Major von Poellnitz



*Major Herman W
von Poellnitz*



Some of No 72 Sqn's Bristols wore this distinctive double-chevron marking.

was told to prepare for service in Mesopotamia. The major was an experienced fighter pilot, a contemporary and friend of James McCudden, when both were stationed at Joyce Green. He had served in France in 1916, flying DH 2s with Nos 32 and 24 Sqns. He was known to his friends and squadron personnel as 'Von Pip'.

The squadron was split into two groups, the first of which went by sea via the Cape of Good Hope; the second formed a convoy of vehicles to drive across France to Marseilles.

'The transport party included 38 light tenders, four workshop lorries, one touring car, 22 trailers, eight motor cycles and other assorted vehicles, all of which arrived in Marseilles in spite of heavy snow and bad roads. At Marseilles they collected portable hangars, eight Bristol monoplanes, two DH 4s and four SE5s. Eventually they took ship for Basra. Seventeen flying officers from Egypt joined the squadron there.'⁵

The squadron arrived at Basra on 2 March 1918 and the three flights were dispatched to different locations. A Flight was sent to I Corps at Samarra, north-west of Baghdad beside the River Tigris. It was equipped with DH 4s, SE5as and Spad S.VIIs. B Flight remained in Baghdad with its two Martinsyde G.100 Elephants, operating under the control of General Headquarters (GHQ), while the eight Bristol M.1Cs of C Flight were based directly to the north of Baghdad at



The aftermath of a storm at Samarra on 1 April 1918, the day that the RAF came into being.

Mirjana, with III Corps.

The RAF's first day in Mesopotamia, 1 April, did not get off to an auspicious start as a whirlwind at Samarra practically demolished the camp and almost all of No 63 and 72 Sqns' aircraft. The only machine to escape serious damage was a Spad which had been left out in the open. Apparently its wing section was so inefficient that the strong winds failed to lift it. According to one of the pilots, 'Fellows were going about half-naked offering to swop a sock for a collar stud or a tie for a tooth-brush, for all our belongings had been strewn generously over plenty of the surrounding desert.'⁶

Later that month it is claimed that one Kurdish tribe was so impressed by an impromptu aerobatic display given by two Bristols of No 72 Sqn that it changed sides on the spot and joined the British.

C Flight saw further action on 26 April, when Lts G M Lees MC and W M Thomas attacked about 100 Turkish cavalry outside Kifri. This was followed up by further ground strafing over the next few days. Close co-operation was maintained with the ground forces, attacking enemy formations and driving off hostile aircraft. C Flight participated in the capture of Kifri and Kirkuk and continued to maintain offensive patrols against ground targets.

The squadron retains an evocative reminder of those early days; two framed combat reports written on Army Form 3348s. They describe the events of 9 May 1918, when Lt D F Lapraik and 2/Lt J A Pitt were on an offensive patrol at 8,000 feet in their Spads. An enemy

aircraft (EA) was spotted, a Halberstadt single-seat scout with a yellow fuselage and camouflaged wings. 2/Lt Pitt begins the tale,

‘While patrolling over Huma, I saw an EA climbing towards us. I dived diagonally and opened fire. The EA seemed to stall in his effort to do a sharp right hand turn. I fired only 10-12 rounds when the Vickers Gun jammed. I endeavoured to clear my jam but failed and during my effort lost the EA and Lt Lapraik.’

Lapraik takes up the story, having realised his wingman's difficulties,

‘I then swung round on the tail of the EA and opened fire. He did an Immelmann turn to shake me off, losing at the same time a lot of height. I dived vertically onto him, firing a good burst. The EA went down in a very steep glide and I followed him at about 150 mph and fired a burst of about 20 rounds into him from close range. The EA went down vertically at a terrific speed. When about 3,000 feet below me his starboard wing collapsed, bits of struts and fabric falling from his machine. He then crashed to the ground. I was at about 4,000 feet when I saw him crash. I then patrolled for another 15 minutes and made for home.’⁷

Four of the Bristols of C Flight were also temporarily stationed in May at Tuz Khurmatli and while they were there, they shot down at least one enemy aircraft.

Sadly, on 10 May, the CO was killed in a car accident, ‘driving into the Tigris when returning from a poker party early one morning,’⁸ he suffered a fractured skull whilst returning to his billet from Baghdad aerodrome. The CinC India sent a private letter to the family:

‘He was splendid in every way and always cheerful. He was very much loved by all his squadron and the best of all is the extraordinarily good work they have done in Mesopotamia from the moment they landed. Their morale was wonderful and that was Von Poellnitz. He was a superb pilot and might have gone very far had he been allowed to live.’⁹

Herman von Poellnitz was replaced by Major O A Westendarp from 30 Squadron, who was followed in July by Major O T Boyd.

Owen Tudor Boyd had flown Martinsyde G.100s with No 27 Sqn and had also commanded No 66 Sqn, equipped with Sopwith Pups, in France in 1917.

Two pilots from No 72 Sqn had closer brushes with the enemy than they would have liked,

‘Two forced landings, fortunately without loss of life were made in difficult country. The first was by Lieutenant Gattens in a Bristol monoplane about 80 miles behind enemy lines. He was picked up by Lieutenant Adams in an RE8. They destroyed the monoplane just before some Turkish cavalry appeared on the scene. The second was made by Lieutenant Lees. Lieutenant Thomas landed beside him, took the position of the machine and reported back to Kirkuk. Lieutenant Lees avoided several patrols of cavalry and got safely to the hills, where he waited until dusk and then walked into Kirkuk.’¹⁰

In recognition of their efforts in operations over difficult and dangerous country Lts Lees and Thomas were both later awarded the DFC. George Lees had already been awarded the MC while serving in France as an observer with No 6 Sqn. His companion, who had joined the Motor Machine Gun Corps as a Private in 1914, later became Sir Miles Thomas and was the Chairman of BOAC in the 1950s.

While these events were taking place, two of B Flight's aircraft had flown some 300 miles to the north, to Hamadan in Persia, which was some 6,500 feet above sea level. There they co-operated with Dunsterforce, a column of British armoured cars commanded by Major General L C Dunsterville, which was driving across north-west Persia towards the Caspian Sea port of Enzeli in order to assist the White Russians against Persian nationalists and stop any actions that might threaten the right flank of the British advance. The main enemy were the Jungalis, a tribe paid and officered by the Germans. Air raids were made on the camps and villages of the tribe by the Martinsydes. The squadron was congratulated by Brigadier-General A C Lewin, who said that this was the first war that the RFC had won on its own (presumably the news of the creation of the Royal Air Force on 1 April had not reached him).

Lt K M Pennington was asked to fly over Urmia in order to ascertain if the inhabitants were friendly. As he flew over the town



An RE8 of No 63 Sqn.

about 2,000 shots were fired at him. However, after making a few judicious enquiries he discovered that this was more enthusiasm than hostility and that the Jhelus were indeed well-disposed towards the British. He was awarded an AFC, though in the circumstances it may be thought that a DFC would have been more appropriate.

Dunsterville then proceeded to the important oil port of Baku, also on the Caspian Sea, where his troops helped the Azerbaijanis to resist their Turkish-German invaders. In August two Martinsydes were flown a further 200 miles to Enzali and then shipped the same distance to Baku for reconnaissance, bombing and leaflet dropping missions. The two pilots on detached duty, Lts M S McKay and R D P Pope were also later awarded DFCs. In September reinforcements were provided by three RE8s from No 30 Sqn.

The RAF made important contributions to the final defeat of the Turks in the offensive of October 1918. Opposing cavalry forces were engaged for one of the last times in history and aircraft attacked the Turks with bombs and machine guns. In the course of many reconnaissance missions by the RE8s of Nos 30 and 63 Sqns, escorted by No 72 Sqn, only one RE8 was lost. The Bristol M.1Cs proved to be very effective in the low level, ground attack role – Major Boyd leading an attack at a height of only 200 feet which destroyed a Turkish long range gun

On 6 October Lt T L ‘Taffy’ Williams began a remarkable adventure,

‘He left Zinjan in Martinsyde No 7467 to escort an RE8 of No 30 Squadron on a reconnaissance mission. Over the Shibli Pass



Lt S D Macdonald with one of No 72 Sqn's Spads.

he saw three big groups of enemy transport and, diving to 500 feet, fired 150 rounds into the biggest group. He was about to attack again when his engine cut out and he had to make a forced landing. As a number of men shouting and waving large knives were approaching, he set fire to his machine and made off as quickly as possible, unfortunately without his water bottle.

He found himself among steep mountains without food or water. Taking his direction from the sun he walked until dark and became very exhausted. He encountered a Persian to whom he offered money. He took him to his house for the night and gave him bread and water. The following morning he was visited by most of the local inhabitants, who deprived him of his revolver, watch, goggles and most of his clothes. Dressed in an old pair of Persian trousers, slippers, etc and with his head shaved in the Persian manner, he started off at midnight for the British lines, with a Persian guide. They walked hard until midday, when the guide left him, taking with him Williams' shirt, shorts and stockings, the guide did not return. He walked on alone, evading Turkish patrols. He spent the next three days

crossing the mountains. He had only a few rags of clothing, was barefooted and could get nothing to eat except a few berries. On the third day, having crossed both the enemy and the British lines, he was picked up by a Gurkha officer, who had suggested shooting him before he explained who he was.’¹¹

Sadly, Lt Williams did not survive the war; he was killed on 25 December 1918, in Baghdad, when the Spad which he was looping broke up in the air.

All three squadrons spent the final days of the campaign machine-gunning and bombing the retreating Turks. No 72 Sqn suffered a casualty on 30 October, when Lt H F C Cannell died of wounds received the previous day. An armistice was signed between Britain and Turkey on 31 October.

In November, No 72 Sqn’s flights were re-called from Persia, Mirjana and Samarra, re-assembling at Baghdad where the squadron was reduced to a cadre in February 1919, with Captain F H Coleman as CO. Francis Coleman had been with the squadron since Netheravon in 1917; he had previously served with No 32 Sqn flying DH 2s. He remained in the RAF as a squadron leader and flew in Iraq again between 1923 and 1928.

Major Boyd became OC 31st Wing and it is known that he used an ex-72 Squadron Bristol M.1C in March 1919 to visit No 63 Sqn at Kazvin, where a detachment was still operating four of the same type. (Boyd rose to the rank of air vice-marshal, was taken prisoner in WW II, escaped and returned to England but died on 5 August 1944.)

Nos 30 and 63 Sqn continued to maintain detachments in Persia until February 1920 when 63 Squadron was disbanded and used to re-establish 30 Squadron, which continued to serve in the region until 1927.

There is no doubt that the RFC and RAF provided a very valuable service to the Army between 1915 and 1918 and, by operating in challenging conditions over an area of some 500,000 square miles, they pioneered the concept of expeditionary air power.

Notes:

¹ Robertson, Major F A DeV, *No 63 (Bomber) Squadron*, p298.

² *Ibid.*

³ Mead, Peter, *The Eye in the Air*, p123.

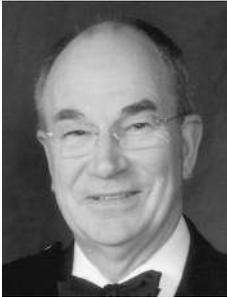
- ⁴ Robertson, Major F A DeV, *No 63 (Bomber) Squadron*, p298.
⁵ McAlerly, C M, *War Flying in Mesopotamia*, p225.
⁶ Thomas, Sir Miles, *Out on a Wing*, p80.
⁷ No 72 Sqn Archives.
⁸ Thomas, Sir Miles, *Out on a Wing*, p90.
⁹ Williamson, H J, *The Roll of Honour*.
¹⁰ McAlerly, C M, *War Flying in Mesopotamia* page 226.
¹¹ *Ibid* p227.

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THE RAF ARMoured CAR COMPANIES IN IRAQ (MOSTLY) 1921-1947

Dr Christopher Morris



Having served as a Medical Officer at Swinderby, Wegberg Hospital, Rheindahlen and Catterick from 1967, Christopher Morris left the RAF for civilian General Practice in 1975. In the 1990s, prompted by having lived at Habbaniya as a child, he began to research the history of the station. This led to the establishment of the RAF Habbaniya Association, which now has more than 650 members, and, almost inevitably, to a link with the veterans of the Armoured Car

Companies and he has attended every one of their reunions.

Origins

Ground operations and defence in the RAF is generally considered to date from the formation of the RAF Regiment in 1942. Less well known, however, are the land-based RAF units which operated in Mesopotamia from the early 1920s – the Armoured Car Companies of Iraq (and Palestine) and the Iraq Levies. But the origins of air forces using vehicles to fight on the ground date even further back, to the beginning of WW I, in what would become the Royal Naval Air Service Armoured Car Division.

The RNAS had first become involved with armoured cars in 1914 and they saw service on the Western Front as armoured scout cars to supplement a shortage of reconnaissance aircraft and to rescue downed pilots. Custom-built armoured cars fitted with machine guns were developed but with the onset of trench warfare they were transferred to the Army (as the Motor Machine Gun Corps) in mid-1915 and deployed elsewhere including to Egypt, Palestine, Libya, South West and East Africa where the terrain was more suitable. The exception was 15 Squadron under Cdr Locker Lampson which remained RNAS and went to Murmansk in Russia and thence down to Rumania and the Caucasus protecting oil interests – and becoming involved with the troublesome Kurds. Following the Bolshevik Revolution they were evacuated via Archangel, reformed in England and sent back to the Caucasus via Basrah, Baghdad and Persia (as an

element of Dunsterforce), once again protecting oil interests vital to the Allies.¹

The Problem – and the Solution

Mesopotamia was part of the Ottoman Empire and at the beginning of WW I an expeditionary force had been despatched from India to take Basrah and safeguard the oil supplies from nearby Abadan in Persia. At the end of a long and bloody campaign the Ottoman Turks were ousted and Great Britain was granted a League of Nations mandate to administer what is now the modern state of Iraq. This was not without difficulty, however, as the many tribes and peoples had to be controlled and they were no respecters of administration and arbitrarily imposed new national frontiers. This was especially true of the Kurds, who sought to establish a homeland of their own, but the prospect of oil in the vilayet (province) of Mosul was too much for the British to allow that to happen. The upshot was that a large, and expensive, army of occupation was required in order to establish and maintain order. There was little infrastructure in place; lines of supply were long; movement was difficult and the climate meant that sickness and death rates were very high.

In 1921 Lord Trenchard, CAS, persuaded Churchill that the RAF could do the job, at a fraction of the financial and human cost. Instead of a huge army it would require only eight squadrons of aircraft supported by armoured cars and the Iraq Levies on the ground, backed up, if/when required, by garrison troops. This concept was endorsed at a major conference held in Cairo in March,² leading directly to the establishment of a series of RAF units mounted on armoured cars.

The Genealogy of the Armoured Car Force

The evolution of the RAF's armoured car organisation³ may be summarised as follows. No 1 Company was formed in Egypt, at Heliopolis, on 19 December 1921 and by the end of January it had a reported strength of 176 men, seven Crossley tenders and one Rolls-Royce armoured car.⁴ The formation of No 2 Company on 7 April 1922, also at Heliopolis, permitted one section to be deployed forward to Amman, in Transjordan. In June 1922 the whole of No 1 Company moved to Palestine – Jerusalem, with sections at Jenin and Semakh.

At much the same time, May 1922, a 'temporary unit comprising

all personnel undergoing training in armoured car duties' was set up at Manston under Wg Cdr W H Primrose.⁵ Known as 'The Armoured Car Details', these men were destined for Iraq and will have been among the 1,000 personnel who left the UK on 14 September 1922 aboard the troopship *Braemar Castle* bound for the Middle East. Noting that the party included 'two matrons and four staff nurses RAF Nursing Service, and Sqn Ldr Chaplain J R Walkley', *The Times* went on to explain that: 'The period of service in the East is four years. Two hot seasons are spent in Iraq, the remainder of the period in India or Egypt.'⁶ While these arrangements provided a change of scene, they did little to provide relief from the heat, although the annual draft always arrived in the autumn and winter months so that personnel could at least acclimatise gradually. Such consideration ended there, however, because, while officers travelled from Basrah to Baghdad by night sleeper, the men entrained at Shaibah Junction in trucks labelled '4 horses or 16 men.'⁷

Meanwhile, from October 1922, a Wing HQ and Nos 4 and 6 Companies had begun to form at Hinaidi⁸ along with No 3 Company at Basrah and No 5 at Mosul. With the arrival of the Primrose draft from England, the four new units could be regarded as having a formal existence with effect from 3 November when OCs were appointed.^{9 10}

In February 1923 No 2 Company joined No 1 in Palestine, so there were no longer any armoured car units in Egypt, and in November 1923 No 1 Company disbanded, leaving No 2 to work alone. Although there were some redeployments in Iraq, No 6 Company to Kirkuk, for instance, and numerous detachments and/or convoy escorts to Kingerban, Sulaimaniya, Kut-al-Amara, Baquba and elsewhere, there were no major changes until April 1927 when the Armoured Car Wing was restructured. Nos 4, 5 and 6 Companies were disbanded (No 3 Company had been disbanded in 1925¹¹) to be replaced by Nos 1-8 Sections distributed between Hinaidi, Basrah, Mosul and Kirkuk.¹² Note that this meant that the only remaining autonomous Armoured Car Company was now No 2 in Palestine. Now based at Ramleh, No 2 Company mounted deployments to locations such as Roshpina, Ma'an, Jerusalem, Amman and Haifa.¹³

In July 1927 Iraq's No 7 Section was withdrawn from Kirkuk to Hinaidi and disbanded, only to reappear in April 1928 before disbanding again, this time along with No 8 Section, in the following



The classic Rolls-Royce armoured car as used by the RAF for more than twenty years. Like ships of the Royal Navy, each car had an individually registered name. This one, HMAc Victor, was photographed in Northern Iraq in the 1920s with the foothills of Kurdistan in the background. (AHB B534)

July. There was a further contraction on 1 April 1930 when Nos 1 and 2 Sections were disbanded, their nominal identities (and neatness) being preserved by renumbering Nos 5 and 6 Sections respectively. The residual four-unit structure was no longer considered to warrant a Wing HQ so, at the same time, the controlling element was reduced to Company status, permitting the revitalisation of the defunct No 1 Company number plate.¹⁴ There were no further changes during the 1930s, No 1 Company continued to patrol Iraq, albeit with its HQ relocated from Hinaidi to Dhibban/Habbaniya¹⁵ in 1937,¹⁶ while No 2 Company continued to handle trouble-shooting in Palestine.

Operations Between the Wars

In Iraq, the car units spent the 1920s and '30s roaming from the southern deserts to the mountains of Kurdistan in vehicles, many of them veterans of WW I, lacking reliable communications, proper mapping, adequate logistic support – and air conditioning. Various types were used; Lancia, Crossley, Morris and the Rolls-Royce. The early Lancias were gradually withdrawn and other marques tried but the most loved and successful was the Rolls-Royce and the force soon standardised on the 1920-pattern Rolls-Royce. Based on the classic Silver Ghost these were so successful that, little modified, they were still in service throughout WW II. The armoured cars were supported by Rolls, Morris, Ford and Crossley tenders.

In the southern desert the main problems were with the migratory tribes whose traditional areas did not recognise borders, especially those with Saudi Arabia. Capt John Bagot Glubb (later Lt Gen Sir John *aka* 'Glubb Pasha') was involved with these between 1924 and 1930. He recognised the importance of ground reconnaissance and support from the armoured cars and the necessity for wireless facilities to co-ordinate operations effectively and rapidly. Unfortunately the urgency was not always recognised by AHQ and delays were compounded by having to relay signals via the squadron base, the distances involved and the limitations of primitive wireless equipment in the desert environment. They also relied on messages dropped from the air in pouches or snatched by a hook trailed from the aircraft and a selection of coded visual signals that could be laid out on the ground using Popham panels.¹⁷ Lessons were learned, however, as this extract from the Armoured Car Wing's operational record, dated



Until radio was sufficiently developed to be able to provide reliable communications, more traditional methods were used, including semaphore. (Gordon Rutter via the RAF Habbaniya Association)

22 December 1929, shows.¹⁸

‘Air Cdre Burnett (Chief Staff Officer) assumed command of all units operating in *(the)* Southern desert. Ibn Mashur Utair, who had previously been ordered to the neutral area *(disputed between Iraq and Saudi)*, was found encamped 18 miles east of Al

Abtiyah on Khor Ghanaim. He surrendered to the Air Cdre with his followers, was disarmed, handed to desert police for custody. . . During this period air co-operation was carried out with 84 and 55 (Bomber) Squadrons. All rations and petrol and water *(were)* delivered by Vickers Victoria, there was never any delay in delivery of supplies. Capt Glubb joined the *(armoured)* car column at Abu Khutalmah and took charge.’

Other duties included escorting vehicles travelling around Iraq, especially when dignitaries or officials were involved, co-operating with civil authorities and attending to breakdowns and aircraft crashes. Typical reports by No 5 Company, for instance, read:¹⁹

‘2 Rolls Royce Armoured Cars escorting Crossley touring car (with clutch trouble, subsequently towed in), 140 miles driven to save Crossley tender of No 30 Sqn from the River Zab; patrols in Mosul.’

‘With administrative inspector & police officer, etc to investigate highway robberies.’

‘Lancia armoured car escorted a Leyland lorry returning with a crashed aeroplane *(on board)*.’

Operations continued and, whilst these may seem mundane, they played a very important part in policing the borders and asserting authority within the country, especially in the more remote desert and mountainous districts. In July 1927 No 4 Section responded to a raid by the Huwaitat tribe who had stolen 250 camels from the Soba tribe. Three Rolls-Royces and a wireless tender were despatched from Hinaidi to rendezvous at Ramadi whence they planned to intercept the raiders on the Rutbah/Palmyra/Damascus road before they could cross the frontier. Four Lewis guns were set up at the wells that the rustlers would have to visit en route while air reconnaissance was provided by No 55 Sqn. The raiders were eventually sighted at 0615hrs on 10 July and the cars went into action. Sqn Ldr Peck left one car and the wireless tender at the rear while the other two, accompanied by a special service officer, Fg Off West, and three camel policemen, overtook the raiders at 40 mph. A burst of machine gun fire was aimed at two men who were breaking away, whereupon the rest of the party hoisted a white flag. All of their weapons – about 200 assorted rifles, revolvers and knives and some 13,000 rounds of ammunition – were confiscated and burned. The 205 men were given half an hour to be out of sight in the direction of the frontier while the two leaders were handed over to the authorities at Rutbah. The looted camels were driven into Rutbah by the Camel Police.²⁰

Other, less dramatic, activities included patrols around various parts of Iraq and into Palestine, with periodic detachments to Aboukir, Amman, Ramleh and Haifa. On 21 September 1929, for instance, No 3 Section carried out a special recce in Palestine and escorted AVM Dowding, who had just taken over command there, and on 11 November their winter clothing was flown over from Hinaidi in a Victoria of No 70 Sqn.²¹

The difficulties associated with their rugged operating environment required a considerable degree of resourcefulness from the crewmen. It is, for instance, 470 miles from Ramadi to Amman, and there was virtually nothing in between – no road, no habitation to speak of. They had to navigate by compass and/or by following ill-defined desert tracks. They had to know where the wells were situated. If in trouble, they had to rely on primitive communications, and wireless links were very



The hazards to be encountered in cross-country movement in Iraq included quagmires. This is HMAV Avenger crossing a salt marsh in the early 1930s – it took 36 hours to cover 2 miles. (John Rolph via the RAF Habbaniya Association)

unreliable in the heat, not to mention the stress imposed on early radio equipment by the dust and the bumpy surfaces – ‘softened’ only by leaf springs. With non-existent roads, countless wadis to cross, quagmires to be dug out of when it rained and sharp stones lacerating tyres, the crews had to be self-sufficient, almost totally reliant on their practical skills and initiative. As a result of their unique circumstances the armoured car crewmen became a proud and close knit community.

At this point it is appropriate to consider the role of the Levies in providing support and ground defence for the RAF. The Muntafiq Horse were the first of many small ‘irregular’ forces recruited locally to support the British during the Mesopotamian Campaign of WW I. They were gradually unified and expanded so that they were more than 5,000-strong by the end of the war. Afterwards their function was to deal with civil unrest and rebellion, formalised in 1921 as ‘until



The, largely Assyrian, Iraq Levies provided the RAF with its own local defence force for some thirty years until they were disbanded in 1955 as part of the accelerating withdrawal of British forces from the region. (Phil Copcutt via the RAF Habbaniya Association)

such time as the Iraq National Army is trained to undertake these duties'.²² In 1928 control of the Levies passed from the Colonial Office to the RAF, (although they were still British and Indian Army officered). In 1932, under the terms of a new treaty, they became the RAF Iraq Levies, with their role now solely to act as an 'air defence force' guarding RAF installations and protecting them from attack.²³ The Levies therefore pre-dated the RAF Regiment in this role by ten years. In 1947 they became officered by the RAF Regiment until disbanded in 1955. This was particularly sad for the Assyrian community who had proved especially loyal and for whom Habbaniya had become their spiritual home.^{24 25}

The Kurds kept the RAF busy for many years – indeed right through into the 21st Century – and the names of Barzani and Mahmoud and their tribes still feature in reports today. The Armoured Car Companies were long involved in sorting them out, a typical entry in an ORB reading:²⁶

'31 October 1930. No 2 Section with 3 Rolls-Royce armoured

Sheikh Mahmoud Barzanji (not to be confused with Mustafa Barzani, another prominent Kurdish nationalist) was an heroic freedom fighter to his people, which made him a problem for those involved in administering the British mandate. He was often referred to as 'CinC RAF Training' by those obliged to deal with the unrest that he stirred up from time to time.



cars, 1 Rolls-Royce wireless tender, 2 armed Fords and 1 Morris 6-wheeler (a support vehicle) to proceed to Kirkuk on operational duties to form part of (a) squadron under Sqn Ldr Goddard, to deal with Kurdish rebels led by Shaikh Mahmoud.'

Operating in Kurdistan imposed additional strains on men and equipment. Grinding up hairpin bends on rudimentary mountain roads in vehicles with crash gearboxes, juddering clutches, drum brakes operated by cables that were prone to snapping and leaf springs prone to breaking were all taken in their stride. The major rivers had to be crossed on pontoon bridges (if they were lucky), otherwise vehicles had to be driven on and off rudimentary ferries or the even more hair-raising 'Blondins'.²⁷ Operations through the Rowanduz Gorge and up the Seven Sisters to Amadia are the stuff of legends.

The RAF's armoured cars played a part in the development of the Baghdad to Cairo air mail. Until this link was established, the mail from London went via the Suez Canal to Bombay and thence to Iraq, taking 28 days. At the March 1921 Cairo Conference it was decided to explore the route from Cairo to Amman and thence to Baghdad for an air mail service to be operated, initially, by the RAF.²⁸ In June 1921 the route was surveyed by two car convoys, one from Amman and one from Ramadi, with DH 9As of Nos 47 and 30 Sqns, respectively, reconnoitring ahead. The Amman expedition, mounted on six Crossley tenders and escorted by three Rolls-Royce armoured cars,



A river being crossed using a rural ferry. (Michael Humphries via the RAF Habbaniya Association)

was led by Wg Cdr P F M Fellowes and largely made up of RAF personnel;²⁹ that from Baghdad lacked armoured cars and was led by Maj A L Holt, although the party included some RAF representation.³⁰ Curiously, this pre-dates the formation of both Nos 1 and 2 Companies, although there would doubtless have been suitable vehicles in-theatre (including, perhaps, the legacy of the Hejaz Armoured Car Battery, which had fought its way to Damascus with T E Lawrence, and/or the remnants of Dunsterforce).

A furrow was ploughed to provide a visual aid to air navigation and twenty-six emergency landing grounds were marked out, some later being provided with a locked fuel tank. From 1922 the route was routinely patrolled and maintained by the cars. A typical operation in support of the air link was the search for Sqn Ldr Warburton, Inspector General of the Iraq Air Force. Having 'left Rutbah in King Feisal's Puss Moth 3 days earlier', he was eventually found on 14 January 1932, safe, forced landed some 70 miles south east of Rutbah.³¹

The oil pipelines from Kirkuk (via Haditha) to Haifa and Tripoli were constructed between 1934 and 1936, quite a feat given the conditions.³² Although the armoured cars were not involved at that time, they certainly were subsequently when any sort of trouble brewed, and particularly during WW II, protecting a resource which



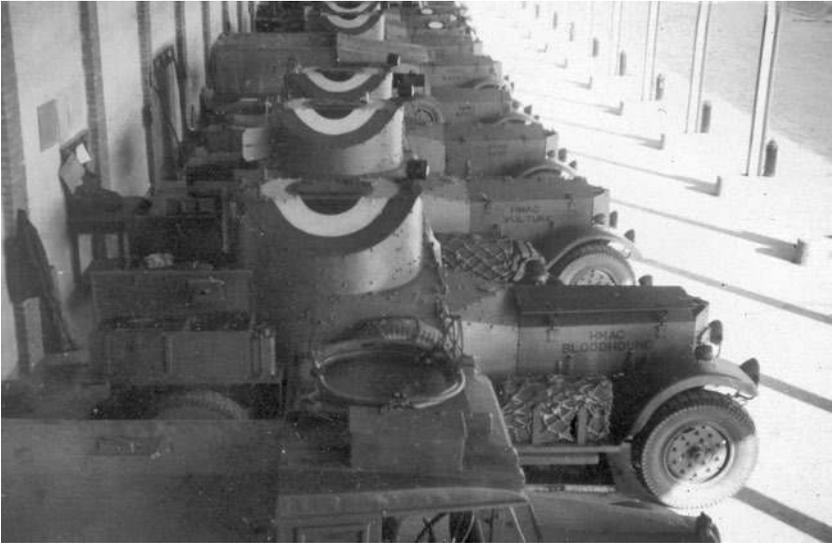
A party of No 1 Armoured Car Company's men taking a break in the desert. (Gordon Rutter via the RAF Habbaniya Association)

was vital to the Allies. At the outbreak of WW II RAF armoured cars garrisoned landing grounds and oil pumping stations on the pipeline and escorted desert convoys carrying equipment and rations and the ground echelons of air units (eg those of No 4 FTS when it redeployed from Egypt to Iraq in August 1939 and of No 70 Sqn which moved in the opposite direction). These expeditions were not without incident; on 9 September 1939, for example, a ration convoy was attacked by bandits.³³

The Hinaidi cantonment in Baghdad was the home of the RAF armoured cars until 1937. Under a new treaty, the British constructed, from nothing, the prestigious and enormous RAF Habbaniya where the armoured cars had their own complex of engineering, armoury and admin buildings, as well as their own billets, cookhouses and messes. Most of these facilities still exist; indeed they were used by Coalition Forces from 2003.

The Siege and Battle of Habbaniya

In April 1941 the pro-Western government of Iraq was overthrown and the new regime, under Rashid Ali Gailani, schemed with the Axis, reckoning they would do better by joining, what appeared at the time,



No 1 Company's vehicles in the lines at Habbaniya shortly before the war. (Gordon Rutter via the RAF Habbaniya Association)

to be the winning side. The Iraqis besieged Habbaniya from the overlooking plateau, creating a desperate situation for the British. Many sources state that Habbaniya was relieved by the arrival of KINGCOL from Palestine but it was actually the case that Habbaniya had already relieved itself. My colleague, Wg Cdr Mike Dudgeon, will expand on events in the air and the part played by his father, Sqn Ldr (later AVM) Tony Dudgeon, in particular, but the ground forces of the lightly-armed Kings Own Royal Regiment (KORR), who were flown in at the last moment, the Iraq Levies and the Armoured Car Companies also played a vital role.

The eighteen armoured cars that were available at Habbaniya were involved in all phases of the action.³⁴ From 2 April they established observation posts on the plateau and westwards on the road to Fallujah, protected the aerodrome and performed anti-aircraft duty. The observation posts were withdrawn at 0400hrs on 30 April when Iraqi forces invested the camp and threatened to shell the cantonment. AVM Smart decided that the only option was to attack and at first light on 2 May the aircraft took off and strafed and bombed the Iraqis. The Iraqis responded by opening fire with artillery. For the next five

Although an attempt was made to save it, the Wellington of No 70 Sqn that had been forced to land at Habbaniya was destroyed by Iraqi shell fire before it could be recovered.

days the armoured cars undertook numerous reconnaissance and deterrent patrols, especially at night, to prevent Iraqi penetration and provided cover for patrols conducted outside the perimeter by the KORR and the Levies. They also patrolled the airfield and raced alongside aircraft taking off and landing, including the Valentias and DC-2s that were flying out civilians,



women and children who had been evacuated to Habbaniya from Baghdad. This diverted attention from the aircraft and gave some measure of protection from Iraqi gunfire. The car crews surveyed the airfield constantly, in order to mark shell holes, and escorted AMWD parties to fill them in. They were also involved in making safe and removing unexploded ordnance from the aerodrome.

Between 1200hrs and 1230hrs on 2 May, six Rolls-Royce armoured cars attacked enemy armoured cars on the tarmac road south of the aerodrome. Fire was opened at approx 400 yards using anti-tank, rifle and armour piercing machine gun ammunition and the enemy retreated to the plateau. These cars had initially turned out in response to what became, perhaps, the most famous incident in which they participated. Having been damaged by anti-aircraft fire, a Wellington of No 70 Sqn had been forced to land on the airfield.³⁵ HMACs *Lion*, *Astra* and *Adder*³⁶ drove to the scene in Vee formation, protecting a tractor that was to recover the crippled aeroplane. They took up station around the tail of the aircraft and it was at this point that the five enemy armoured cars appeared and opened fire, piercing the tractor's petrol tank. The attempt at towing was abandoned; *Lion* took the pilot and the tractor driver on board and returned to the camp.

Adder and *Astra* remained by the aircraft before joining No 1 Section in attacking the enemy. All vehicles returned safely without having sustained any casualties. The following day two cars covered a successful second attempt to tow in both the wreckage of the Wellington (which had, in the meantime, been hit by shellfire) and a stranded Oxford.³⁷

Surprisingly, the RAF was also operating a pair of light tanks at this time. Supposedly of Italian origin and acquired during the Abyssinian campaign, photographic evidence renders their provenance somewhat uncertain. What is certain is that, named *Walrus* and *Seal*, they were positioned (mostly) at the Eastchurch Gate end of the camp (in the direction of Sin el Dhibban/Fallujah) and provided covering fire to Levy and KORR foot patrols – which was particularly welcome when returning late after the cover of darkness had suddenly lifted (it does so relatively rapidly in those latitudes). Despite exchanging much rifle and machine gun fire with the Iraqis they suffered no casualties.³⁸

When, on 6 May, it was discovered that the Iraqis had fled the plateau, it was the armoured cars that led the patrols out. They helped in the salvage of hurriedly discarded Iraqi material – including their armoured cars! Subsequent actions involved chasing the panicking rearguard, protecting the Mujairah outfall valve from Lake Habbaniya (to prevent more flooding), supporting the KORR and the Levies as they secured the Sutaih Bridge (to prevent the Iraqis being reinforced from Ramadi). Finally, following the arrival of KINGCOL and HABFORCE from Palestine, they took part in the battle for the Fallujah Bridge and the subsequent march on Baghdad. Thereafter, and for the rest of WW II, the cars roamed far and wide throughout Iraq, utilising their unique fighting techniques and intimate knowledge of the terrain and conditions, to maintain Allied control over this vital part of the Middle East.³⁹

The activities of the armoured cars at Habbaniya were recorded in some detail and, apart from providing a comprehensive account of the action from a unique perspective, they also contain some amusing insights, as on 4 May when it was noted that

‘All posts not within reasonable distance of a urinal are to construct a urinal pit in the vicinity of post for immediate use. Indiscriminate micturition is strictly forbidden. Pit to conform

No 2 Company's charismatic leader, Flt Lt (later Sqn Ldr, MC) Michael Peter Casano with his dog 'Butch'.

to Fig 15, p178 of the RAF Pocket Book, 1937.⁴⁰

This reference to utilities serves to highlight the most significant vulnerabilities of Habbaniya. Apart from being hemmed in by the Euphrates and overlooked by the plateau⁴¹ there was no duplication or dispersal of services so one lucky strike on the power station, or the sole water treatment plant, would have rendered Habbaniya untenable and forced its surrender.

No account of the siege would be complete without mentioning No 2 Company under the command of the legendary Flt Lt Michael Casano. They had been in Egypt, serving with distinction in the Western Desert, when they were required to race 1,000 miles to help save Habbaniya. On 9 and 10 May Blenheims of No 84 Sqn were attempting to drive the Iraqis out of Rutbah but failed.⁴² Casano and his cars achieved this the next day and pressed on to Habbaniya. He was a great tactician, if impetuous and disinclined to wait for cautious orders. He was involved in the final assault on Baghdad and then went to Syria to help defeat the Vichy French. Having recovered from wounds sustained after the unit had returned to Egypt, Casano was later recruited by Sir John Glubb and he commanded the Arab Legion's armoured cars until the end of WW II.

Like all commissioned armoured car personnel, 'Cass', as he was known to his men, was a GD officer.⁴³ He served with, and subsequently commanded, No 2 Company from 1936 to 1943 and was held in great esteem by all who served under him. His admirable leadership and example gained their respect and it was this, and the loyalty that it inspired, that made his unit so effective.⁴⁴



Conclusion

The aim of this paper has been to demonstrate how important the RAF's armoured cars were to the maintenance of law, order and stability throughout this difficult region and, in particular, to highlight the critical part that they played in the defence of Habbaniya. If that defence had failed it would probably have meant the loss of Egypt and the Suez Canal, extending the link to India, and allowing the oilfields of the Middle East to fall into the hands of the Axis – all of this before the USA had entered the war. In short, if Habbaniya had fallen in 1941, it is difficult to see how Britain could have carried on.

Apart from detachments to Palestine, Kuwait and the Western Desert, No 1 Company (and its predecessors) was based in Iraq throughout its service. No 2 Company, after moving there in 1923, and apart from detachments to Iraq, Syria and the Western Desert, spent the whole of its service in Palestine. The proud history of these splendid autonomous fighting units came to an end when they were incorporated into the RAF Regiment on 3 October 1946, Nos 1 and 2 Companies being absorbed by Nos 2701 and 2702 Sqns at Ramleh and Qastina respectively. On 25 February 1947 their identities were re-established when they were redesignated to become Nos 1 and 2 (Armoured Car) Sqns, RAF Regiment, but both were re-roled as Field Squadrons in 1953.

To say that their absorption into the Regiment was an unpopular move would be something of an understatement! Armoured car crews, both officers and men, were accustomed to serving in small, independent units and they were very proud of their unique trade and the skills associated with it. They felt they would be subsumed by the Regiment and lose their identity. Furthermore, the officers, still mainly GD, felt that being transferred to the Regiment was not a positive career move. Many left rather than join the Regiment. There was bitterness over the Regiment's acquisition of the car units' identities, their badges and their mess silver. Indeed this resentment continued to be felt in the early days of the Armoured Car Reunions and it was a while before the old hands came to accept their Regiment successors.⁴⁵ They are, however, now both interested and proud to hear that Nos 1 and 2 Sqns, RAF Regiment continue what they in the RAF Armoured Car Companies had started – that is to say, ground service and the protection of the men, women, aircraft and

installations of the Royal Air Force on the ground in hot, dusty, disease-ridden and inhospitable foreign climes.

Acknowledgement

In the preparation of this paper I wish to acknowledge the tolerance of my wife, Susan, and the contributions made, over many years, by the members of the RAF Habbaniya Association, particularly Peter Burlton and his late wife Carol, and by the veterans of the Armoured Car Companies.

Notes:

- ¹ See, for instance, Perrett, B and Lord, A; *The Czar's British Squadron* (Kimber, 1981).
- ² TNA AIR8/37; Minutes of the Cairo Conference, March 1921.
- ³ For brevity, in the narrative the associated units will be referred to as, for instance, No 1 Company, or generically as armoured cars or just cars.
- ⁴ TNA AIR5/1239. HQ RAF Middle East monthly summaries, Vol I, 1921-24
- ⁵ TNA AIR5/1379. Air Organisation Memorandum 1511 of 15 May 1922.
- ⁶ *The Times*, 14 September 1922.
- ⁷ Interviews and correspondence with many veterans of the RAF and Armoured Car Companies.
- ⁸ Hinaidi was a large British military cantonment on the south eastern outskirts of Baghdad which the RAF took over from the Army in 1922. When the RAF moved to Dhibban/Habbaniya it was handed over to the Iraqi Forces. It is now known as Rashid Airbase, although the original British layout is still discernible today.
- ⁹ Air Force List for December 1922.
- ¹⁰ TNA AIR5/1287; Iraq Command: Monthly Operation Summaries, Vol I, 1921-23.
- ¹¹ TNA AIR5/1379. Air Organisation Memorandum 1575 of 2 January 1925.
- ¹² TNA AIR5/1291; Iraq Command: Monthly Operation Summaries, Vol V, 1927-29.
- ¹³ TNA AIR29/54; ORB, No 2 Armoured Car Company, 1922-39.
- ¹⁴ TNA AIR5/1292. Iraq Command: Monthly Operation Summaries, Vol VI, 1930-32.
- ¹⁵ Dhibban was renamed Habbaniya with effect from 1 May 1938
- ¹⁶ TNA AIR5/1294. Iraq Command Monthly Summaries, Vol VIII, 1936-39. With the closure of Mosul in October 1936, No 1 Section was withdrawn to Hinaidi to join HQ No 1 Company and Nos 2 and 3 Sections, No 4 Section being at Shaibah. With the establishment of the new base at Dhibban the armoured cars began a phased redeployment; No 1 Section moved in December 1936, the HQ and No 2 Section in November 1937 and No 3 Section in December 1937. With No 4 Section remaining at Shaibah throughout, the armoured car force underwent no further peacetime changes in either its structure or its disposition.
- ¹⁷ Glubb, J B; *War In The Desert* (Hodder & Stoughton, London, 1960) pp146 and 317-318.
- ¹⁸ TNA AIR29/50; ORB HQ Armoured Car Wing, later (from April 1930) No 1 Armoured Car Company, 1927-46.
- ¹⁹ TNA AIR5/840; ORB for No 5 Armoured Car Company, 1923-24.

- ²⁰ TNA AIR29/50.
- ²¹ *Ibid.*
- ²² Browne, Brig J Gilbert; *The Iraq Levies 1915-1932* (Royal United Service Institution, London 1932; reprinted Naval & Military Press, Heathfield, 2005) p14.
- ²³ *Ibid.*
- ²⁴ For more on the Levies (and other locally recruited troops, eg Kings African Rifles, Sudan Defence Force, Burma Rifles) see Lunt, J; *Imperial Sunset* (Macdonald, London, 1981).
- ²⁵ On a personal note, I value the friendship of those who still fondly remember my parents and my twin brother and myself at Habbaniya in 1955 (my father, SqN Ldr F N Morris was OC the Civil Cantonment – of 10,000 souls). Some are members of the RAF Habbaniya Association and we meet at reunions.
- ²⁶ TNA AIR29/50.
- ²⁷ Named after Jean François Gravelet (1824-1897) *aka* Charles Blondin, the famous tightrope walker, a ‘Blondin’ involved a vehicle being pulled across a river on a platform suspended from a rope/cable slung between pylons on each bank.
- ²⁸ TNA AIR8/37.
- ²⁹ TNA AIR5/219; Alternative routes for Air communications between Egypt, Palestine and Mesopotamia, 1921-25.
- ³⁰ TNA AIR 20/534 -545; War Diaries of Mesopotamia Group, April-June 1921.
- ³¹ TNA AIR 29/50.
- ³² *The Story of the Iraq-Mediterranean Oil Pipeline*, Iraq Petroleum Company, 1936 (privately printed).
- ³³ TNA AIR29/50.
- ³⁴ TNA AIR29/50 and AIR23/5982 – Habbaniya: Operations by No. 1 Armoured Car Company, 1941, amplified by extensive correspondence with veterans.
- ³⁵ Based at Kabrit, No 70 SqN had a detachment operating from Shaibah.
- ³⁶ Rather like ships of the RN, the RAF’s cars had individual names prefixed by HMAC – His Majesty’s Armoured Car.
- ³⁷ TNA AIR29/50 for 3 May 1941.
- ³⁸ TNA AIR29/50, amplified by the recollections of crewman Norman Mogie (since deceased).
- ³⁹ TNA AIR29/52; ORB No 1 Armoured Car Company, February-August 1944.
- ⁴⁰ TNA AIR23/5982. Copy of order from RAF Station Habbaniya.
- ⁴¹ Interestingly, when Dhibban/Habbaniya had been shortlisted as a potential site for a projected new RAF base, these features had been specifically identified as ‘ideal defensive’ factors.
- ⁴² No 84 SqN was based at Aqir but operating from the landing ground at H4, a pumping station on the oil pipeline on the Transjordan side of the Iraq frontier.
- ⁴³ Casano was training to be a pilot in Egypt but crashed, was injured and considered unsuitable. (In the spring of 1942 he was transferred to the A&SD Branch. **Ed**)
- ⁴⁴ Conversations with his men and with ‘Cass’ himself.
- ⁴⁵ Interviews and correspondence with veterans of the RAF Armoured Car Companies.

No 4 SFTS and RASCHID ALI'S WAR – IRAQ 1941

Wg Cdr Mike Dudgeon



Having joined the RAF via Cranwell, Mike Dudgeon served from 1963 to 2000. He flew Whirlwinds, Wessex, Pumas and Chinooks in the Far East, Europe, America and the Falklands; staff appointments included NATO's Rapid Reaction Force HQ and the Army Directorate of Land Warfare. After leaving the RAF he became involved with the Mercers' Company, was its Master in 2002-03 and he currently represents it on the Council of Gresham College; he is a trustee of Action for Blind People and is a City of London Guide.

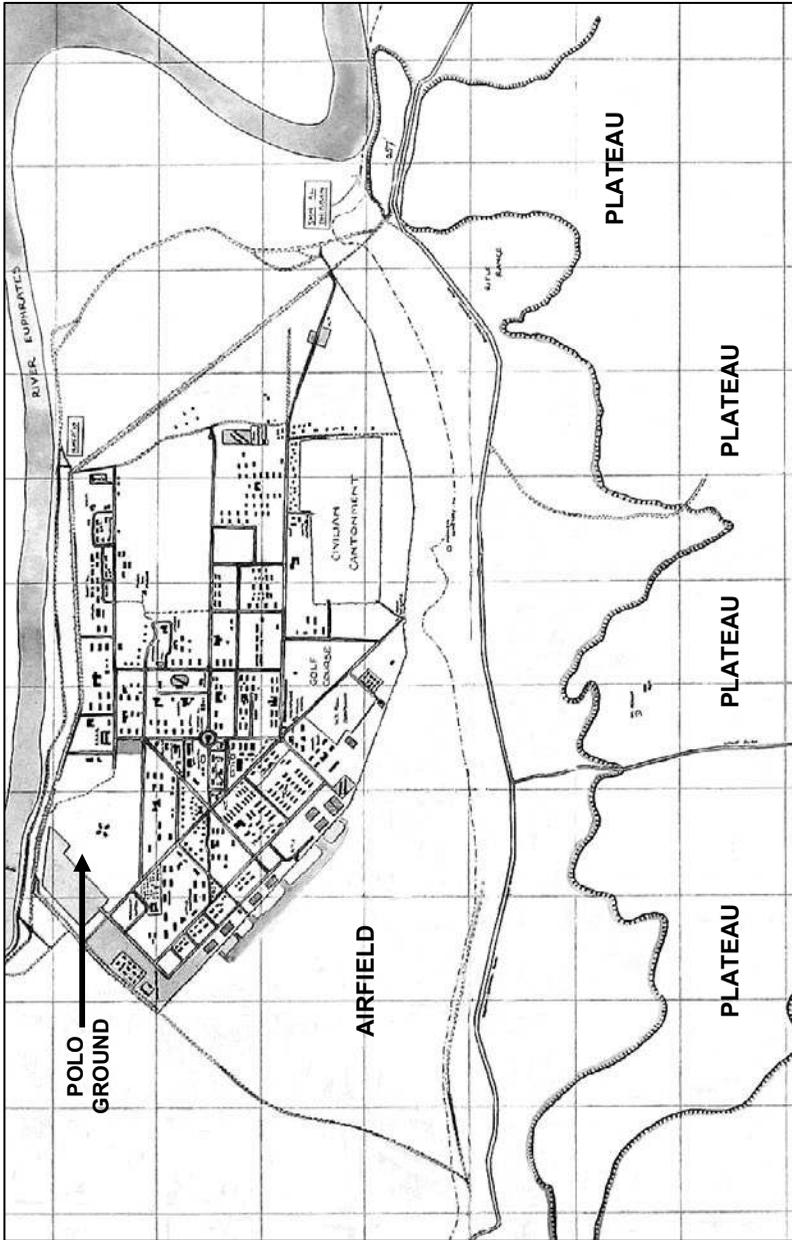
INTRODUCTION

As the Honorary Secretary of the RAF Habbaniya Association, Dr Morris, is far more qualified than I to analyse No 4 Service Flying Training School's campaign in Iraq in May 1941. However, my father, as Sqn Ldr Tony Dudgeon, had just been posted to the school for a rest tour and so took an extremely active part in it. For many years he said little, but later he became frustrated at the lack of recognition of No 4 SFTS' outstanding achievement and its significance. He researched the campaign in great detail – and was sometimes dismissive of the Official History. His book *Hidden Victory*¹ is probably as authoritative an account as is practicable of those momentous times.

DEVELOPMENTS UP TO 1941

Iraq and the RAF

Trenchard's doctrine of air policing had been highly effective between the wars and by the late 1930s, the RAF's presence in Iraq was concentrated at Habbaniya – the jewel in the RAF's crown. Its 500 acres included a swimming pool, polo pitch, golf course and fifty-six tennis courts, as well as a Maintenance Unit, hangars, weapon, fuel and logistic stocks, and the airfield. Situated in the centre of the country, 55 miles from Baghdad, beside the Euphrates, astride the route west to the oil pipeline from Kirkuk to the Mediterranean, it held



RAF Habbaniya

a strategically commanding position. South of the airfield was Lake Habbaniya, used by Imperial Airways flying boats, and between the two a plateau some 160 ft above airfield height, with its ridge virtually along the airfield southern boundary.²

The 1930 Anglo/Iraqi Treaty of Alliance permitted British forces to *transit* the country and for troops and aircraft to be stationed at two bases, Shaibah (which for simplicity I will refer to as Basrah) and Hinaidi (later Habbaniya). Iraq guaranteed to protect the bases, although the threat was assumed to be only ill-equipped tribesmen. Other airfields and military facilities were handed to the fledgling Iraqi forces, and we set about training and equipping them with modern aircraft. By 1941 these included Gladiators and Hawker Nisrs – an Audax with a more powerful Pegasus engine – plus twin-engined Savoia Marchetti and single-engined Breda 65 and Northrop bombers. The Iraqi Army was similarly equipped with modern light armour, field artillery and AAA.

Political Factors

Iraq had always been turbulent, but through the 1920s and '30s its increasingly efficient and brutal forces quelled various insurrections. Its government became ever more nationalist, but claimed to respect the Treaty. In British opinion all remained well, but we missed two key factors.

- First, the success of Nazi Germany before and early in the war fostered Arab nationalism, and proved that the British could be beaten. A *Doktor* Grobba in the Baghdad German Legation capitalised on this to forge strong links between the German and Iraqi governments. Although the legation was expelled on the outbreak of war, Grobba continued to exercise his malign influence via the Italian Embassy.
- Second was a wily and rabidly anti-British lawyer, Raschid Ali Al Gailani. Through the 1920s and '30s he rose ever higher in Iraqi government circles, fomenting anti-British feeling, particularly among a group of Army colonels called The Golden Square, but also abroad, notably in Egypt.

On 2 April 1941, The British Ambassador, Sir Basil Newton, left, noting that there was 'some minor discontent in Baghdad, nothing to



Pre-war shot of Hardys of the resident No 30 Sqn up from Habbaniya.

worry about', and was replaced by Sir Kinahan Cornwallis DSO MC, a far more incisive character. That same day, the Regent of the Iraqi boy-King lost his nerve and fled, allowing Raschid Ali and the Golden Square to seize power. He promptly and secretly sought military and financial aid from Germany to expel the British. Ribbentrop's Foreign Affairs department, immediately guaranteed German support for any war by the Arabs against the British. In return Raschid Ali promised to make all airfields in Iraq available for German and Italian use.

No 4 SFTS's PREPARATIONS

Initial Reactions: 2-18 April

At Habbaniya was Air Headquarters Iraq, with AVM Harry³ Smart as AOC, and No 4 SFTS commanded by Gp Capt Walter Savile, with some 84 obsolete aircraft, including Gordons, Audaxes, Hart Trainers, Oxfords, a communications flight with Valentias, and three Gladiators. It is probably fair to say that the mind-set at both AHQ and the school was of a backwater with a routine task, requiring strict adherence to regulations. Raschid Ali's coup on 2 April was a completely unexpected, and very rude, shock. The AOC signalled London, HQ Middle East, and India (commanding Iraq) for reinforcements, particularly modern aircraft. General Wavell, heavily engaged in the Western Desert and Greece, refused. London, still believing the Treaty to be effective, counselled negotiation. India, at least, diverted a brigade en-route to Malaya, to arrive at Basrah on 18 April. To demonstrate firm intent, on 7 April the School mounted a

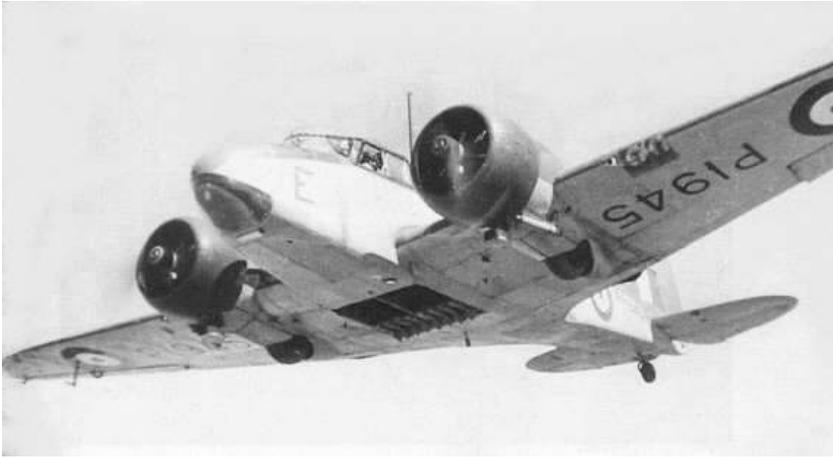
maximum effort formation of 48 assorted aircraft flown by a mix of pupils and instructors. It stooaged around, but it had no operational capability, and the school resumed its training task.

Aircraft Modifications

Some of the instructors, including my father, wanted to adapt the school's aircraft to make them suitable for operational use. He and the CFI, Wing Commander Larry Ling, noted that, although their Gordons could carry two 250 lb bombs, the Audaxes carried only eight 20 lb anti-personnel bombs. The Army co-operation Audaxes were virtually identical to the Hart day bombers that my father had flown on the North-West Frontier with 2×250 lb bombs – and more besides. He and Ling proposed switching bomb-racks to carry the heavier weapons, but were told firmly that the Audax was only cleared for the 20 pounders. After badgering AHQ to apply for authority to carry 250 pounders, its signal read 'What is the bomb-load of an Audax?' Unsurprisingly, the reply was ' 8×20 lb'. Frustrated, my father proposed a proving flight. Initially the CO refused to authorise this, but he eventually agreed, on condition that my father or Ling wrote accepting full responsibility and acknowledging that it was against his advice. The flight was trouble-free, the results accepted, and enough bomb-racks found to equip twelve Audaxes for 250 lb bombs and nine for 20 lb bombs; sadly, the remaining Audaxes and Hart Trainers could not be armed.

The 27 Oxfords also offered possibilities, as they could carry 8×9 lb smoke-puffs semi-internally. Although the racks were identical to those for the 20 lb bombs, these would not fit into the recess – yet the 20 pounder carried as much explosive as a 6-inch shell. My father proposed a simple modification that would make them fit, but, again the staffs refused to authorise this, and Ling was ordered, in writing, not to allow him to try it. In the bar, Ling and my father decided that if he had not *seen* the order, what he did was his own business. Father modified the prototype bomb rack himself, loaded the eight bombs and got airborne just before the air staff caught him. Again the flight was trouble-free and the remaining 26 aircraft were modified. By its own efforts the school had more than doubled its striking power.

Finally, because the airfield was too large and impractical to



Above Oxford P1945 modified to carry eight 20 lb bombs.

include, only the domestic and maintenance facilities at Habbaniya were within its perimeter fence. The golf course and polo pitch, which were within the camp, were therefore rolled flat to provide overnight dispersal and a small relief landing ground.

Reinforcements and Reactions: 18 April-1 May

On 18 April the main body of reinforcements from India started to reach Basrah, and 400 troops of the King's Own Royal Rifles were flown from India to Habbaniya by Valentias and DC-2s of No 31 Sqn. The rest stayed in Basrah, 300 miles to the south-east, to secure the vital port, airfield and power station. Because these troops *remained in* rather than *transiting through* Iraq, on 21 April Raschid Ali declared this a breach of the Treaty and forbade further reinforcements. On 23 April the Ambassador notified him of more arrivals, and Raschid Ali declared this an Act of War. On the 29th the Ambassador decided to evacuate British women and children to Habbaniya. Simultaneously, Raschid Ali began occupying the plateau overlooking the airfield with a force of some 9,000 men with fifty field-guns, AA guns and armour, and repeated his demand to Germany and Italy for their promised support.

At dawn on 30 April a reconnaissance Audax observed the Iraqis digging in. The Iraqis then issued a warning that any vehicle or aircraft leaving the camp would be shelled. The AOC responded by



A Wellington, W5654, of No 70 Sqn which, along with No 37 Sqn, operated a number of aircraft from Shaibah in support of Habbaniya.

ordering every airman and junior officer who was not an instructor to dig and man trenches around the camp. He again signalled for advice on whether to threaten air action, but received mixed counsel. However, recognising the gravity of the situation, HQ Middle East ordered Blenheims of No 84 Sqn to Aqir in Palestine, Wellingtons of Nos 70 and 37 Sqn to Basrah, and No 203 Sqn's fighter Blenheims (with belly gun-packs) to Lydda. They also sent six Gladiators to Habbaniya but took back the pilots.

No 4 SFTS's Air Striking Force

Denuded of its groundcrew and students, the school's instructors loaded and prepared aircraft as best they could, and created the Habbaniya Air Striking Force (ASF). Commanded by the CO from a small Ops Room behind the hangars, the school's 64 operational aircraft were grouped into two squadrons, plus the Communications Flight:

- The Audaxes in two flights under Wg Cdr Ling, operating from the polo pitch:
 - 12 Audax: 2 × 250 lb bombs
 - 9 Audax: 8 × 20 lb AP bombs
- The Oxfords, Gordons and Gladiators as flights under my father, operating from the airfield:
 - 27 Oxford: 8 × 20 lb AP bombs
 - 7 Gordon: 2 × 250 lb bombs
 - 9 Gladiator
- Communications Flight: 3 Valentia



A Hawker Nistr of the Iraqi Air Force.

It was decided that only qualified pilots would fly the aircraft, with promising students and volunteer ground-crew filling crew slots. However, even by co-opting pilots from ground appointments, only 39 could be mustered – including the two Squadron Commanders. Of these only three had any recent operational experience, and some had never seen combat. There were only two men actually qualified as bomb-aimers and four as air gunners. These spirited, but very under-qualified, crews were divided roughly evenly between the two squadrons.

The Iraqi threat and the ASF's response

Ranged against them were the Iraqi Army on the plateau, and its Air Force with significantly capable aircraft:

- 25 Nistrs (Pegasus Audax) at Mosul
- 9 Gladiators at Kirkuk
- and 15 Breda, 15 Northrop and 4 Savoia Marchetti bombers at Rashid/Baghdad

Throughout 1 May forces continued to build on the plateau, with artillery visibly trained on the airfield and camp. Messages flashed back and forth as the AOC sought help and advice, but without getting clear direction. Finally, a message from Churchill stated 'If you have to strike, strike hard'. The AOC decided on a pre-emptive strike at 5am next day, using the whole of his available force, supported by

Wellingtons from Basrah, with a simultaneous ultimatum to the Iraqi government from the Ambassador. Orders were issued at 8pm, following which the instructors did the rounds of the slit trenches quietly withdrawing all groundcrew and students – every one of whom would be essential for the ensuing operations.

SIEGE OF HABBANIYA: 2-6 May

First Strike: 2 May

The strike force took off in the fading darkness on 2 May and when the bombs started falling at 5am there were 49 aircraft milling about in the dawn light over a plateau the size of a golf course. Flashes from guns shelling the camp provided target markers as Oxfords bombed level from 1,000 feet, together with ten Wellingtons which also engaged the AAA with their turret guns, while Audaxes and Gordons dive-bombed. It was totally uncoordinated and very abrasive. Aircraft were being shot down or damaged, and crews killed or injured. All of the Wellingtons returned unserviceable, and one was forced to land at Habbaniya. An attempt to recover it with a tractor covered by armoured cars had to be abandoned when the tractor was hit, and the aircraft set on fire.

ASF Tactics

After 3 hours of intense bombing there was no sign of a retreat, so sorties continued. On landing one member of the crew would report to Ops to record targets and be assigned others, while the other would help re-arm. The Iraqi Air Force conducted several tip-and-run raids, with limited effect, although they did set fire to three aircraft. Gladiators on patrol, without radar cover, had little success in intercepting attackers. The twin-engined Savoia-Marchettis, having oxygen, came in at high level and, although one Gladiator struggled up to intercept, its guns had iced up.

Trees around the polo pitch screened operations, but the airfield was in full view of the guns. The hangars absorbed much shellfire and aircraft behind them were reasonably protected. They would wait till an airman indicated no traffic, accelerate hard through the gate onto the airfield, and steep turn away as soon as airborne. Return was along the river, through the camp *round* buildings and trees, before turning between the hangars to land on the taxiway, then brake hard and swing



*P1940, one of the Oxfords on charge to No 4 SFTS in 1941.
(P H T Green)*

back in through the gate. Report in, bomb up and repeat.

Outcome, First Day

By sunset, the Air Striking Force had flown 193 recorded sorties – about six per pilot – albeit many more went unrecorded, especially from the polo pitch. However, 22 of the 64 aircraft had been shot down, destroyed on the ground or damaged beyond immediate repair. More worrying, ten of the 39 pilots (over 25%) were dead or too badly injured to fly. Many aircrew were flying despite wounds, and aircraft were deemed flyable unless key components were damaged. Wg Cdr Ling had become a casualty, and the aircraft were regrouped, with the Audaxes and Gladiators on the polo pitch under Wg Cdr Hawtrey, and the Oxfords and Gordons on the airfield.

National Responses

Meanwhile Churchill had transferred command of Iraq to HQ Middle East in Egypt and insisted that Wavell provide a relief force. With great difficulty he started assembling a group to be known as HABFORCE under General Clark, with an advanced element under Brigadier Kingstone, KINGCOL. Comprising cavalry, artillery, lorry-borne infantry, RAF armoured cars and elements of the Transjordan Frontier Force, it was short of equipment, had 535 miles of desert to cross, and could not start to move before 11 May.

In Germany, Hitler finally responded to Raschid Ali's demands

and began to assemble a *Luftwaffe* force to stiffen Iraqi resolve and exploit any gains. Though its deployment would be delayed by preparations for Operation Barbarossa, *Sonderkommando Junck* (named after its commander *Oberst* Werner Junck) was to comprise volunteer crews, flying German aircraft wearing Iraqi markings. It was a major escalation, of which British intelligence knew nothing.

Integrating Theatre Assets: 3 May

On 3 May crews were again airborne at 5am on the cycle of bomb-repair-rearm-bomb. Additionally, vulnerable Valentias of the Communications Flight and DC-2s of 31 Squadron were to fly in and evacuate women and children, together with AVM Smart, who had unfortunately been incapacitated. They were also flying in ammunition and gun crews for two ancient field-guns which workshops had recovered from outside AHQ and refurbished. These were later put to good use by the gunners and they had a disproportionate impact on Iraqi morale, since it appeared that British artillery was being flown in, and this may well have deterred them from mounting a ground offensive.

Protecting the vulnerable transports was a major concern. Audaxes applied maximum effort to suppress the guns, while the Gordon crews, to improve accuracy, removed the 200 ft minimum height safety fuses leaving only 7-second delay fuses. This certainly achieved accuracy, although it also rattled the teeth of the departing aircrew.

Meanwhile, Wellingtons and Blenheims attacked Iraqi airfields and fought off their fighters, while air defence patrols over Habbaniya also had some successes. Moreover, four Blenheim fighters arrived at Habbaniya unexpectedly to reinforce the hard-pressed Gladiators.

Night Operations

Habbaniya's most vulnerable points were its sole electricity generating plant and its water system both of which were subject to constant shelling, including at night, and whose loss would have been catastrophic. The Audaxes flying from the polo pitch could continue to attack the guns until the Moon set at about midnight. Thereafter, only the Oxfords, which had a landing light, could sustain this offensive until dawn by flying three two-hour sorties. Only my father and two other pilots had any night experience. Guided, without any lights, onto the airfield and unable to see the ground, they made a

timed taxi-run on a compass heading to the take-off point. There they turned onto a heading, calculated to avoid the wrecked Wellington and other hazards, opened the throttles and hoped to lift off before reaching the 10-foot dyke at the airfield boundary.

Over the plateau they were able to relax to release a random bomb every quarter of an hour or so, or to aim one at a recent muzzle flash (not quite B-52 carpet bombing). To land, they flew with all lights out along the river at 1,000 ft until reaching the sharp bend east of the airfield. There they throttled back and turned onto the approach heading, descending to 250 ft – still over the enemy. At 50 ft indicated the landing lamp was switched on so that, hopefully, the boundary road and ditch could be seen as they were crossed, confirming that they were now over the airfield. After touch down, the lights were extinguished and the aircraft braked to a stop on a compass heading, before looking for flashlights indicating the way to the hangars. Dad said it was absolutely terrifying. After flying one sortie, the second pilot refused to do it again, while the third misjudged his take-off, hit the dyke and his aircraft blew up. My Pa continued as best he could, flying two two-hour sorties per night – as well as the day job.

Culmination: 4-6 May

4 and 5 May were similar, with Wellingtons and Blenheims flying counter-air sorties and the ASF attacking Iraqi positions around Habbaniya. However, by dusk on 5 May only four Oxfords were still flyable, with the other flights similarly depleted, and four of the surviving pilots had been grounded with combat stress.

At dawn on 6 May an Audax crew spotted major reinforcements heading for the plateau and Habbaniya suffered another major air attack. The ASF, as well as making attacks on the plateau, flew some 40 sorties against the reinforcements. Suddenly the forces on the plateau, utterly demoralised by the continuous bombing, began to flee in disarray, colliding with incoming forces at a narrow defile east of camp. In the chaos, the tangle of vehicles provided a target-rich environment for the RAF, and by dusk the road was filled with burning vehicles. The Iraqis suffered around 1,000 casualties, the defenders taking over 400 prisoners and large quantities of guns, artillery, ammunition and armoured vehicles. The Siege had been lifted, and Habbaniya secured.



When Iraqi convoys, withdrawing from the plateau on 6 May, met incoming reinforcements on the road between Falluja and Sinn el Dhibban, Habbaniya's ASF was able to wreak havoc on the resultant traffic jam. (IWM)

EVOLVING STRATEGY: 7-17 May

Counter-Air: 7-14 May

On 8 May five Gladiators from No 94 Sqn arrived, further improving the school's defensive capabilities. With more aircraft and crews the striking force began to extend its operations. The priority was counter-air, both offensive and defensive and, as a result, Iraqi air attacks steadily reduced in both number and effectiveness, but on 14 May a Blenheim returning from the Mosul area reported being engaged by a Bf 110. Initial disbelief gave way to consternation, not only at the threat to the elderly biplanes, but also because aircraft numbers and provenance were unknown.

Luftwaffe Operations: 3-17 May

Since early May Col Junck had assembled seven He 111s, fourteen Bf 110s, three Ju 90s and ten Ju 52s – of which one was a communications post and two were specialised laboratories for adapting Iraqi fuel for German engines. Junck encountered considerable difficulties while deploying his force to Mosul, and his



Seen here in Egypt, Gladiator K7957 was on the strength of No 94 Sqn in 1941 when several of its aircraft were sent to Habbaniya to bolster its air defences.

logistic support was particularly depleted. Furthermore, the Ju 90s and the standard Ju 52s were his only for the single journey, and much of their space had been commandeered by the returning *Doktor* Grobba and his German Legation. Consequently, most of the engineering spares were in two over-loaded He 111s, which had gone unserviceable in Syria where they had been strafed by RAF fighters. Finally, none of his aircraft had been modified for desert operations.

Even so, *Sonderkommando Junck* was a formidable force, and on 15 May a He 111 with the German Head of Military Mission, Major von Blomberg, flew to Baghdad. The aircraft flew low over the city to raise morale, but a burst of machine gun fire killed Blomberg.

On 16 May *Doktor* Grobba and Raschid Ali set the *Sonderkommando's* priorities:

- Repel KINGCOL
- Help capture Habbaniya.

Maximum effort was required from the *Luftwaffe* to 'stiffen the Iraqi spine'. Junck concluded that this would be best achieved by a concerted attack on Habbaniya – that afternoon.

The 16th had been a peaceful day at Habbaniya, until six Bf 110s arrived to strafe with cannon-fire. The attack was not particularly effective, although an Audax on a flight test was shot down. Far more



The stripped carcass of a He 111, wearing spurious Iraqi AF markings, that had been forced to land in the desert after being damaged in combat.

effective were three He 111s which made two bombing runs, hitting several hangars. A Gladiator scrambled to engage the bombers; the pilot was caught in their crossfire and killed, but he had damaged one bomber sufficiently for it to crash later. Fortunately, most of the aircraft in the hangars were already badly damaged, but several people were killed, including the Senior Technical Officer who had been working miracles with his men to get aircraft airborne again.

The following day, although the Wellingtons at Basrah were withdrawn for operations in Greece, the school received welcome reinforcements of four more Gladiators, six Blenheims, and two long-range cannon-armed Hurricanes. Most of these were promptly put to use to mount a low-level attack on Mosul which destroyed two aircraft and damaged four others. Sadly, one of the Hurricanes was brought down by debris killing its pilot, Flt Lt Sir Roderick McRobert – last of three famous brothers. More happily, a pair of patrolling Gladiators bounced two Bf 110s taking off from Baghdad. Surprisingly, rather than simply making their escape, the much faster German aircraft (which had no rear gunners, perhaps because they been carrying staff officers) turned to engage the highly manoeuvrable Gladiators; this was a bad mistake and both Messerschmitts were shot down. These very obvious victories over the *Sonderkommando* were a further blow to Iraqi morale and to German prestige.

KINGCOL's Arrival: 18 May

On 18 May KINGCOL reached Habbaniya – where it stopped, since it was only lightly equipped and HABFORCE was still a week away. Nevertheless, HABFORCE's Commander, General Clark, flew in, as did AVM d'Albiac to replace AVM Smart as AOC. They immediately planned a joint operation to seize the Euphrates bridge at Fallujah, key to the route to Baghdad.

The Fallujah Bridge: 19-20 May

Under cover of darkness on 19/20 May 1,500 troops were deployed forward and at dawn Valentias from Basrah landed additional troops beyond the bridge. Meanwhile, Audaxes destroyed the nearby radio station and cut the two telephone links to Baghdad. The less substantial one was cut by an Audax flying back and forth between the poles for about a mile, while the heavier line was dealt with by the crew of another Audax which landed alongside. The pilot climbed onto the upper wing to cut the cable with bolt croppers, while the gunner felled a couple of telegraph poles with an axe.

Meanwhile, Audaxes, Gordons and Oxfords carried out intensive bombing, flying some 130 sorties and dropping over 20,000 lbs of bombs. By lunchtime there was no returning fire, and a low-level recon revealed no sign of enemy troops. The ground force advanced under cover of close air support, secured the bridge and found 300 Iraqi troops and officers cowering in shelters. Trained regularly to defend the bridge in British Staff College-run exercises, these had always stopped at lunchtime with no afternoon script. More significantly, the prisoners reported that the whole Iraqi Army was demoralised and in mortal fear of RAF bombing.

Counter Air: 21-27 May

The ASF was disappointed that the captured bridge was not exploited immediately, but the Iraqi Army still had 40,000 well equipped troops which even HABFORCE, when it arrived, would find something of a challenge. The ASF and its reinforcing squadrons therefore resumed its counter-air campaign. Bf 110s continued to harass Habbaniya, but their attacks had little effect and one was shot down by the remaining Hurricane. Another was found abandoned in the desert and towed 40 miles back to the airfield and later used for comparative trials in Egypt.



Having been forced to land in the desert, this Bf 110 (WNR 4035 of II./ZG76) was subsequently restored to airworthiness by the RAF.⁴

The He 111s flew ineffective harassing sorties against the approaching HABFORCE and sometimes the airfield. However, Junck was having great difficulty supporting his force, and Hitler, fixated on Barbarossa, sent no help. Between 22 and 25 May only one or two Heinkels could be flown each day, and those only by cannibalising the others. On 26 May only 4 × 50 kg bombs remained, and Junck with his staff left for Syria on the last serviceable Heinkel. In all *the Luftwaffe* had lost seven He 111s, twelve Bf 110s and two Ju 52s. Much more significantly, Germany had been seen to fail and had lost the respect of the Iraqi people.

TOTAL VICTORY

ASF-HABFORCE Joint Operations: 28-31 May

By now HABFORCE had reached Habbaniya and was planning its advance on Baghdad, but it had no maps. My father, also a survey pilot, offered to photograph the route, which he did in an Oxford on 26 May. A photo-mosaic was created and grid-marked; this was then photographed, printed and maps were issued on the 27th in time for the advance on the 28th. They proved to be both accurate and popular.

Also on 28 May Mussolini deployed a squadron of CR 42 fighters to Kirkuk, but this was too late to be effective. One was shot down by a Gladiator the following day, its captured pilot appearing to be totally confused about his role and purpose. The Italians withdrew a few days

later.

On 30 May the ASF and supporting squadrons flew intensive interdiction sorties for HABFORCE's advance. Heavy attacks with home-adapted 'screaming' bombs were made on Raschid airfield and the Washash Barracks in full view of the city, and on 31 May the British Embassy was asked for safe conduct of a flag of truce. On 1 June Habbaniya signalled the world that Raschid Ali had been caught by his own people fleeing with his Army's pay in his pockets, that a general surrender was in force, and that the people of Baghdad were pleased to see British officers and civilians in the streets again.

CONCLUSIONS

Statistics

In terms of cold statistics, in 30 days No 4 SFTS had flown over 1,600 sorties in slow, obsolete, unsuitable aircraft which they had modified to confer an operational capability. They had dropped 220,000 lb of bombs – including over 5,000 20 pounders – and fired a quarter of a million rounds of ammunition. They had flown almost every role in the air power lexicon: interdiction, counter-air (defensive and offensive), transport, reconnaissance, close air support – practically everything short of strategic bombing, albeit the effect had been strategic. This was achieved almost exclusively by the courage and tenacity of unseasoned instructors and inexperienced pupils, who willingly accepted any task assigned. They were supported by engineering and ground staff who wrought miracles in hot, dangerous and inhospitable conditions.

Strategic Impact

The *Luftwaffe*'s official historian stated: 'The war in Iraq was won by the RAF utterly demoralising the Iraqi Army in the first few days.'⁵

Churchill said in his history of the War:

'The spirited defence of Habbaniya by the Training School was a prime factor in our success. The Germans had at their disposal an airborne force which would have given them Syria, Iraq and Persia, with their precious oil fields.'⁶

Marshal of the RAF Lord Tedder called it 'a Royal Air Force epic' and speculated whether without it, the war might have ended very differently.⁷

Lessons for Today

Are there specific lessons for the RAF today from the Siege of Habbaniya? I could suggest three:

- Always seize the initiative – *carpe diem*. Trite perhaps, but if the school had not struck first, we would have lost.
- Know your equipment. Know how to use it, and just how much you can abuse it – but this must be from thorough knowledge and not ignorant bravado.
- Finally, trust your young men. It was the curmudgeonly Curtis LeMay who, when asked his top priority, said ‘protecting my mavericks’.

Maybe these are not startling insights, but as I watch operations in Afghanistan today, I believe that they are still key lessons.

Notes:

¹ Dudgeon, Air Vice-Marshal A G; *Hidden Victory: The Battle of Habbaniya, May 1941* (Tempus, Stroud, 2000).

² The original airfield still exists but, although it was subsequently provided with a lengthened and paved runway, it could not cope with later high performance aircraft so the Iraqi Air Force eventually built a second, and much larger, airfield on the plateau and named it Al Taqaddum. **Ed**

³ Although his given name was Harry, Smart was always known as ‘Reggie’.

⁴ Having been repainted in British colours, the captured Messerschmitt was test flown by OC 11 Sqn, Wg Cdr Al Bocking on 14 September 1941. He subsequently checked out OC 45 Sqn, Wg Cdr James Willis, who flew it on two further occasions before their new toy was confiscated and flown away to Egypt. **Ed**

⁵ From *The 1941 War in Iraq*, a 1984 article by Dr Karl Gundenlach, Head of Luftwaffe Section, Historical Research Office.

⁶ Churchill, Winston; *The Second World War, Vol III* (Cassells, London, 1950) p236

⁷ In conversation with (then Wg Cdr, later AVM) Tony Dudgeon in 1943.

MORNING Q&A

Air Mshl Sir Mike Simmons. I really enjoyed Mike Dudgeon's talk. For an FTS, they seem to have disposed of a great deal of ordnance – where did all that come from?

Dr Christopher Morris. There were vast fuel and bomb dumps at Habbaniya. If you think of Hab as the main base for the entire region, it is reasonable to assume that it would have held a large stockpile of war stores of all kinds. So that would be the explanation – bulk stores of this nature were shipped to Basra and then ferried up country via the Euphrates.

Wg Cdr Mike Dudgeon. That certainly makes sense. No 4 FTS had originally been in Egypt, at Abu Sueir. It only moved to Hab after the outbreak of war, when the operational units in Iraq were transferred to Egypt – where the fighting was most likely to occur. So the FTS would have inherited the war stocks that had actually been put there as a contingency for the pre-war squadrons.

Air Mshl Macfadyen. As an incidental supplement to that – there was some reference to the two cannons that were involved in the siege. They eventually found their way to Cyprus where they used to stand outside Air House at Episkopi. Unfortunately, Air House burned down in a forest fire in 1998. I wonder whether anyone knows what became of the guns.

Air Cdre Ian Atkinson. As an aside, I have in my hand a letter, dated 13 June 1941, written to me by my father. He was then the Chief Engineer of the Irrigation Department and had been inspecting the Habbaniya Flood Relief Scheme. It has only been mentioned in passing but the Euphrates could flood quite seriously, hence the need for a scheme to protect Habbaniya. Anyway, my father was arrested by the Iraqis and carted off to Baghdad where he spent an uncomfortable fortnight or so until he was relieved.

I think that there was another military column involved – was it not General Sir Ouvry Roberts, who came up from India, from Basra, and provided the heavyweight support?¹

Morris. Apart from Kurdistan, of course, Iraq is very flat. The Control Tower at Shaibah is 73 feet above sea level, while

Habbaniya's is at 143 feet. That's a fall of only 70 feet in 300 miles, so it takes a long time for the snow melt to reach the sea. The flood season in the vicinity of Habbaniya is May/June and the Iraqis exploited this tactically by flooding the area between Falluja and Hab and breached Hammond's Bund, although the British were able to repair it and prevent any further damage.

No heavy forces came up from the Gulf during the siege. The only substantial elements that reached the area, KINGCOL and HABFORCE, came from the west, from Palestine. The only reinforcement that came up from the south were the relatively small numbers of infantrymen that could be flown in from Shaibah.

Sqn Ldr Ian Blair. I was one of the u/t pilots at Habbaniya during the siege (*spontaneous applause*). I did not actually participate in the operations, but everything that has been said is quite authentic. Regarding the question raised about armament – there is another aspect. As I understood it at the time, we were still training the Iraqi Air Force and the breech blocks for most of their guns were held in the Armoury at Habbaniya, in addition to which the RAF armourers who were attached to the Iraqis were withdrawn, of course.

Mention was made of the Gladiators' guns not working. Before starting pilot training I had been an armourer myself and when that problem cropped up I stopped marshalling aircraft and digging slit trenches, went over to the polo pitch, where the four Gladiators were based, and took it upon myself to supervise the armourers. I had never seen guns like it! The aircraft had obviously been sent from somewhere in the desert and the reason that the guns hadn't fired was because there was so much carbon in the barrels that the bullets were struggling to get as far as the muzzles! But we stripped them down, serviced them and got them working. That wasn't as easy as it sounds because most of the armourers were used to working with Vickers and Lewis guns – the Browning was new to them. Another problem was a shortage of ammunition, which we had to belt-up by hand – four tracers to one ball. But we had the satisfaction of being able to watch our aeroplanes in action – looking down-sun each one produced four rods of silver as they strafed the Iraqi troops.

Morris. Picking up on the point about the training of the Iraqis – Hab is built on sand, of course, and it may reflect on the quality of our

training that their shells, and their bombs, weren't properly fused. They needed to have been set to cater for the soft ground; since they weren't, they didn't do nearly as much damage as they could have.

Dr Seb Ritchie. For Christopher Morris. I was interested in the quite negative slant that you gave us on communications with the Armoured Car Companies – as I understood it, you said that the AHQ had been quite resistant to integrating them. Yet later in the 1920s the cars were completely integrated within the C2 infrastructure which tied together the aircraft, the cars, the field HQs and the main AHQ and it was that degree of co-ordination that permitted the cars to be employed so effectively on the southern frontier. So how did we progress from that very negative, as you presented it, early stage to that quite revolutionary degree of integration later in the same decade?

Morris. I think that the initial problem was that the early operations were being conducted in the remote southern desert – there is a not a lot between there and Baghdad – and in the run-up to Christmas. Indeed one incident actually occurred on Christmas Eve and Christmas Day, which may have contributed to the lack of response. Lack of experience will also have contributed, of course. Then again, AHQ was originally in Baghdad, whereas the Armoured Car Wing HQ was at Hinaidi. The AHQ later moved to Hinaidi which would probably have improved co-ordination.

As a means of communication, to begin with they had to rely on a pretty primitive and unreliable spark wireless set. As late as 1930 they were still signalling by a combination of Morse, semaphore and Aldis lamp. To use W/T with aircraft the wireless tender had to stop while the crew dismounted to erect a wireless mast. When early R/T sets did become available, they could talk to an aircraft at about 20 miles and ground-to-ground with another car at about 4 miles. So it was essentially an evolutionary process.

We should not forget, of course, the conditions in which they were operating. Summer temperatures were routinely above 100° in the shade, and in the desert there is no shade. Added to that there was the dust and the ruggedness of the terrain and the impact that that would have had on equipment. I imagine that maintaining wireless communications would always have represented a considerable challenge. But, I would agree that they did get their act together and

by the late 1920s the level of co-ordination was remarkably good.

Richard Bateson. To what degree was Junk's supply route from Athens to Mosul affected by Vichy-French control of Syria?

Dudgeon. It had initially been agreed that Junk could transit via, I think it was, Damascus, but later on there appears to have been something of a disconnection between the people on the spot in Syria and those back in France. It was that which obliged Junk to divert two of his heavily-loaded Heinkels into Aleppo where they broke their tailwheels on the rough ground – leaving them stranded to be caught out by RAF fighters. I think that the French were a bit ambivalent towards the Germans, who were, after all occupying much of their homeland, so there wouldn't have been a universal feeling of goodwill.

Wg Cdr Andy Walters. If you read the RUSI Journals of the inter-war years you will come across people like Portal and Cochrane lecturing on air control and explaining how it was being very successful in Mesopotamia without the need for an Imperial Army on the ground. But others point out that the expanding Iraqi Army eventually grew so big that it equalled the number of divisions that the British had withdrawn. It was argued, therefore, that 'air control' was really an entirely political concept, designed to ensure the survival of the Royal Air Force in times of economic constraint; in reality aircraft were merely supporting the activities of the Iraqi Army on the ground. Can anyone shed any light on the extent to which the AOC interacted with local forces?

Morris. Well, the RAF did actually run Iraq, and we trained their armed forces – reference was made to Sqn Ldr Warburton who was the Inspector of the Iraqi Air Force. But following the signing of the 1930 Treaty the British were no longer responsible for internal security. Prior to that, from 1926, we had been committed to 'assist' the Iraqi Government in the maintenance of order but before that, from 1922, the RAF had been fully responsible for the control of Iraq.

The means became well-established. Aircraft would fly over a troublesome village and drop leaflets warning the people to desist and notifying them that, if they persisted, they would be bombed the following day. If they complied, that was the end of the matter, if not

the village was bombed but, having been warned, it would have been evacuated so, while material damage was inflicted, there were few casualties. It has been alleged, incidentally, that the RAF used poison gas in Iraq – that is totally untrue.

To sum up, from 1928 onwards, the Iraqi Government became increasingly responsible for internal security, but it still called upon the RAF when necessary.

Dudgeon. Could I add a footnote – drawn from my father’s experience, not mine. Several years ago he was asked to provide some material for a TV programme called *Birds of Death*. It made him very angry because it used his film of operations on the North-West Frontier, using exactly the procedures that Christopher described – warning notices, a pause and then, if necessary, bombing of a deserted village. What happened in Iraq was that we taught the air force how to do it but, once they assumed responsibility for their own affairs, they didn’t bother with the leaflet stage – they just bombed the villagers that they didn’t like, and the TV programme implied that that was what the RAF had been doing – which was what made my father so angry.

Since the Iraqis clearly had the means of implementing British-style air control, it begs the question as to why they also felt it necessary to create such a large army. I can only speculate but, if your aim is to establish a state in which the government feels the need to know what is going on in every house, you can’t do that from the air.

Guy Warner. Before we break for lunch, the Chairman has permitted me to extend an invitation to any members who happen to visit Northern Ireland. The Ulster Aviation Society would be delighted to see you at its museum at the former RAF airfield at Long Kesh, near Lisburn. We have just taken delivery of a Belfast-built Canberra PR 9 which some of you might care to inspect. If anyone does wish to pursue this, you can contact me via the Editor.

¹ In May 1941 the GSO1 to 10th Indian Division at Basra, Lt-Col O L (later Lt-Gen Sir Ouvry) Roberts, was sent to Habbaniya. Having become the *de facto* commander of all available ground forces during the siege, before returning to Basra he subsequently went over to the offensive, commanding the ‘Habbaniya Brigade’ which participated in the taking of Falluja. 10th Indian Division did move up to central Iraq in strength later, but not until mid-June, by which time the revolt was over. **Ed**

**SUBSTITUTION OR SUBORDINATION?
THE EMPLOYMENT OF AIR POWER OVER AFGHANISTAN
AND THE NORTH-WEST FRONTIER, 1910-1939**

Clive Richards



Clive Richards graduated from Brunel University in 1989. Following a brief career in the financial services sector, he joined the RAF Museum in 1993 as a curator in the Department of Research and Information Services. In 1996 he left the Museum for the Air Historical Branch, being employed as its senior researcher until December 2008. He is currently reading for a PhD at Exeter University, his subject being the history of the Air

Ministry between 1932 and 1949.

The origins of military aviation in India¹

Although the Indian Army established an experimental balloon section at Rawalpindi in 1901, it was not until the end of that decade that attention turned to the employment of heavier-than-air craft for military purposes. In 1909 a branch of the Aerial League of the British Empire was established in India, the first president of this branch being none other than the then Commander-in-Chief of the Indian Army, Sir O'Moore Creagh.² During the winter of 1910-11 three separate teams of aviators arrived in India with the aim of conducting demonstration flights.

The most significant of these parties in terms of the development of military aviation was that sent by the British and Colonial Aeroplane Company.³ The British and Colonial party arrived at Calcutta in December 1910 and in the following month one of their Bristol Boxkites took part in cavalry manoeuvres in the Deccan. Although this aircraft only participated in the exercise for one day before being 'reduced to matchwood' in a take-off accident, according to Brancker its limited contribution nevertheless reinforced Creagh's belief in aviation's 'vast possibilities and its future importance to the Indian Empire.'⁴ It was clear from the start, however, that any attempt to foster military aviation in India would be dogged by one crucial factor – finance. Writing to the Director of Staff Duties at the War

Office, Brigadier-General Launcelot Kiggell, in May 1911, Sir Douglas Haig (then Chief of the General Staff in India) noted that ‘We are considering here how best to start a school of instruction and a corps for air work. I should be greatly obliged if you could let me have any suggestions on the subject.... Money at present is very tight here and so we shall find it difficult to make a beginning even in a small way.’⁵

In the same month, Captain Seaton Dunham Massy of the 29th Punjabis became the first Indian Army officer to qualify as a pilot with the Royal Aero Club. After serving on attachment to the Air Battalion, Royal Engineers, Massy returned to India where he spent the summer of 1912 ‘at Army Headquarters in India working out the details of a scheme for introducing a School of Aeronautics’. In 1913 Massy and three other Indian Army officers travelled back to the UK in order to attend a course at the Central Flying School, and on 1 December 1913 he was appointed formally to command the newly-created Indian Central Flying School, then located at Sitapur in Uttar Pradesh. Captain Cuthbert Gurney Hoare of the 39th Central India Horse, Lieutenant Cyril Louis Norton Newall of the 2nd Gurkha Rifles and Lieutenant Hugh Lambert Reilly of the 82nd Punjabis were also posted to the school as instructors between November 1913 and April 1914. In answer to a question in the House of Commons on 7 April 1914, the Under Secretary of State for India stated that at that time the school comprised ‘three aeroplanes, and five others have been ordered. The immediate object is to gain experience of aviation under Indian conditions, with a view to the eventual expansion of the school as a training establishment.’⁶

Plans to further develop military aviation in India were derailed by the outbreak of war in August 1914. Indian Army officers then present in the UK and possessing Royal Aero Club Certificates – including Massy, Hoare, Newall, Lambert and Captain Duncan Le Geyt Pitcher of the 39th Central India Horse, all of whom were then at Farnborough – were all swept up in the rapid mobilisation of the RFC. This did not mark the end of Indian military aviation *per se*, for in November 1914 Massy, Reilly and a party of RFC personnel embarked for Egypt, where they were joined by a detachment drawn from the Indian Central Flying School to form an aviation unit intended to support Indian Expeditionary Force ‘E’ defending the Suez Canal. In 1915

Reilly went from Egypt to Mesopotamia, where a second detachment formed from personnel drawn from the Indian, Australian and New Zealand Armies was established in order to support Indian Expeditionary Force 'D'. Both of these detachments were funded by the Government of India.

The problem of the frontier

Despite the deployment overseas of personnel and resources intended to form the basis of an Indian Flying Corps, the Government of India had not lost sight of the desirability of employing aircraft for military purposes within India itself. The main driving force behind this was the need to secure the North-West Frontier.

The challenges posed by the North-West Frontier were summarised by Lieutenant-General Sir George MacMunn in an article published in *The Journal of the Royal United Services Institution* in February 1931.⁷ In MacMunn's analysis, the defence of the frontier posed 'a greater and a lesser problem'. The first of these was 'the defence of the frontier of India *vis-à-vis* definite invaders from outside.'⁸ In 1902 Lord Kitchener, then Commander-in-Chief, India, initiated a reorganisation of the Indian Army 'based on the principle that the government of India maintained its troops to defend British India rather than occupy it.'⁹ The main external threat was then perceived to stem from Imperial Russia, and the likely route for any invasion would be 'the Khyber and Bolan passes through the mountains of the North-West Frontier.'¹⁰ Although the precise nature of the threat would change over time, the belief that the Frontier would need to be defended against an external threat would nevertheless endure up to the outbreak of the Second World War.

The second problem MacMunn defined as 'a ridiculous but also a very real one . . . the defence of everyday peaceful citizens within our administrative border from their fellow British subjects within our political, but outside that administrative, border.'¹¹ The administrative border referred to by MacMunn is that described by Barthorp as having been 'inherited from the Sikhs, up to which the Punjab Government ruled, policed, taxed and dispensed justice as occurred in the rest of India.'¹² However, in November 1893 a treaty signed by the Foreign Secretary, Sir Mortimer Durand, and Amir Abdur Rahman of Afghanistan established a new political border between Afghanistan

and India – the ‘Durand Line’ – the effect of this agreement being to enclose ‘within British territory the lands of Chitral, Bajaur, Swat, Buner, Dir, the Khyber, Kurram and Waziristan.’¹³

In 1901 ‘the settled districts under the Commissioners of Peshawar and the Derajat between the Indus and the old administrative border’ were brought together with ‘the Political Agencies of Malakand, Khyber, Kurram, Tochi and Wana, and other tribal territory up to the Durand Line’ to form the North-West Frontier Province.¹⁴ In practice, the new border between India and Afghanistan proved to be porous; in a ‘Note on Military Policy Towards the Tribes on the North-West Frontier’ prepared in 1919, the War Office reflected that the Durand Line had been well described as being ‘in reality only an arbitrary line drawn through the limits of a more or less homogenous population. Thousands of our subjects constantly visit independent territory, thousands of hillmen regularly migrate to our districts. The residents within or without the frontier are a common race, closely connected by ties of interest, business, tenancy and marriage.’¹⁵

In order to maintain order in the tribal areas lying between the political and administrative borders, the Government of India relied upon ‘a mixture of tribal management with sufficient outside influence to bolster up the weakness of the tribal system.’ In their review of 1919, the General Staff noted that ‘Two principles have guided the Government of India’: firstly, ‘Posts and garrisons have been limited to the minimum possible’; and secondly, ‘Any interference with the tribes that can be avoided has been avoided.’ The end result of such a policy was ‘the “vicious circle” round which events of the North-West Frontier continued to travel.’ That is to say:

‘Months and years of lawlessness and misconduct – a fine inflicted – if not paid, a blockade – then an expedition – and lastly, the troops withdraw, leaving behind them a legacy of hatred and contempt. A policy described by Lord Kitchener as one of “raid and scuttle”.’¹⁶

The numerous Imperial commitments assumed by the Indian Army on the outbreak of the First World War denuded the forces available for the defence of India itself. In August 1914, ‘The strength of the Army in India was approximately 77,000 British and 159,000 Indian ranks, exclusive of 38,000 volunteers and 35,000 Indian reservists’; by

the end of that year 'India was maintaining four overseas forces amounting to over 100,000 men of all ranks, and had in addition exchanged 35,500 of her best British regular troops for an equivalent number of semi-trained Territorials with inferior armament and equipment.'¹⁷

Moreover, this diminution came at a time when normal concerns with regard to the security of the Frontier were further exacerbated by Turkish and German attempts both to entice the Amir of Afghanistan, Habibullah, into an invasion of India, and to encourage an uprising within India itself. As early as August 1914 the Turkish Minister of War, Enver Pasha proposed the despatch of 'a mission of Turkish officers to the amir [*sic*], accompanied by a German military contingent to enhance the group's prestige with the Afghans.'¹⁸ In the following year, Berlin despatched two parties to Kabul; the first led by Captain Oskar von Niedermayer, 'a Bavarian geologist and artillery officer who had travelled extensively in Persia and India', and the second by Werner Otto von Hertig of the Foreign Ministry.¹⁹

Although Niedermayer and Hertig left Kabul in May 1916 having failed to sway the Amir from the position of strict neutrality that he had adopted two years earlier, the activities of the German mission had nevertheless caused considerable consternation in India. In the North-West Frontier Province, 'the local British commissioner viewed the German expeditions as so potentially dangerous that he doubled the financial subsidies to the local tribes, to encourage them not to be influenced by enemy propaganda', whilst across the border in Afghanistan 'the British raised the allowances they paid tribes and made strenuous attempts to bribe influential religious leaders.'²⁰ Despite these efforts,

'mullahs on both sides of the border began to preach jihad, stimulating desertion from the British Indian Army by Trans-Frontier tribesmen. Attacks on the Tochi and Kurram were being launched from Khost across the Durand Line . . . by March 1915. Mohmands in their thousands invaded the Peshawar District in April [1915] and again in October [1915], by which time unrest had developed in Swat while Mahsuds raided Dera Ismail Khan frequently and together with Wazirs attacked Bannu.'²¹

Military aviation on the North-West Frontier, 1915-1919

The deterioration of the situation along the border highlighted the need to enhance security on the North West Frontier. With ground troops at a premium, thoughts turned to the possibility of using aircraft. Given the lack of resources then available to the Indian Army, the Government of India was obliged in the summer of 1915 to approach London for assistance. The case for employing aircraft over the North West Frontier was summarised in a telegram sent to the Secretary of State for India by the Viceroy on 20 August 1915. In order to play its part in the Empire's war effort, the Government of India had 'reduced the garrison of India and especially that of the NW Frontier to [the] bare minimum necessary to provide for the security of the frontier.' In light of this, any additional steps to increase the efficiency of the forces available was 'of the highest importance, and amongst such measures we regard the introduction of aircraft as one of the most valuable.' The Viceroy continued:

'In frontier warfare reconnaissance has always been one of the greatest difficulties, and our ability to meet large and sudden concentrations is largely dependent on information. We are satisfied that [the] increasing reliability of aeroplanes at present confers on us [the] power of reconnaissance far in excess of past experience. Thus from our point of view [the] necessity is an urgent one.'²²

This telegram was forwarded to the War Office by the India Office with a cover letter noting that the Secretary of State for India, Sir Austen Chamberlain, 'would strongly recommend that the views of the Government of India be accepted and their application for the despatch of a suitable detachment of the Royal Flying Corps to India be complied with as soon as the opportunity offers.'²³ While the War Office was willing to consider the Government of India's request, there was a catch. Rather than supplying the equipment and manpower to the Indian Army for the creation of an 'Indian Flying Corps', the Directorate of Military Aeronautics had specified as early as July 1915 that flying units for 'Mesopotamia and [the] North West Frontier shall form an integral branch of the Royal Flying Corps.' The Viceroy signalled that the Government of India accepted this principal in a telegram to the India Office dated 22 August 1915.²⁴

Despite the interest already shown in military aviation by the Indian Army, it therefore fell to the British Army to form the first air units for operations in India. Concern in the Indian Army General Staff with regard to the degree to which the War Office appreciated the rigours of operating on the North West Frontier and in Mesopotamia led the Army's Chief of the General Staff, General Sir Percy Lake, to forward notes on the subject to the Military Secretary at the India Office, General Sir Edmund Barrow, 'to be passed, demi officially, by you to the DDMA' (Deputy Director of Military Aeronautics). These stressed that 'frontier conditions are as yet unknown and require careful study' and that as 'Politically it will be most important that the first flights undertaken over tribal territory should be successful' it would be necessary to ensure that they were conducted by 'none but the very latest and best obtainable machines, piloted by exceptional men from the outset.'²⁵ In an effort to establish both the demands of operating aircraft in India and the best machines for the task, the War Office turned to one of the Indian Army aviators present in the UK at the outbreak of war, Lieutenant Colonel Duncan Pitcher, who in August 1915 was serving as the Central Flying School's Assistant Commandant. In a report examining 'Flying conditions on the North West Frontier of India and suitable types of machines for the same', Pitcher recommended that modified versions of either the Royal Aircraft Factory BE2c or the Royal Aircraft Factory RE7 would be suitable.²⁶

The BE2c was duly selected, and a flight of No 31 Sqn equipped with these aircraft left the UK bound for India in November 1915, arriving in the following month. No 31 Sqn was brought up to strength when a second flight (detached from No 22 Sqn) joined it in India in February 1916. No 31 Sqn commenced operations against tribesmen on the Mohmand border during the latter part of 1916, and during the next two years it combined training and survey work with participation in operations against the tribal areas. In his 'report on the operations undertaken against the Mahsuds during the period March to August, 1917' the commander of the Northern Army, Lieutenant General Sir A A Barrett, referred to 'the valuable work performed by the aeroplanes of the 31st Squadron, Royal Flying Corps, both in reconnaissance and bombing the enemy' during an operation 'to destroy the village of Nanu, at the head of the Splitoi Valley'.

Risalpur	No 31 Sqn (HQ and three flights)	Allotted to Corps troops, 4th Army Corps
Lahore	No 114 Sqn (HQ and two flights) Aircraft Park	Central reserve for use on NW frontier or for internal security duties
Aden	No 114 Sqn (half-flight)	

Table 1: The RAF in India, June 1918

Source: Signal from CinC India, June 1918: TNA AIR 2/68, File A1179.

Subsequently,

‘several raids were carried out by aeroplanes of the 31st Squadron, Royal Flying Corps. Shingai villages in the Takhi Zam and others in the Badda Toi were bombed and in a particularly successful raid on 26th June nine hits were scored on Makin and six on Marobi, the home of Mulla Fazl Din, the titular chief of the tribe. These raids involved considerable risks. Engines were very liable to failure in the high temperature prevailing; distances from the base at Tank were long and hills up to 8,000 feet had to be crossed. These risks were, however, cheerfully taken by the flying officers and were well repaid by the results obtained, which undoubtedly contributed largely to the general desire for peace displayed by all sections of the tribe.’²⁷

In September 1917 a second BE2c squadron – No 114 Sqn – was formed at Lahore from a nucleus of No 31 Sqn. The disposition of the RAF in India in June 1918 is at Table 1.

The value of the contribution made by the RFC and RAF to operations on the Frontier was not lost on the Rt Hon Edwin Montagu MP, who had succeeded Sir Austen Chamberlain as Secretary of State for India in June 1917. Writing to the Air Ministry in July 1918, the Secretary of the Military Department of the India Office noted that Montagu had been:

‘much impressed with the importance of having more aeroplanes in India. Recent frontier warfare has shown their extreme value, and it is not too much to say that an efficient and

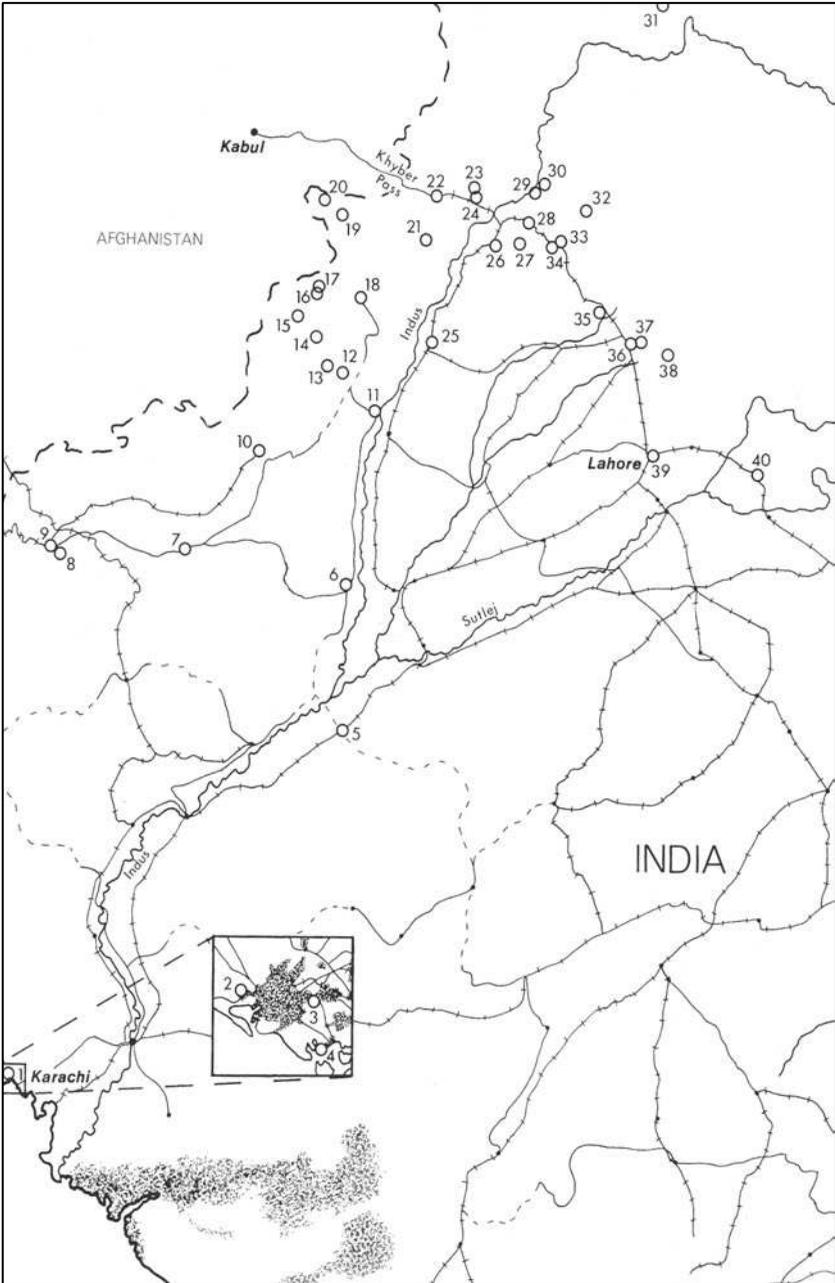
sufficient force of aeroplanes can bring about a decision in our favour on the frontier more quickly than anything else, and incidentally save many lives, considerable bloodshed, and much money.²⁸

From war to peace

The initial response of the Air Ministry to the India Office's request was a cautious one. In his reply dated 29 July 1918 the Secretary of the Air Council noted that although the Air Ministry intended to establish in India 'a total of two service squadrons and two training squadrons, the latter to be capable of mobilising for service at short notice, and to act as a reserve', it was 'regretted that it is not possible at the present time to divert any additional Air Force [squadrons] to India, but in case of urgent need, squadrons could be drawn from the service or training organisation of the Middle East.'²⁹

The Air Ministry's position would appear to have shifted dramatically after the Armistice. In a letter to the India Office dated 20 November 1918, the Secretary to the Air Council advised the India Office that after 'a most careful review of probable Indian requirements both in respect of aircraft to co-operate with military forces and of a separate long-range striking force', it had now been decided that not four, but *twelve* squadrons would now be required in India. This force would consist of four army co-operation squadrons, two squadrons of fighters, two squadrons of fighter-reconnaissance aircraft, two day bomber and two heavy bomber squadrons, divided into two wings, and commanded by a major-general who would also act 'as expert adviser to the Government of India upon all questions appertaining to the employment of aircraft.' This letter also included a stipulation that would recur repeatedly during the immediate post-war period: that 'the Royal Air Force, inasmuch as aircraft units now constitute an essential adjunct to all military and naval forces, will be administered in India on the same financial basis as units of the British army maintained there in times of peace' – and therefore paid for by the Government of India itself.³⁰

Perhaps unsurprisingly, the India Office's response to this sudden *volte-face* by the Air Ministry was a sceptical one. In its reply dated 28 November 1918, the India Office noted that the force now deemed as necessary was far in excess of that first proposed 'at a time when a

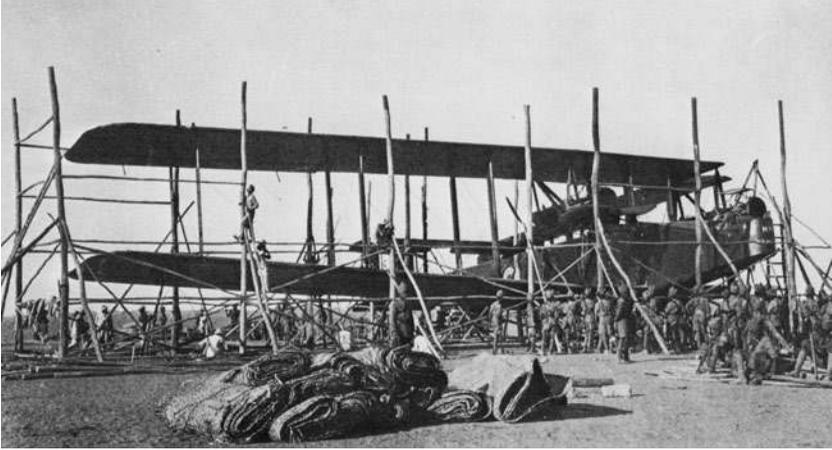


1 Karachi	14 Sorarogha	27 Fatehjang
2 Mauripur	15 Razmak	28 Hassani Abdel/Wah
3 Drigh Road	16 Miranshah	29 Lower Topa
4 Korangi Creek	17 Dardoni	30 Upper Topa
5 Khanpur	18 Bannu	31 Gilgit
6 Dera Ghazi Khan	19 Arawali	32 Murree
7 Loralai	20 Parachinar	33 Chaklala
8 Samungli	21 Kohat	34 Dhamial
9 Quetta	22 Peshawar	35 Jhelum
10 Fort Sandeman	23 Risalpur	36 Gujrat
11 Dera Ismail Khan	24 Nowshera	37 Julalpur
12 Tank	25 Mianwali	38 Sialkot
13 Manzai	26 Basal	39 Lahore

Key to map on p72 showing locations of significance to the RFC/RAF in north west India at various times. The heavy dashed line in the top left hand corner is the Durand Line.

Turco-German offensive towards India appeared to be possible and...the Commander-in-Chief's estimate then seemed to the Secretary of State [for India] to err on the side of moderation. But that danger has passed, and it is not easy to conceive that India can for a long time to come be threatened by an enemy possessing an Air Force of any kind.' Given this, the Secretary of State for India doubted 'whether the possible advantages of utilising the squadrons during peace time in the Civil Administration . . . will be considered by the Indian Government sufficient in themselves to justify the introduction of a military establishment in excess of actual military requirements.'³¹

The need to enlarge the RAF component in India was demonstrated when Afghan forces crossed the Indo-Afghan frontier in May 1919. During the ensuing conflict – the Third Afghan War – support for the Army in India was provided primarily by the BE2cs of No 31 Sqn. In a despatch filed after hostilities had come to an end, the Commander-in-Chief in India, General Sir Charles Monro, noted that 'pilots and observers unhesitatingly answered every call made upon them and rendered invaluable service throughout. The same may be said of workshop personnel who laboured untiringly under the most trying climatic conditions.'³² In addition to close reconnaissance patrols, the RAF also mounted several bombing attacks against targets within Afghanistan. The most famous of these was a remarkable sortie flown



The HP V/1500 'Old Carthusian' being reassembled at Lahore prior to flying its remarkable mission against Kabul in 1919. (Chaz Bowyer)

on 24 May 1919, during which Captain Robert Halley DFC* and a crew of four flew a Handley Page V/1500 heavy bomber, J1936, named *Old Carthusian* – the only serviceable heavy bomber then present in India – from Risalpur over the mountains to attack Kabul. Four of the bombs dropped by Halley and his crew ‘found their mark on the Amir Ammanulla’s palace, including demolishing a wall of the Amir’s harem, and the raid so impressed the Afghans that the Amir hastily sought an armistice on 3 June, followed by a peace treaty signed on 8 August.’³³

The conclusion of this treaty did not mean an end to hostilities. During the course of the war the Amir had sought deliberately to exploit unrest amongst the hill tribes on the North West Frontier. In response, between November 1919 and March 1920 the Indian Army conducted a punitive campaign against the Wazirs and Mahsuds, supported by the RAF. In a second despatch describing operations in Waziristan, Sir Charles Munro recognised that it was now ‘impossible to over-estimate the value of aircraft in tactical co-operation with other arms.’³⁴ According to Robson, when taken together the Third Afghan War and the Waziristan Campaign signified ‘the arrival of the aeroplane as a major factor in Frontier warfare’:



A DH 10 of No 60 Sqn.

‘Before, it had been an item of interest, of marginal utility and uncertain potential. When the Dejarat Column dispersed in April 1920, it had become accepted doctrine that no major operations could sensibly take place without the availability of air support. Air power would not guarantee success but it would hopefully prevent defeat.’³⁵

The status of the RAF in India, 1919-1925

After some discussion, it was eventually agreed in 1919 that the post-war strength of the RAF in India should be set at eight squadrons. The Air Ministry position in December of that year was summarised by Trenchard in his memorandum ‘An Outline of the Scheme for the Permanent Organisation of the Royal Air Force’:

‘It is proposed to provide eight squadrons for India and three for Mesopotamia, with the necessary facilities for repair. As regards India, this is in accordance with a proposal put forward from India and now under consideration by the Government of India. The cost of the units in India will fall on the Government of India on exactly the same basis as in the case of the military garrison. Recent events have shown the value of aircraft in

Risalpur	No 1 Sqn No 20 Sqn No 31 Sqn No 60 Sqn	Sopwith Snipe Bristol Fighter Bristol Fighter de Havilland DH 10 Amiens
Quetta	No 5 Sqn	Bristol Fighter
Mianwali	No 27 Sqn	de Havilland DH 9A
Ambala	No 3 Sqn No 28 Sqn	Sopwith Snipe Bristol Fighter

Table 2: RAF in India, April 1920

Source: Chaz Bowyer, *RAF Operations 1918-1938* (Kimber, 1988), p154.

dealing with frontier troubles, and it is not perhaps too much to hope that before long it may prove possible to regard the Royal Air Force units not as an addition to the military garrison but as a substitute for part of it. One great advantage of aircraft in the class of warfare approximating to police work is their power of acting at once. Aircraft can visit the scene of incipient unrest within a comparatively few hours of the receipt of news. To organise a military expedition even on a small scale takes time, and delay may result in the trouble spreading. The cost is also much greater, and very many more lives are involved.’³⁶

The RAF achieved the target strength laid down in Trenchard’s memorandum in the following year. The disposition of the RAF in India as at 1 April 1920 is at Table 2.

Two of the key tenets advanced by Trenchard in his 1919 memorandum would go on to dominate the ensuing debate with regard to the role of the RAF in Indian defence. The first of these was the desire to ensure that ‘The cost of the units in India will fall on the Government of India on exactly the same basis as in the case of the military garrison.’ In order to understand more fully the implications of this stipulation, it is necessary to consider the existing military organisation in India. The ground forces then in India – the ‘Army in India’ – consisted of two components; the Indian Army, ‘the force recruited and permanently based in India, together with its ex-patriate [*sic*] British officers’ – and the British Army units deployed to

maintain Indian external and internal security.³⁷ According to Bond, 'Though recruited and trained in Britain, units of the Regular Army when serving in India were wholly supported by Indian taxes. They were under the political control of the Government of India and were ultimately, via the Viceroy, responsible to the Secretary of State for India and Parliament.'³⁸ While the Air Ministry's desire to ensure that Royal Air Force units in India were funded in the same manner as their British Army counterparts meant that the cost of maintaining these units was not a drain on the Air Force Vote, it also had the effect of incorporating the funding of the RAF in India within the overall 'Military Budget in the control of which Army interests and prepossessions have inevitably an overwhelming preponderance.'³⁹ In his memoir *The Central Blue*, Sir John Slessor recalled that:

'Elsewhere throughout the Empire the RAF had for the past three years been a separate autonomous Service, with its own budget introduced to Parliament by its own Secretary of State. In India, however, the Air Force vote was still merely one of the heads of Army expenditure in the Military Services Budget, controlled by the Commander-in-Chief in India as Army member of the Viceroy's Council. It was not even shown in a separate section as was expenditure on the Royal Indian Marine.'⁴⁰

This lack of control was exacerbated by the severe budgetary restrictions placed on the military by the Government of India. The reform of the Indian political system during the inter-war period enabled Indian politicians to voice the resentment felt by many Indians at being asked to meet the cost of maintaining what appeared to be an occupying force. In response, the Government of India attempted to keep a tight reign on military expenditure. Inevitably, part of this pressure was felt by the RAF. The most obvious cost-cutting measure undertaken during the early 1920s was the reduction in the number of RAF squadrons in India from eight to six, first suggested by the Government of India in a telegram sent in January 1921.⁴¹ Given both the unsuitability of the Snipe for operations over the North-West Frontier and the type's poor serviceability the two Snipe squadrons were obvious targets, one was redeployed to Mesopotamia in April 1921, while the other was disbanded in the



*SofS for Air, 1921-22, the
Rt Hon Frederick Guest.*

following September.

However, a decision taken in the previous year would prove to have more severe long-term consequences for the RAF in India. According to a memorandum presented to the Cabinet by the Secretary of State for Air (Captain the Rt Hon Frederick Guest) in September 1922, a telegram from the Government of India dated 27 September 1920 stated that ‘all shipments of aeroplanes and engines to India should be suspended.’ Despite pressure from the Air Ministry to allow essential modifications to be carried out, during 1921 ‘a complete embargo

upon all new supplies was still maintained and the squadrons still had to do the best they could on such reserves as they held.’ In December 1921 Guest expressed his concerns in person to the Secretary of State for India, who consulted in turn the Government of India. In his memorandum, Guest notes that ‘The answer received from the Government of India (dated the 22 February) [1922] made it clear that the representations of the Air Ministry were more than justified. It was admitted that the supply of general stores *was only adequate for two weeks’ operations with all squadrons.*’ Moreover, ‘Information came to hand from another source that certain Class 1 modifications, affecting the safety of machines, had not been incorporated due to the absence of supplies.’⁴²

This situation was further compounded by the lowly status of the RAF within the Indian military hierarchy. The Esher Committee in 1920 had endorsed an arrangement by which the Air Officer Commanding RAF India was ‘responsible for the efficiency of the Air Force in India and for the administration of the funds allotted to it under the general control of the CinC’. However, according to Guest the result of this arrangement was that:

*'At present the Air Officer Commanding has no right of access to the Viceroy and is entirely under military authority. Until the Air Officer Commanding is in a position to represent with adequate authority to the highest authorities in India the requirements of the Air Force and to communicate with the Air Ministry in the same way as does the Commander-in-chief [sic] in India with the War Office, it is impossible to ensure either efficiency or safety.'*⁴³



General Henry Rawlinson, CinC India 1920-25 (seen here as a Lt-Gen in France in 1916).

The second element of Trenchard's memorandum that would prove controversial was the hope expressed that 'it may prove possible to regard the Royal Air Force units not as an addition to the military garrison but as a substitute for part of it.' Although this promised to reduce Indian defence expenditure, any suggestion that the Royal Air Force could supplant elements of the Army of India was resisted by the Indian military. Moreover, there remained the suspicion that the arguments advanced in favour of substitution were driven more by the desire to make the Indian exchequer pay for squadrons that could then be used to meet Imperial commitments outside India. In a letter to Major-General Sir Archibald Montgomery dated 3 May 1922, the Commander-in-Chief India, General Sir Henry Rawlinson stated his belief that both Trenchard and Winston Churchill (then Colonial Secretary) had been:

'carried away by their enthusiasm for the air, and are imbued by the old idea that they can win the battle by themselves . . . I foresee, however, in the not very distant future, that strong pressure will be brought to bear from home on us to exchange two more bombing squadrons for two British battalions. They



AVM Sir John Salmond (1925).

cost about the same. The Viceroy and I are fully alive, however, to what lies behind this endeavour. They really want to make India keep up more squadrons, which would be available in case of emergency for Imperial purposes, and no one is more alive to this fact than the Viceroy himself. However, if in the end they insist on reducing British battalions, I would rather have them replaced by Air Squadrons that by nothing at all.’⁴⁴

All of these matters were examined between November 1921 and June 1922 by a Sub-Committee of the Committee of Imperial Defence established under the Lord Privy Seal, Austen Chamberlain, to examine Indian Military Requirements. The Indian Military Requirements Committee decided that a senior Royal Air Force officer should be sent to India ‘To represent to the Viceroy of India and his senior political and military officers the possibility of effecting economies by an increased use of the Air Force, in co-operation with the Army, for controlling territory’ and ‘To investigate under the general directions of the Commander-in-Chief the role of the air arm in Indian defence’ and ‘To study the existing organisation and administration of the Royal Air Force in India with a view to ensuring the future maintenance of air units in that country in a state of efficiency.’⁴⁵

The officer selected to carry out this review was Air Vice-Marshal Sir John Salmond. In his report, delivered in August 1922, Sir John reported that ‘the Royal Air Force in India is to all intents and purposes non-existent as a fighting force.’ On 23 August 1922 only seven out of an establishment of 70 aircraft were serviceable; some

were 'so old and decrepit that they should have been already struck off charge, while some are flying without the incorporation of technical equipment essential to safety.'⁴⁶ In order to remedy 'the state bordering on impotency into which the fighting service . . . has been allowed to drift'⁴⁷ Sir John made a number of recommendations, including revisions to the personnel establishment, expansion and acceleration of the works programme, ceasing the embargo on indents, relocation of the RAF Headquarters, changing the method of budgeting for the RAF in India and elevating the status of the AOC.⁴⁸

However, much of the report is actually dedicated not to 'The Organisation and Administration of the Royal Air Force in India', but rather to the manner in which the RAF should be employed in defence of the Frontier. Here, Salmond argued in favour of substitution. He recommended in particular that the Royal Air Force should take responsibility for the maintenance of order in Waziristan and that air power should be the primary weapon in any future war with Afghanistan. As Rawlinson predicted, in order to facilitate this Sir John pressed for the increase of the RAF in India by a further two squadrons. In Salmond's view the costs involved in this increase would be more than met by:

'the possible reduction of heavier types of artillery and motor transport, with corresponding savings in the depots and ancillary services employed in the supply of such units . . . a prospective saving in the cost of upkeep of troops which can be withdrawn from tribal territory to stations where their maintenance will be cheaper, and finally . . . the possibility of some economy of military staffs should an extensive advance into Afghanistan no longer be envisaged.'⁴⁹

Salmond's selection of Waziristan reflected the change in the Government of India's stance towards controlling of the tribal areas. In a departure from the previous strategy of 'raid and scuttle', military forces did not withdraw from Waziristan in the aftermath of the 1919-20 campaign, but rather remained to enforce order within the tribal area beyond the administrative border. This revised strategy – which would become known as the 'Modified Forward Policy' – was outlined by the Viceroy, Lord Chelmsford, in a speech on 20 August 1920. Asserting that that 'as a result of hard fighting we have occupied



A DH 9A of No 27 Sqn threading its way through one of the passes on the North-West Frontier (P H T Green)

a central and dominating position in Waziristan', Chelmsford went on to state that:

‘we have decided, with the approval of His Majesty’s Government, that our forces shall remain in occupation of Central Waziristan, that mechanical transport roads shall be constructed throughout the country . . . and that our present line of posts shall be extended as may seem necessary.’⁵⁰

While ‘during the 1920s, the Modified Forward Policy, and the complex civil-military framework created for the watch and ward of the administrative border, proved a highly effective solution to the problem of tribal control’,⁵¹ it would also prove to be expensive. According to Toynbee,

‘the maintenance of so large an Expeditionary Force under such difficult conditions was imposing a financial burden upon India which was relatively heavier than the economic loss inflicted upon the tribesmen by the partial devastation of their territory, in accordance with the economic law that, in a struggle of endurance, the advantage lies with the less highly organised community.’⁵²



This Bristol Fighter served in India between 1924 and 1930. It was with No 5 Sqn in 1925 and may well have participated in 'Pink's War'. (Chaz Bowyer)

Although Rawlinson resisted what he perceived to be Salmond's desire to see that 'the Air Force shall be employed at the expense of the Field Army',⁵³ given the pressure on the Indian military budget he was content to allow the RAF to trial air control over Waziristan. The opportunity for such a trial came in 1925. In response to continuing unrest, during what became known as 'Pink's War' a force consisting of a maximum of seven flights drawn from Nos 1, 5 and 20 Sqns (all equipped with Bristol Fighters) and Nos 27 and 60 Sqns (flying DH 9As), was assembled at Tank and Miramshah under the command of Wg Cdr R C M Pink CBE. Despite being hampered by inexperienced pilots and shortages of aircraft and engines, over fifty-four days a total of 2,070 operational hours were flown against approximately forty targets in an area of 50-60 square miles in south-east Waziristan. In addition to air attacks against these targets by day and night 'air blockade' sorties were also flown, tactics being varied regularly 'in order to keep the tribes on the "qui vive" and in a constant state of uncertainty as to when and how they were going to be attacked.'⁵⁴ Only one aircraft was lost to enemy action during the course of the campaign, being shot down by rifle fire on 21 March, the

pilot was killed and his observer fatally injured.

In the wake of 'Pink's War', Salmond's requirement for a further two squadrons was finally met in 1928 with the despatch of Nos 11 and 39 Sqns to India. Additionally, in the aftermath of the air evacuation of the British Legation at Kabul during the winter of 1928-29 the RAF in India was further strengthened by the establishment of a Heavy Transport (later renamed Bomber Transport) Flight. However, while the RAF would subsequently be employed regularly to support the Indian Army in operations on the Frontier, further attempts to press the case for air control were not to prove successful. The innate conservatism of the Indian Army, and its dominant position within the Indian administration, resisted any further expansion of the role of the RAF. As late as 1938, a joint War Office-Air Ministry sub-committee chaired by Major-General Henry Pownall, tasked 'to report on the defence problems of India and to make recommendations for the future composition and organisation of both the Army and the Royal Air Force in India' described the role of the RAF in India as being simply 'to play its part in conjunction with the army.'⁵⁵

Conclusion

The concept of using aircraft for policing operations over the North-West Frontier originated during the First World War. Initial advocacy for such a role stemmed from outside the air hierarchy – notably, from the India Office – at a time when the attention of the RFC/RAF was centred primarily upon the Western Front, and it was only with the end of the First World War that the Air Ministry became receptive to calls by the India Office to increase the size of the RAF in India. As such, it predated – and to a great extent presaged – the development of the doctrine of air control by the Air Staff during the inter-war period.

During the inter-war period the Royal Air Force would continue to play a significant role in military operations on the North-West Frontier. However, attempts by the Air Ministry to challenge the entrenched pre-eminence of the Indian Army in frontier operations ended in failure. The use of air control techniques was limited to a small number of 'experiments', such as Pink's War; attempts by the Air Ministry to achieve any form of air substitution were stymied,

with the RAF being limited instead to the role of a supporting arm. A further consequence of this was that much of the infrastructure required to support air control (for example, dedicated ground forces and intelligence networks) was not developed in India. With regard to the question posed by the title of this paper – ‘substitution or subordination?’ – it is clear that despite the best efforts of the Air Staff, the emphasis in India was very much on the latter rather than the former

Finally, I would like to conclude with a quote from the Government of India’s own *Official History of Operations on the NW Frontier of India 1920-1935*, published in 1945 but in essence all too apposite today:

‘Wars between 1st class Modern Powers come and go. Armaments and battle grounds change with each upheaval. The tribes of the North-West Frontier of India however remain as heretofore an unsolved problem. The Indian Army of the future will still have to deal with Mohmands and Afridis, Mahsuds and Wazirs. The Tangis and Kandaos of the past will again be tested. History repeats itself. Let it be read profitably.’⁵⁶

Notes:

¹ References to ‘India’ in this paper relate to the Indian state as it existed prior to independence and the creation of the state of Pakistan – the latter incorporating the North-West Frontier Province – in 1947.

² ‘Aerial League in India’, *Flight*, 8 January 1910, p26.

³ The British and Colonial Aeroplane Company Ltd was formed in 1910 and manufactured aircraft under the ‘Bristol’ name. In 1920 the company went into voluntary liquidation and its assets were transferred to The Bristol Aeroplane Company Ltd..

⁴ Raleigh, Sir Walter; *The War in the Air: Being the Story of the part played in the Great War by the Royal Air Force* (Oxford University Press, 1922; reprinted by The Naval and Military Press in association with the Department of Printed Books, Imperial War Museum, nd) p422; Macmillan, Norman; *Sir Sefton Brancker* (William Heinemann, 1935) p19.

⁵ Paris, Michael; ‘Air Power and Imperial Defence 1880-1919’, *Journal of Contemporary History*, Vol 24, 1989, p218.

⁶ Hansard, 7 April 1914, Column 1783 (TNA ZHC2/569).

⁷ MacMunn, Lieutenant-General Sir George; ‘The North West Frontier of India’, *RUSI Journal* Volume LXXXVI, No 501, February 1931, pp1-9.

⁸ *Ibid*, p1.

⁹ Heathcote, T A; ‘The Army of British India’, in Dr David Chandler (General

Editor), *The Oxford History of the British Army* (Oxford University Press, 1996), p378.

¹⁰ *Ibid.*, p379.

¹¹ MacMunn, *op cit*, p2.

¹² Barthorp, Michael; *Afghan Wars and the North West Frontier 1839-1947* (Cassell, revised edition, 2002) p100.

¹³ *Ibid.*, p99.

¹⁴ *Ibid.*, p140 & p141.

¹⁵ TNA AIR5/132, p1.

¹⁶ *Ibid.*.

¹⁷ *The London Gazette*, No 31476, 28 July 1919, pp9537-38.

¹⁸ McKale, Donald M; *War by Revolution: Germany and Great Britain in the Middle East in the era of World War I* (Kent State University Press, 1998),; p79.

¹⁹ *Ibid.*, p80 & p128.

²⁰ McKale, *op cit*, p144.

²¹ Philip Stigger, 'How far was the loyalty of Muslim soldiers in the Indian Army more in doubt than usual throughout the First World War?', *Journal of the Society for Army Historical Research*, Vol 87, No 351, Autumn 2009, p230.

²² TNA AIR1/31/15/1/165 *Aeroplane for use on North West Frontier of India (Includg [sic] Report by Lt Col Pitcher IA).*

²³ *Ibid.*

²⁴ In that month steps were also put in train to absorb the Indian Army aviation unit then in Mesopotamia (together with its attached Australian and New Zealand Army personnel) into the RFC as No 30 Squadron.

²⁵ TNA AIR 1/31/15/1/165.

²⁶ *Ibid.*

²⁷ *The London Gazette*, No 30629, 13 April 1918, pp4504-5.

²⁸ TNA AIR2/68, File A.1179.

²⁹ *Ibid.*

³⁰ Letter from Secretary of the Air Council to the India Office, 20 November 1918; TNA AIR2/68, File B2177 (this file is annexed permanently to File A1179 and both are held under the same reference by The National Archives).

³¹ TNA AIR2/68, File B2177.

³² *The London Gazette*, No 31823, 15 March 1920, p3285.

³³ Bowyer, *op cit* (at Table 2), p151.

³⁴ *The London Gazette*, No 32156, 8 December 1920, p12139.

³⁵ Robson, Brian; *Crisis on the Frontier: The Third Afghan War and the Campaign in Waziristan 1919-20* (Spellmount, 2007) pxiv.

³⁶ Cmd 467 'An Outline of the Scheme for the Permanent Organisation of the Royal Air Force', December 1919, Section 3, 'Service Units' p2; reproduced in *The Organisation of the Royal Air Force, 1919-1926* (Air Ministry, March 1926; reprinted October 1926), Air Historical Branch collection.

³⁷ Heathcote, T A; 'The Army of British India', in Dr David Chandler (General Editor), *The Oxford History of the British Army* (Oxford University Press, 1996) p379.

- ³⁸ Bond, Brian; *British Military Policy between the Two World Wars* (Clarendon Press, 1980) p99.
- ³⁹ 'India and the Royal Air Force' (paper submitted by the Chief of the Air Staff to the Secretary of State for Air, 6 December 1921, and circulated subsequently to the Indian Military Requirements Committee as IMR 28, December 1921), p3; TNA AIR8/40, Enc 1, p3..
- ⁴⁰ Slessor, Sir John; *The Central Blue* (Cassell, 1956) p34.
- ⁴¹ IMR 28; AIR8/40 Enc 1, p3.
- ⁴² CP 4179 'Shortage of Equipment of the Royal Air Force: Memorandum by the Secretary of State for Air', September 1922; copy on TNA AIR5/579.
- ⁴³ *Ibid.*
- ⁴⁴ Reproduced in Mark Jacobsen (Ed), *Army Records Society Volume 19, Rawlinson in India* (Sutton Publishing for the Army Records Society, 2002), p101-02.
- ⁴⁵ Draft 'Terms of Reference for an Air Force Officer of High Rank, whom the Indian Military Requirements Committee propose should be sent to India' were submitted to the Indian Military Requirements Committee by the Secretary of State for Air in a note dated 7 April 1922 (circulated as IMR 89; copy on TNA AIR8/40). These correspond closely to Salmond's actual terms of reference, as detailed in Appendix I of his final report; the latter are cited here.
- ⁴⁶ Report by Air Vice-Marshal Sir John Salmond, KCB, CMG, CVO, DSO on the Royal Air Force in India, August 1922', Part II, paragraph 64; TNA AIR5/579, Enc 20A.
- ⁴⁷ *Ibid*, Part II, para 66.
- ⁴⁸ *Ibid*, Part II, para 86.
- ⁴⁹ *Ibid*, Part I, para 58.
- ⁵⁰ Toynbee, Arnold J; *Survey of International Affairs 1925, Vol I: The Islamic World since the Peace Settlement* (British Institute of International Affairs/Oxford University Press, 1927) p559.
- ⁵¹ Moreman, Tim; 'Watch and ward': the Army in India and the North-West Frontier, 1920-1939', in David Killingray and David Omissi (Eds), *Guardians of Empire: The Armed Forces of the Colonial Powers c.1700-1964* (Manchester University Press, 1999) p145.
- ⁵² Toynbee, *op cit*, p559.
- ⁵³ Letter to Major-General Sir Archibald Montgomery, 5 September 1922; reproduced in Jacobsen, *op cit*, p114.
- ⁵⁴ *The London Gazette*, No 33104, 20 November 1925, p7597.
- ⁵⁵ 'The Defence Problems of India and the Composition and Organization of the Army and Royal Air Force in India', part I, para 6; TNA WO106/5447.
- ⁵⁶ *Official History of Operations on the NW Frontier of India 1920-35* (Government of India, 1945; reprinted by The Naval and Military Press in Association with the Department of Printed Books, Imperial War Museum, nd), pviii.

THE JEBEL AKHDAR WAR (THE ROYAL AIR FORCE IN OMAN 1952-1959)

Air Vice-Marshal Peter Dye



As an Engineering Officer, Peter Dye spent 35 years in the RAF, 20 of them supporting frontline operations, notably those involving the Jaguar and Tornado. Among his later staff appointments he was responsible, within the Defence Aviation Repair Agency, for the overhaul of all RAF, RN and Army fixed wing and rotary aircraft. As the third generation of his family to serve in the RAF, he has a passion for its people and traditions. He has written widely on aspects of the history of the

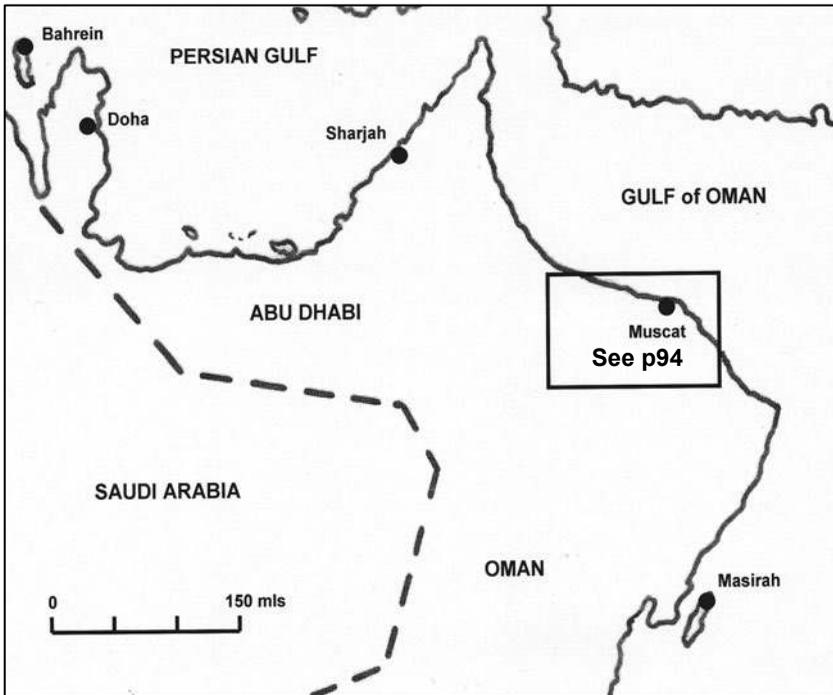
Service and led the campaign to erect, at St Omer, a memorial to the British Air Services of WW I. Since 2008 he has been the RAF Museum's Director of Collections.

Note. An intervening higher priority engagement meant that Peter Dye was unable to attend the seminar in person. His paper, which was first published in 2008 in the *Air Power Review Vol 11, No 3*, was therefore delivered by the Editor who had been obliged to tailor it to fit the time allotted. It is reproduced here in full. **Ed**

Background

The dismemberment of the Ottoman Empire, following Turkey's defeat in the First World War, triggered the creation of states and international boundaries where none existed before. The straight lines that defined the new political map of the Middle East reflected the handiwork of cartographers rather than geographers or historians. The price for this externally imposed order has been a century of internal unrest – exacerbated by the region's strategic importance, as the main source of the West's oil supplies – and a succession of inter-state conflicts that have attracted rival sponsors engaged in wider political and ideological struggles.

It is possible to regard both the Jebel Akhdar War, and the subsequent Dhofar Campaign, as proxy conflicts of the Cold War – this was certainly the contemporary perspective – but in reality they drew on deeper grievances caused by poor governance, deprivation and economic disparity. To this unfortunate mixture one might also add feudal values, tribal rivalries and the long standing distrust



between the interior (Oman) and the coastal towns (Muscat).

Jebel Akhdar

The interior of Oman is dominated by the massive plateau of Jebel Akhdar (Green Mountain) that lies some 80 miles to the southwest of Muscat, the capital city and main port of Oman. It is neither green, nor a single mountain, but a large grey-brown massif covering more than 700 square miles with individual peaks rising to nearly 10,000 feet. It is home to around 58 separate villages and laced by some 700 wadis. Until the construction of roads, it took a six-hour climb, up a near vertical path, to reach the main plateau at 6,000 feet. The tribes of the area have always been fiercely independent and have successfully defied invaders for centuries.

The rebellion began in 1954 and was, in essence, a power struggle between the Sultan and the tribes of the interior – driven by the prospect of substantial oil reserves. The uprising was quickly suppressed by the Sultan's forces but two years later the rebellion

flared up again. With money, training and arms provided by Saudi Arabia, and the vocal support of Egypt, it looked as if control of the interior might be wrested from the Sultan. In the end, the rebels were defeated, but only with British assistance and after an 18-month campaign involving the extensive use of air power, including the employment of air control techniques developed and refined by the Royal Air Force in Iraq and Aden over the previous 30 years.¹

The final assault on Jebel Akhdar was carried out by the Special Air Service (SAS) under extremely difficult and hazardous conditions. This redoubtable feat of arms almost certainly saved the Regiment from disbandment but it also overshadowed the achievements of the RAF in carrying out some 2,000 offensive sorties with just a handful of aircraft – avoiding the need to employ substantial ground forces. The Jebel Akhdar War is now little remembered, but it remains an impressive and instructive example of what joint operations can achieve with modest resources but with clear, consistent and fully aligned military and political strategies. This paper will outline the background to the campaign, describe the role of air power in defeating the rebels and identify the lessons of continuing relevance for counter-insurgency operations.

The Buraimi Dispute

The immediate cause of the fighting in Oman was the longstanding determination of Saudi Arabia to revise her frontiers and extend her influence in south eastern Arabia. After the Second World War these ambitions focused on the Buraimi Oasis (comprising eight villages, with a population of about 25,000, 200 miles to the north west of Muscat) where there was the prospect of significant oil reserves and a history of disputed sovereignty. In 1952 a small armed party from Saudi Arabia occupied one of the villages and refused to withdraw, despite protests.² The Sultan raised an army of some 8,000 tribesmen to expel the invaders, but was deterred from taking action by the British Government, who hoped to achieve a peaceful solution through the ongoing Anglo-Saudi boundary negotiations.³ A show of force by three Vampires from RAF Sharjah and the deployment of 100 Trucial Oman Scouts, failed to move the Saudis – although the low flying aircraft and leaflet drops brought strong protests about British intimidation and aggression.

A stalemate ensued with the British anxious to avoid confrontation but willing to show support for the Sultan by increasing the ground and air forces in the area, including the loan of 400 Aden Protectorate Levies and two flights of RAF armoured cars.⁴ This had little noticeable effect on the negotiations and by early 1953 it was evident that something else was needed. In the belief that a settlement was still possible, an aerial blockade was initiated to put additional pressure on the Saudi garrison. There were only a limited number of tracks converging on the oasis and it proved possible to detect approaching caravans out to several hundred miles and to use the Trucial Oman Scouts and RAF armoured cars to intercept any suspicious movements. The Vampires at Sharjah were accordingly replaced by Lancasters which had the necessary range and endurance to maintain the blockade. The RAF's visible presence also served to encourage those tribes that preferred to remain loyal to the Sultan. It was tedious work, however, involving low level flying in extremely high temperatures with the risk of severe turbulence. More worryingly, a number of incidents between dissident tribes and the Levies revealed Whitehall's continuing reluctance to authorise the use of live ammunition or the dropping of warning bombs. The RAF's preference was to use the traditional methods of air proscription: leaflet warnings about continued misconduct; further warnings to permit safe evacuation; and the destruction of selected targets (generally villages or fortified towers). The Air Staff protested that:

'There will be no solution to this frontier problem in south-eastern Arabia as long as we are denied the opportunity to exercise our proper and well tried methods of air control. In the meantime, we are committed to the present protracted and ineffective aerial reconnaissance to which there is no end in sight.'⁵

The Air Staff may, therefore, have been encouraged by a *Time Magazine* report that described the RAF's efforts as a 'sort of comic-opera blockade'.⁶ The efforts to isolate the Saudis continued through the remainder of 1953, the only change being the replacement of the Lancasters by a flight of six, unarmed, Anson communications aircraft. Eventually, in the summer of 1954, the Anglo-Saudi negotiations produced an outcome. It was agreed that Buraimi and all



The Vampires and Lancasters that had initially been deployed in response to the Buraimi Dispute were soon replaced by the rather less aggressive Ansons of No 1417 Flt.

other disputed territory would be evacuated – other than a small police force from both sides – pending the outcome of a joint arbitration tribunal.⁷ The aerial blockade was lifted and the RAF presence at Sharjah reduced to a small detachment.

In due course, British frustration at the slow progress being made with the arbitration process and a suspicion that the Saudis were covertly reinforcing their police presence led to an air/land operation in October 1955 to expel them. The RAF provided Lincoln heavy bombers as well as transport aircraft to move in the necessary ground forces. Full control of the oasis was achieved at the cost of just nine casualties.

Although the Buraimi affair had apparently been successfully concluded, the British Government – sensitive to international opinion and wary of intervention by the United Nations – had shown itself reluctant to employ force of arms in support of its treaty obligations. In the process, it had done little to enhance the Sultan's authority and, arguably, had merely exposed the frailty of his position. More importantly, none of this had dented Saudi ambitions.

The Dispute in Central Oman

The territory of Muscat and Oman has not always been a single state; moreover, as we have seen, its external boundaries were not well defined. Although Muscat dominates the coastal periphery, the tribes of the interior have generally regarded their spiritual leader, the Imam, based in Nizwa, as having greater authority. It was only in 1920 that

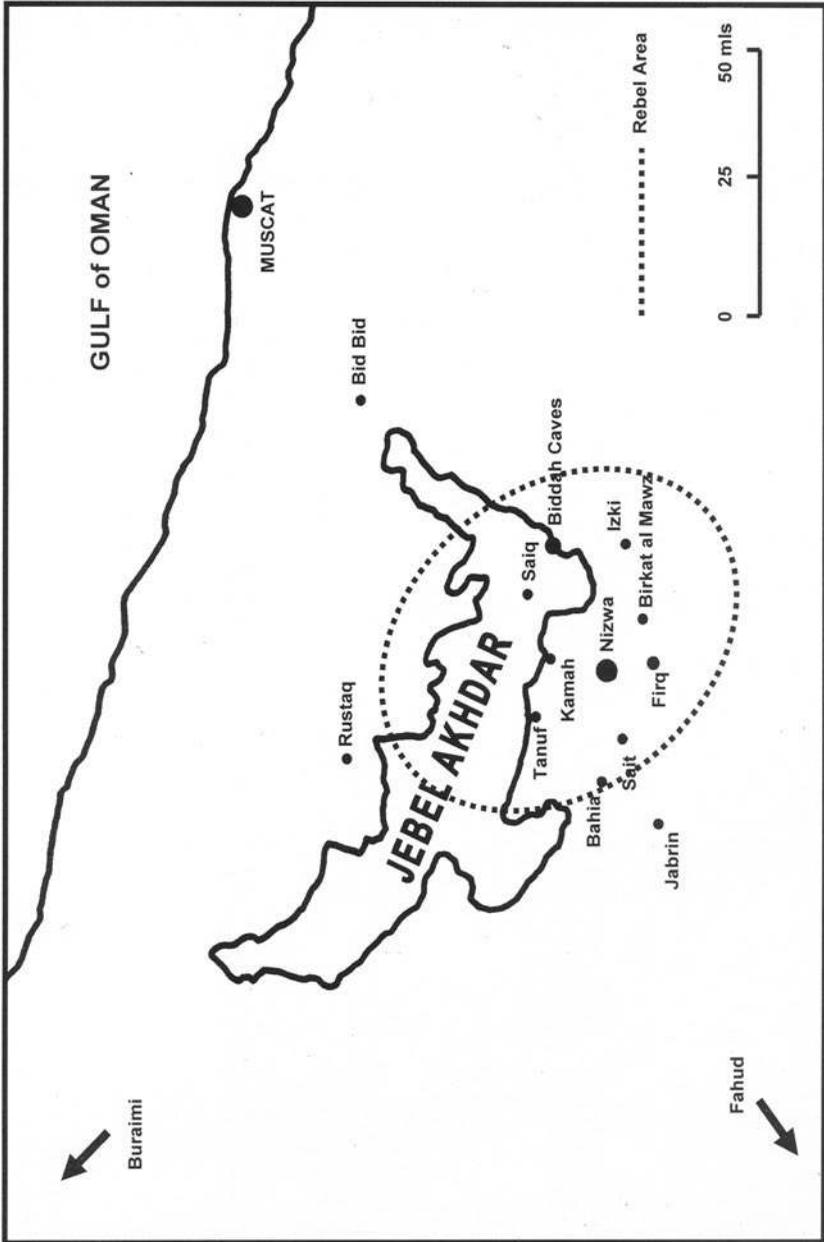


When it was decided to take positive action over Buraimi, the big stick was represented by Lincolns of No 1426 Flt. (J B Stephens)

the Sultan of Muscat was formally recognised as having authority throughout Muscat *and* Oman.⁸ When the Imam died in May 1954, a successor Ghalib bin Ali was appointed without reference to the Sultan. Ghalib's brother, Talib bin Ali, had ambitions to break free of the Sultan's control and established links with both Egypt and Saudi Arabia. One of Ghalib's first actions was to declare the oil concessions granted by the Sultan as invalid. Meanwhile, an Imamate office was opened in Cairo pending admission to the Arab League.

When the Saudis were finally ejected from Buraimi in October 1955, the Sultan decided to act against the Imam. In early December he ordered the Muscat and Oman Field Force (MOFF) to occupy Ibbri.⁹ No resistance was offered to the motorised column which then moved quickly to occupy Bahla, Rustaq and finally Nizwa. The Sultan himself travelled to Nizwa to accept homage from the tribes and to announce that the office of Imam had been abolished. Ghalib was allowed to return to his home village although his brother Talib evaded capture. The immediate threat posed by the Imam's ambitions had been removed, but the Sultan still left a small garrison of the MOFF in the Nizwa area to ensure future good behaviour. Meanwhile, Talib found refuge in Saudi Arabia where, over the course of the next year, he assembled, trained and armed several hundred supporters who would eventually form the basis of an Omani Liberation Army.

The 1956 Suez crisis did not impact directly on Oman, but the weakening of British authority across the Middle East provided





Venom FB 4 of No 8 Sqn.

encouragement to those determined to challenge existing borders or bent on overthrowing the old order. On 14 June 1957, Talib and about 200 heavily armed followers landed at two locations on the coast near Muscat.¹⁰ Joining up with Ghalib, the brothers travelled to Wadi Ali in the shadow of the Jebel Akhdar, where the white flag of revolt was raised. Other leaders rushed to join them, including Suleiman bin Himayer, the ‘Lord of the Green Mountain’, and chief of the Bani Riyam tribe who lived on Jebel Akhdar and in the surrounding villages.¹¹ The MOFF tried to arrest Talib but were quickly forced to withdraw under constant attack, suffering heavy casualties and losing most of their vehicles in the process. Nizwa itself fell to the rebels on 17 July.

Talib’s rebellion had been intended to form one of two simultaneous uprisings, the second being in the Sharqiyah area east of the Jebel and south of Muscat. In the event, Talib arrived later than planned by which time the Sultan had imprisoned the Sharqiyah rebels. Although the situation might therefore have been a lot worse (from the Sultan’s perspective), the defeat of the MOFF meant that there was little chance that the Sultan could deal with Talib on his own. Accordingly, he called on the British Government for help.¹² Given the very real danger that the Sultan would lose control of the interior – with serious implications for the entire region – the Government agreed to his request. To avoid wider diplomatic repercussions, it was decided to move quickly, but with minimum force. Three companies of 1st Battalion, The Cameronians, were immediately flown in by the RAF (including one company recalled from Kenya) while a fourth company was placed at 24 hours readiness to move. Three frigates were diverted to the Gulf, to prevent any

further reinforcement of the rebels by sea, while Venoms and Shackletons, together with Beverley, Hastings, Pembroke and Valetta transports, were deployed forward to Bahrain and Sharjah.

The plan was to use air power to weaken the rebel resolve sufficient to allow the Sultan's forces to re-occupy the area. Under Operation BLACK MAGIC, the region to the south of Jebel Akhdar (centred on Nizwa) was formally proscribed.¹³ Proscription was, in effect, an inwards blockade that denied the inhabitants of the proscribed towns or villages the opportunity to travel or to work in their fields during daylight hours – on pain of attack. It aimed to disrupt agriculture and trade to such an extent that the tribes would capitulate. To achieve effect, it required a permanent air presence and the willingness to employ force when the proscription was broken.

The first phase, commencing on 19 July, involved intensive photographic and visual reconnaissance to identify the extent of the rebel area and their strongholds (noting those villages not flying the Sultan's red flag while recognising that white flags might indicate surrender rather than rebellion!). Much of the existing mapping was found to be inaccurate or misleading and provided no reliable information on tracks, watering holes or spot heights. Although the proscribed area was over 350 miles from Bahrain, and 220 miles from Sharjah, the endurance of the Shackletons enabled at least one aircraft to be constantly overhead during daylight hours, each mission lasting 9-10 hours.

Commencing on 24 July, the fortified towers at Izki, Nizwa, Tanuf, Birkat al Mawz, Bahla and Firq were attacked on successive days. Each operation, using rockets and cannon fire, was preceded by warning leaflets (dropped 48 hours in advance) while further leaflets were dropped during the course of the attacks repeating the proscription requirements.¹⁴ The fort at Izki was badly damaged by Venoms, although the thick walls of the main tower at Nizwa proved more resilient against rockets. The barracks at Firq were also heavily attacked. Little or no movement was seen – other than two vehicles that were set on fire – indicating that the warnings had been successful but many more red flags were reported once the Venoms had departed. Regular patrols using both Venoms and Shackletons kept up the pressure on the rebels while Meteors and Canberras continued to provide photographic coverage. By now, it was estimated that Talib's



A Shackleton MR 2 of No 37 Sqn.

forces consisted of some 1,000 dissidents concentrated in the area bounded by Nizwa, Firq, Tanuf and Bahla.

Ground operations commenced on 6 August with the Sultan's forces advancing south from Bid Bid towards Izki, while the Cameronians and Trucial Oman Scouts, together with a troop of armoured cars, advanced north from Fahud, via Izz, towards Firq. The armoured cars, with additional Land Rovers, trucks and water-bowsers, had all been flown into an improvised desert strip at Fahud by the RAF. The summer heat was intense, as was the dust, but both columns were provided with close air support, directed by accompanying RAF air contact teams. Venoms and Shackletons were used to remove road blocks and to destroy rebel strong-points using their considerable fire power. The Venoms were armed with four 20mm cannon as well as carrying eight 3-inch rockets with a 60 lb warhead while the Shackletons could drop up to sixty 20 lb fragmentation bombs as well as being equipped with a forward turret armed with twin 20mm cannon.

The rebels occupying Firq put up a strong resistance, despite the weight of rocket and cannon fire.¹⁵ However, a combination of day and night attacks saw the town captured on 11 August. Throughout this operation the Venom support was excellent.

'The pilots' accuracy was remarkable and they were quick to locate and attack targets that must have been difficult to spot in that bare terrain. During the attack . . . the Venoms operated a 'cab rank' with a small air contact team with the forward troops, whilst overhead Shackletons circled 'like hens watching their chicks buzzing below.'¹⁶

Nizwa was captured the next day, allowing the two columns to link



The abandoned ruins of Tanuf. (Laurence Garey)

up at Birkat al Mawz. Unfortunately, the three rebel leaders, Ghalib, Talib and Suleiman had avoided the encircling columns. A new civil administration was established in Nizwa but to secure the area against further rebellion, the forts at Tanuf and Izki were demolished by setting explosive charges while the fortified towers at Sait and Ghumer were destroyed by Venom rocket fire.¹⁷

Unlike the long drawn out struggle at Buraimi, the Sultan's rule had been convincingly re-established in less than four weeks. Although the ring-leaders had escaped, the British Government took the opportunity to withdraw most of its forces – leaving only a few aircraft at Sharjah – in the belief that the MOFF would be able to remove the last vestiges of resistance.¹⁸

The Siege of Jebel Akhdar

The remaining rebels, perhaps numbering no more than 600,¹⁹ set up camp in the vicinity of Saiq, on the southern side of the Jebel.²⁰ Numerous large caves were to be found in the limestone which provided natural shelters against bombing or rocket attack. The plateau was bounded by near vertical rock walls and steep escarpments cut by deep wadis which provided the only lines of communication. These were often little more than narrow paths, only passable in single file, and so steep that they could be held by just a handful of lightly armed defenders. Even without opposition, climbing the 6,000 feet to the plateau in the heat of the day represented an immense physical challenge that demanded a ready supply of water and high levels of fitness.

The first attempt to dislodge the rebels took place on 25 September when the Sultan's forces, assisted by a single Shackleton, advanced to within 8 miles of Saiq before being ambushed. The Shackleton was able to suppress the enemy fire, after some initial difficulty locating the rebel positions in the heavily shadowed wadi, but the patrol was still forced to retreat.

An aerial blockade was now imposed, but the size of the Jebel and the difficulty of spotting movement meant that this was much less effective than at Buraimi. Meanwhile, Talib became increasingly adventurous and moved off the Jebel on several occasions to assert his authority over the local villages and to mine the dirt roads. As a result, the area around the mountains was soon littered with wrecked vehicles.²¹ A further attempt to dislodge the rebels occurred on 15 November with an attack on the village of Bani Al Habib. Full air support was provided by Venoms and Shackletons – the latter using 20 lb fragmentation bombs. On one occasion, in an effort to achieve greater precision, these were dropped from below the briefed safety height leaving the Shackleton to return to Masirah with more than eighty holes in the fuselage and wings.²² The advance continued, supported by supplies dropped by Pioneers and Venoms using rocket and cannon fire against snipers on the upper slopes. Progress slowed, however, and after a further day the attack was called off – still well short of the objective.

An important development, at least for the longer term, was the visit to Oman by the Under Secretary of State for War, Julian Amery, in January 1958. Following discussions with the Sultan, it was agreed to provide additional civil and military assistance, including gifts of equipment, and to create an air force with pilots seconded from the RAF. These steps recognised the need to address the wider implications of the insurgency (both political and economic) and to provide the Sultan's Armed Forces with greater indigenous capability – something that would more than prove its worth during the Dhofar campaign.²³

Over the next six months the military effort focused on trying to tighten the aerial blockade. A 'sky-shouting' Pembroke (broadcasting aerial messages in English and Arabic, as well as a selection of music from 'High Society') was brought in, together with a leaflet dropping campaign designed to weaken Talib's support amongst the villagers.



One of No 37 Sqn's Shackletons being bombed up with 1,000 pounders at Khormaksar.

The Pembroke was of questionable value as the rebels sent a message complaining that they could not hear what was being broadcast.²⁴ On another occasion, the aircraft was so badly hit by small arms fire that the pilot had to make an emergency landing at Firq – after jettisoning the loudspeakers. Thereafter, ‘psyops’ were conducted by flying in two 5.5 inch howitzers from Aden and firing daily (but at irregular hours) on the plateau from the valley below.

Meanwhile, the air campaign increased in intensity, both Venoms and Shackletons being employed in a sustained programme of attacks on water supplies, crops and livestock. The Shackletons now flew out of Masirah Island, some 175 miles to the south of the Jebel Akhdar. This reduced the transit time, compared to Bahrain or Sharjah, as well as allowing operations to be conducted largely out of the public eye.

Cultivation on the Jebel Akhdar plateau depended upon a system of ancient irrigation channels (*falaj*), including aqueducts, water tanks and dams, terraced fields and wells.²⁵ The use of 1,000 lb bombs was authorised for the first time, but this was more challenging than it might seem as the Shackleton crews were trained in anti-submarine warfare rather than bombing. There was no reliable topographic information, making the standard bombsight ineffective. Heights had to be estimated, which greatly reduced accuracy. However, if the Shackletons dropped lower than 8,000 feet, to ensure greater precision, they inevitably came within range of heavy small arms fire (including .5 inch Brownings).

There were few signs that Talib was ready to surrender. In fact, he grew stronger through the early part of 1958, gaining new recruits and additional weapons and money smuggled in from the coast – notwithstanding the naval and aerial blockade. In response, a further squadron of Trucial Oman Scouts and two troops of armoured cars were deployed to the area to bolster the investing forces. Air operations continued against the plateau during the course of which the RAF suffered its only fatality of the campaign when Flt Lt Owen Watkinson, from No 8 Sqn's detachment at Sharjah, crashed in his Venom after failing to pull out of a strafing attack. His grave can still be found near the village of Saiq, with substantial remains of his aircraft.²⁶ (*See pages 151-152*)

It was argued that the only solution lay in a full scale military operation. Options included a parachute descent onto the plateau or a helicopter-borne assault. Both strategies looked extremely risky given the high altitude and the potential resistance.²⁷ The small carrying capacity of the available helicopters suggested that it would take some time to assemble a strong enough force to withstand a rebel counter-attack. The final proposal involved a four-battalion attack on the Jebel, including a battalion-sized airborne assault, together with substantial air assets and an enhanced naval presence. Not surprisingly, given the Cabinet's reluctance to deploy any more regular units, this plan was rejected out of hand.²⁸

Part of the explanation for this rejection, beyond political sensitivities, was growing evidence that the air operations were at last beginning to have an effect. During the week ending 12 September, Shackletons dropped 148 1,000 lb bombs and the Venoms fired 40 rockets – together with large quantities of 20mm ammunition.²⁹ Intelligence reported casualties amongst the rebels while there were stories that some villagers had urged the Imam to surrender.

A radically different approach was now developed that envisaged a squadron of the SAS scaling the mountain to secure a route for the Sultan's forces to capture the plateau. This would involve fewer ground units, although it still demanded substantial air support. The revised proposals were formally agreed by the Chief of the Defence Staff on 13 November. The lead SAS elements actually arrived in late October, with a full squadron (80 personnel) arriving from Malaya (via Masirah) in two Beverleys on 18 November. During this period,



The Pembrokes of No 1417 Flt proved their worth during the Jebel Akhdar War and in October 1958, the unit was redesignated to become No 152 Sqn whose markings this one wears. (E Taylor)

there was a temporary pause in the bombing to allow negotiations to take place as Talib had indicated a desire to surrender. It soon became clear, however, that this was merely a ruse to gain some respite from the blockade so the air campaign was resumed on 22 November.

Patrols by the SAS started almost immediately from posts located at both the southern and northern approaches to the Jebel. The intention was to flush out the rebels and map the routes to the plateau. These patrols were largely conducted at night as moving in the heat of the day, in the face of well-concealed snipers and machine gun posts, was impractical, if not suicidal.³⁰ Air attacks continued on known rebel positions, including caves, sangars and machine-gun posts while Venoms provided additional fire power, allowing patrols to disengage safely when counter-attacked. Although some early successes were achieved, and significant numbers of rebels were killed or wounded, the quality and strength of the opposition led to the decision to fly in a second SAS squadron.

The final assault took place on the night of 26/27 January 1959 using a route discovered through aerial reconnaissance. After a gruelling nine-and-a-half-hour climb up a narrow track, eliminating an enemy outpost on the way, the SAS reached the plateau and dug in to await the rebel counter-attack. To make better time, they had had to abandon their heavy packs en-route, and were extremely relieved, therefore, to receive nine containers of supplies in a dawn air drop from three Pembrokes. The arrival of these unarmed transport aircraft

broke the last vestiges of rebel resolve as the descending stores (under pink canopies that served as temporary tents) were mistaken for paratroops. The anticipated counter-attack never materialised and the entire plateau was occupied the next day without further fighting. The cave that had served as Talib's headquarters was discovered, together with abandoned arms and documents. The rebellion literally melted away, together with the main leaders who found refuge elsewhere in the Middle East. According to *The Times*, the SAS operation had been 'a brilliant example of economy in the use of force.'³¹

The revolt was now effectively over. In fact, it was quickly discovered that the blockade had been far more effective than had been imagined and many tribesmen were close to starvation.³² Bringing in food supplies therefore became the main priority. Some sporadic activity in the form of sabotage and mine-laying continued for a few more years but there was no longer any appetite for outright rebellion, either on the Jebel or across the wider Nizwa region.³³ The Sultan's authority over the interior was now complete, although, as a precaution, an airstrip was constructed on the plateau together with an access road from the base of the Jebel.

CONCLUSIONS

The efforts of the SAS in securing the Jebel Akhdar, and eliminating the last vestiges of the rebellion, have tended to obscure the earlier phases of the war, as well as the RAF's overall contribution. Since the successful night assault is credited with saving the SAS from disbandment, this emphasis is perhaps understandable. Less explicable are some of the conclusions drawn about the role of air power in defeating the rebellion and in counter-insurgency operations in general.

It is claimed, for example, that the Jebel Akhdar War . . .

' . . . demonstrated the limitations of air power and the need to use ground forces to concentrate insurgents before air operations could be of use.'³⁴

Another commentator, noting that air proscription had failed to subdue the rebels on the Jebel Akhdar, has observed that 'air supremacy was no substitute for action on the ground.'³⁵ Others have implied that the 'failure' of air proscription in Oman marked a turning

point in how counter-insurgency campaigns would in future be conducted.³⁶

There is, of course, an element of truth in these criticisms but it is simply wrong to suggest that air power failed. Air proscription – in the form of an aerial blockade – had clearly worked at Buraimi, although the lack of political will had limited how quickly this could be achieved. When there was a determination to act decisively, witness the British Government's response to the Sultan's request for assistance in July 1957, air power gave this political intent some very sharp teeth; within a matter of days.

It is also worth recalling that air proscription, as practised in Aden and the Protectorates, invariably involved ground forces or the threat of ground action in the form of the Aden Protectorate Levies and RAF armoured cars.³⁷ While some recalcitrant tribes did capitulate simply as a result of leaflet dropping, this ignores the key role of Political Officers. In essence, air control was about achieving political effect. The use of forward air strips facilitated this outcome by giving Political Officers access to the tribes (as well as providing a potential base for future air operations). Air proscription formed just one thread (albeit an important thread) in a continuing engagement with local rulers in which they permitted their actions to be constrained (and sometimes punished) in return for political (and often financial) advantage. Amongst the tribes of the Protectorate, the 'rules' of air proscription were understood and largely respected in as much as they allowed issues (generally banditry) to be resolved quickly with the minimum, if not the total absence, of casualties – while preserving the authority of all those involved.

Without the logistic and close air support provided by the RAF in the first phase of the Jebel Akhdar War, it is difficult to envisage how fewer than 200 British regulars and roughly the same number of local forces, could have seized Nizwa and the surrounding region from nearly 1,000 well-armed rebels backed by thousands of sympathetic villagers. Self-evidently, the involvement of external sponsors made defeating the insurgency more problematic than simply occupying territory – for both air and ground forces. The aerial blockade and bombing campaign certainly weakened tribal support for the rebellion but it was never going to deter Riyadh or Cairo from continuing to supply arms, money and equipment. However, physically severing

this life-line proved extremely difficult. As a result, the rebellion's centre of gravity became the Jebel itself. Removing Talib and his confederates from their power base would probably have been achieved over time, as attrition wore down their resolve, but time was not on the side of Government.³⁸ Military operations against the rebels, and the suffering inflicted on local tribesmen, fed the propaganda machine – allowing Britain to be portrayed as an imperialist power engaged in suppressing a popular uprising against a despotic ruler.

Recent work on counter-insurgencies and the role of air forces has recognised the essential contribution of air power, in partnership with ground forces.³⁹ Successful counter-insurgency requires a unity of effort across multiple agencies (including political and economic). An analysis of the RAF contribution to the Jebel Akhdar War makes this abundantly clear. Employing no more than 50 aircraft, and flying some 2,000 sorties,⁴⁰ air power delivered:

Speed – using the rapid deployment of ground forces and additional air assets to achieve operational and strategic surprise.

Sustainability – providing effective support to operations in the heat of the summer, over extremely difficult terrain, employing forward airstrips to sustain the advance and evacuate casualties.

Intelligence – creating an accurate picture of enemy held territory and progress of the close battle thus permitting the co-ordination of independent action by separate ground units on different lines of advance.

Fire Power – providing substantial fire power, beyond the small calibre weapons and limited indirect fire available to the ground forces.

Leverage – using the tactical and psychological impact of aircraft in the close air support role to permit lightly armed infantry to take and hold objectives otherwise beyond their reach.

Low Casualties – as in the Protectorates, air power largely obviated set piece battles or close-in fighting, thus minimising



Air control was never an exclusively 'air' concept and ground forces were also employed as and when appropriate. This picture shows DH 9As of No 55 Sqn co-operating with RAF armoured cars but they could have been British soldiers or local troops.

casualties on both sides.

Political Credibility – the use of aircraft represented a relatively low 'political' footprint (compared to ground forces), giving the Government more room for manoeuvre without drawing international criticism.

The Jebel Akhdar War was successful because military force was applied within a strategy that balanced the ends, the ways and the means. It is to be regretted that the achievements of the RAF have been overlooked in the wider debate about the efficacy and relevance of air control; as if one needs to choose between employing solely air power or solely ground power in conducting counter-insurgency operations. This polarisation has set the tone for much of the subsequent argument about the best way to tackle counter-insurgencies. As a result . . .

'Downplayed, taken for granted, or simply ignored, air power is usually the last thing that most military professionals think of when the topic of counter-insurgency is raised.'⁴¹

At times, it has appeared that the issue is more about primacy than military effect. The ‘either air power or ground power’ school of thought ignores the obvious conclusion that both are essential in any counter-insurgency campaign and that neither can be effective without clear political direction.

Notes:

¹ For a history of air power in the region see ‘RAF Air Operations in Southwest Arabia’, *Air Power, Insurgency and the ‘War on Terror’*, HMSO, London, 2008.

² Numbering some forty men under the command of Turki bin Abdulla.

³ Meagher, J B; ‘The Jebel Akhdar War, Oman 1954-1959’, *Marine Corps Command and Staff College* (Quantico, 1985). Meagher argues with some justification that if the Sultan had been allowed to act quickly and decisively, as he originally intended, the country might well have been spared the subsequent rebellion.

⁴ Pending recruiting action to bring the Trucial Oman Scouts up to a strength of 500.

⁵ Lee, D; *Flight from the Middle East* (London: HMSO, 1980) pp115-116.

⁶ *Time Magazine*, 5 October, 1953.

⁷ In October 1955, with the boundary discussions languishing, and with growing suspicion about Saudi intentions, it was decided to remove the Saudi police presence in Buraimi using the Sultan’s forces assisted by the RAF and the Trucial Oman Scouts. This was successfully completed with only a few minor casualties.

⁸ Under the Treaty of Sib.

⁹ The Muscat and Oman Field Force, later redesignated the Oman Regiment, comprised some 300 effectives.

¹⁰ Some sources, including TNA WO337/9 *Operations in Muscat and Oman 1952-1959*, put the number as closer to 70.

¹¹ Morris, J; *Sultan in Oman* (London: Faber, 1957), provides a vivid but less than flattering pen-picture of Suleiman.

¹² Lee, *op cit*, p125. Two days after the fall of Nizwa, in accordance with the 1951 Treaty of Friendship between the United Kingdom and Oman, the Sultan asked for the ‘maximum military and air support which our friend Her Majesty’s Government can give.’

¹³ The area to the south of Jebel Akhdar was divided into five sectors, numbered 1-5, east to west.

¹⁴ The Venoms could drop leaflets from their split flaps.

¹⁵ On 8 August, Flt Lt Turner, operating out of Bahrain in Shackleton WL800, flew close support for the attack on Firq in a sortie lasting over 10 hours. Some slight damage from small arms fire was experienced. Further close air support was provided on successive days until the town was captured.

¹⁶ TNA WO337/9.

¹⁷ Anon. ‘The Struggle for Liberation in Oman’, *MERIP Report* (Middle East Research and Information Project, Washington, April 1975). Tanuf lies ruined to this day. It was subsequently claimed that the RAF’s fierce bombing had destroyed the

village.

¹⁸ It has been suggested that a more vigorous pursuit of the rebels would have led to their total defeat, avoiding the need to lay siege to Jebel Akhdar. TNA WO337/9, p18.

¹⁹ There are conflicting assessments of rebel numbers, ranging from less than 150 to 600 hard core members.

²⁰ Other rebel villages included Sharaijah, Al Ain, Al Aqor and Bani Habib.

²¹ De la Billiere, P; *Looking for Trouble* (London: Harper Collins, 1994) p135. Talib reputedly laid at least 120 anti-tank mines during the course of 1958.

²² Flt Lt Watson in Shackleton WL801. The incident occurred during their second sortie of the day.

²³ Gilchrist, M A; 'Dhofar: A Case Study in the Application of Air Power', *Sultans Armed Forces Newsletter*, 2002.

²⁴ Meagher, *op cit*, p10.

²⁵ TNA WO337/8 *Reconnaissance Report – Jebel Akhdar*.

²⁶ Richardson, C G; *Tales from a Desert Island* (Lancaster: Scotforth Books, 2003) p211. The crash occurred on 30 August 1958. According to Colin Richardson, Flt Lt Owen Watkinson flying Venom FB4 (WR552) crashed into the plateau while strafing goats.

²⁷ The few Sycamore helicopters that were available could only carry three soldiers with their equipment.

²⁸ Kitson, F; *Bunch of Five* (London: Faber, 1977) pp163-201. Frank Kitson provides an excellent description of how these political concerns constrained the military planners in their efforts to bring the siege to a close.

²⁹ Additional attacks were conducted by Sea Venom and Seahawk Aircraft embarked on HMS *Bulwark*.

³⁰ De la Billiere, *op cit*, pp131-151.

³¹ Cairo Radio reported that in the attack 120,000 British troops had been employed while Moscow embellished the story further, claiming 13,000 paratroopers had been dropped. In the last month of fighting total casualties were: Sultan's Armed Forces (including British), 13 killed and 57 wounded: Rebels, 176 killed and 57 wounded. TNA WO337/9 refers.

³² Kitson, *op cit*, p201.

³³ *Ibid*, p150. 'The inhabitants of the plateau were in a wretched state: their villages had been wrecked, their fields left untilled. The ancient Falaj system was in ruins and the people themselves had been living miserably in caves.'

³⁴ Peterson, J E; *Defending Arabia* (London: Croom Helm, 1986) p84.

³⁵ Mawby, S; 'From Tribal Rebellions to Revolution: British Counter-Insurgency Operations in Southwest Arabia 1955-67', *Electronic Journal of International History* (Institute of Historical Research, University of London, December 2000) paras 23-26.

³⁶ For example, Hoffman has written that 'one of the main results of this short-lived conflict was the abandonment of the traditional policy of air control. Faced for the first time by a truly formidable enemy, Britain realised that it was no longer possible to control the restless tribes or maintain order on the Arabian Peninsula through air power alone.' Hoffman, B; *British Air Power in Peripheral Conflict 1919-1976* (Santa Monica: RAND Corporation, Report R-3749, 1989).

³⁷ Witness the successful expulsion of Yemeni forces from the Western Protectorate during 1925 which involved aerial attacks on forts and other strongholds in conjunction with ground operations by friendly tribes.

³⁸ Kitson, *op cit*, p195. A point recognised by Kitson, who comments that ‘the combined effect of air action, the blockade and patrolling done by the SAS squadron had gravely weakened the enemy position.’

³⁹ See, for example, Corum, J S & Johnson, W R; *Air Power in Small Wars* (Lawrence: University Press of Kansas, 2003) and Vick, A J; *Air Power in the New Counterinsurgency Era* (Santa Monica: RAND Corporation Report, MG-509, 2006).

⁴⁰ Lee, *op cit*, p138. A total of 429 Shackleton sorties were flown in which 1,540 tons of bombs were dropped and 7,000 rounds of 20mm cannon fired. Nearly 1,500 Venom sorties were flown in which 3,718 rockets were fired together with 271,060 rounds of 20mm ammunition.

⁴¹ Vick, *op cit*, p109.

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THE RAF AND ADEN, 1928-1967

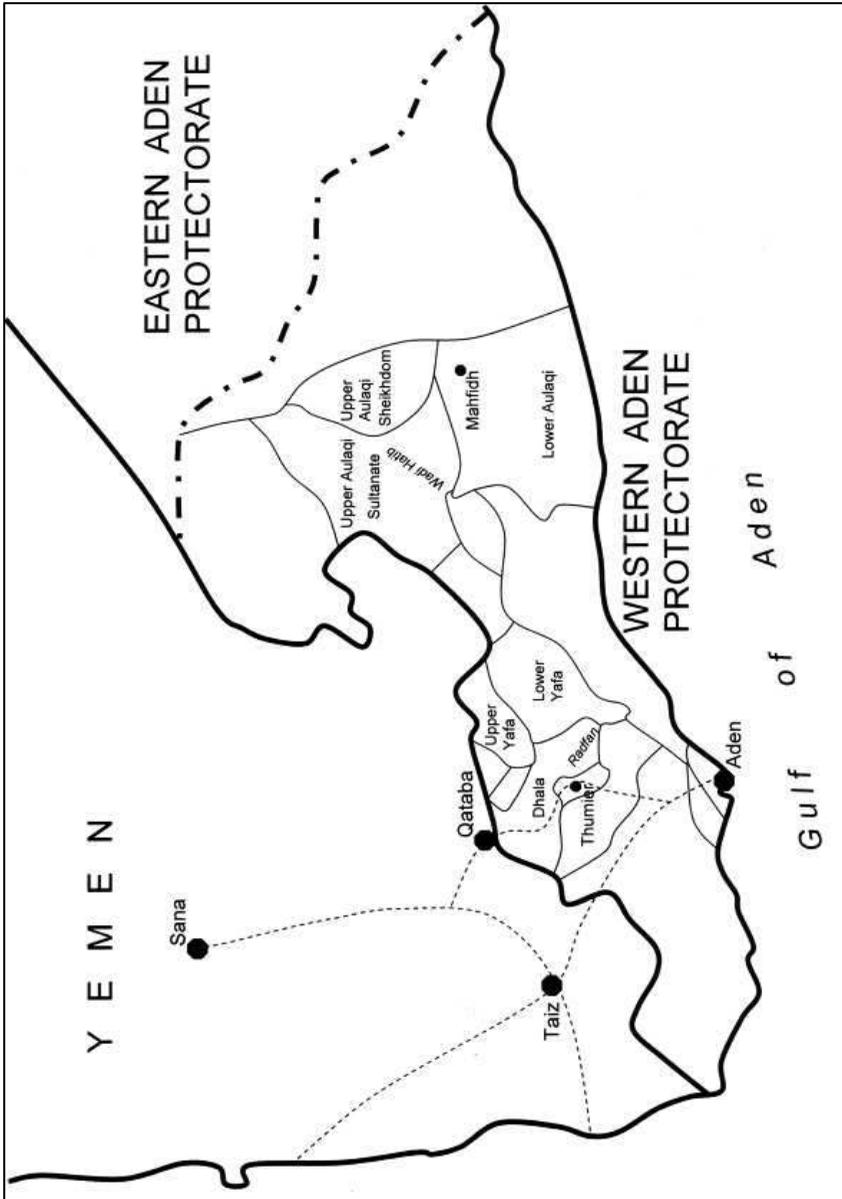
by Dr Sebastian Ritchie



Seb Ritchie obtained his PhD from King's College, London, in 1994, and lectured for three years at the University of Manchester before joining the Air Historical Branch. He is the author of numerous classified histories of recent RAF operations in Iraq and Yugoslavia, and has also lectured and published widely on aspects of air power and air operations in the Second World War. In addition to numerous articles on aspects of the RAF's history, he has written two books – Industry and Air Power, and Our Man in Yugoslavia: The Story of a Secret Service Operative.

This paper surveys RAF activity in Aden from the beginning of the air policing period in 1928 through to Britain's final withdrawal in 1967. The starting point for any examination of RAF operations in Aden must always be Air Chief Marshal Sir David Lee's official history, *Flight from the Middle East*, but Lee's brief was, of course, confined to the post-Second World War period.¹ A longer-term view is employed here in an attempt to place the post-war events in their correct historical context. At the same time it is important to remember that the scope of Lee's history – written in the 1970s – was restricted by security considerations and political sensitivities. Consequently there was a great deal that could not be said, particularly about the relationship between political developments and military operations, and about the conflict in the Aden-Yemen frontier area. Fortunately no such constraints apply today, and it is possible on the basis of documents released into the National Archives to examine these issues in some detail.

Situated in the far south of Arabia, the region referred to as Aden in the period with which we are concerned was not a nation state in the modern sense. The port of Aden was of very considerable strategic value to Britain and together with its immediate environs had the status of a Crown Colony. Otherwise the region was inhabited by many different Arab tribes, divided between numerous factions, and



Aden, showing principal locations mention in text.

Britain's presence was based on treaties with their rulers promising protection in return for loyalty. For this reason – beyond the Crown Colony – Aden became known as a Protectorate, which was in time divided into Western and Eastern Protectorates for administrative reasons.

Until 1918 the other major colonial power in southern Arabia was Turkey; a frontier demarcating the areas under British and Turkish influence was agreed between 1904 and 1914. During the First World War the Turks crossed the border and extended their presence throughout the British Protectorates, but they were never strong enough to capture the Crown Colony. Following the Turkish withdrawal in 1918 the area north of the border became an independent state – The Yemen. And the Yemeni Imam immediately declared his refusal to accept the Anglo-Turkish frontier agreements and laid claim to the entirety of southern Arabia.²

The Yemenis posed a constant threat to British interests in the region from then on, but they were for many years the only effective source of opposition. The treaty system was ultimately restored across Aden; hence the traditional tribal leaders continued to provide the foundation of British government. The system remained viable until after the Second World War, but a terminal decline then began. The causes were many and varied, but they included economic development, associated population shifts, the growth of mass political movements espousing Arab nationalism, anti-colonialism and socialism, the radicalisation of tribal politics and further external interference from The Yemen and also Egypt. The authority of Aden's sultans, sheiks and emirs was steadily undermined together with the British power base.³

Political reform in Aden was too belated, too limited, and far too obviously designed to serve British interests. It cannot of course be argued that earlier reforms would have fundamentally altered the course of history: Britain would still almost certainly have quit Aden in the late 1960s or early 1970s as part of the more general decolonisation process. But if her administrators had responded more flexibly to the challenges of the post-war years, the withdrawal could perhaps have taken place in a more stable atmosphere and a regime more sympathetic to western interests might have been left behind. As it was, final decolonisation was more problematic in Aden than in

almost any other part of the British Empire.

This very general opening survey is necessary to illustrate the fact that the operations conducted by the RAF (and the other armed forces) in this theatre did not take place in a vacuum. Fundamentally the opposition to British rule in Aden was political in character and military action was only ever likely to address this political causation to a limited degree. At best, military action sometimes offered a viable short-term solution to Yemeni encroachment or tribal dissidence; at worst it turned out to be completely irrelevant to the broader revolutionary currents sweeping across southern Arabia in the 1950s and '60s.

The situation in Aden between the two World Wars was broadly amenable to typical RAF air policing measures. As in Iraq, the British government was seeking to reduce the cost of defence, but at the same time searching for a way to project force economically into remote and inaccessible parts of the Protectorates; and, as in Iraq, there was a serious cross-border threat – the Yemenis were extending their influence south of the frontier, and were edging closer and closer to Aden Colony. Air power offered a solution. And so it was that in 1928 the task of defending Aden passed from the War Office to the Air Ministry, the bulk of the British garrison was withdrawn, and the RAF's presence was increased from a single flight to a full squadron – 8 Squadron – which was to operate in conjunction with locally raised Levies (the Aden Protectorate Levies – APL) and friendly tribal forces.⁴

The RAF was compelled to deal with the frontier problem first and then address the internal security situation. The initial campaign against The Yemen began in June 1928 and ended in August, when the Imam prohibited his forces from further incursions south of the border. Tactics were very similar to those employed by the Americans in Afghanistan in 2001. All ground operations were conducted by Protectorate tribes, ground and air action being co-ordinated by a single RAF intelligence officer and a wireless operator. There was in fact very little conflict on the ground, and casualties were therefore minimal on both sides. Much was achieved through the morale effect of air power: the Yemenis were overawed, and rarely offered determined resistance. They were expelled from Aden for a financial outlay of just £8,500 over and above normal peacetime spending



Shortly after arriving in Aden with DH 9As in 1927, No 8 Sqn re-equipped with Fairey IIIFs which it flew until these were replaced by Vincents in 1935.

levels. In short, this initial application of air policing in Aden was spectacularly successful.⁵

Needless to say, this did not totally eliminate the Yemeni threat; but while there was some limited further encroachment into Aden, it was mostly on a hit-and-run basis. There was no longer any systematic Yemeni pursuit of territory within the Protectorates. In October 1933 one of these raids led to the issue of an ultimatum to the Imam threatening further air action.⁶ Again, he decided to comply with British demands, but this exchange was then followed by talks which produced the Anglo-Yemeni Treaty of Friendship in the following year.⁷

One of the Imam's most important stipulations during the treaty negotiations was that Yemeni merchants should have secure and unhindered use of the few trade routes that ran between the frontier and Aden port. Assurances were duly given by the British authorities, but the first Yemeni caravans to attempt the journey thereafter came under attack from Protectorate tribes. The British Resident Advisor in Aden brought strong pressure to bear on the RAF to deal with the

perpetrators, and this led to two separate operations during 1934 and to some further actions in the later 1930s.⁸ Despite this, raiding along the trade routes remained a problem right through to the 1960s.⁹

The maintenance of internal security in Aden was a more complex issue. The treaty system meant that even limited acts of aggression by one tribe against another had political implications: the treaties were obviously of no value to the tribes if Britain did not act in their defence. Equally, the prevailing view among the British authorities was that acts of dissidence could not be ignored, for this would be interpreted as a sign of weakness and would therefore encourage further unrest. Hence air action could sometimes be initiated in response to apparently very minor transgressions. In 1929, for example, the Subehi tribe was targeted for more than a month following a single murder, and the theft of some livestock and two police camels.¹⁰

But before we accept the widely publicised view that the RAF spent its time in Aden ruthlessly and repeatedly bombing defenceless Arab tribes, there are a few points we should keep in mind. First, of course, there was an overriding political requirement to maintain British authority at minimal cost; air power was only ever employed at the request of the civil authorities.¹¹ Second, very few missions flown by the RAF in Aden in the inter-war period actually involved the release of weapons. The official records show that when the RAF took to the air it was primarily for reconnaissance or training purposes, while air presence, mapping and communications were also major commitments. During this time, discounting missions connected to The Yemen and the 1934 treaty, the RAF carried out on average just one live operation per year over the Aden Protectorates. Hostilities were rarely very protracted, and on several occasions a simple demonstration of firepower proved sufficient to bring dissident tribal factions into line.¹² Moreover, until 1935, the aircraft involved were Fairey IIIFs, which had a bomb load of only 500lb.¹³

Offensive missions were also subject to rigorous constraints. If weapon release was not merely demonstrative, the RAF would typically target property and sometimes crops and livestock – not people. Warnings were always issued if human habitations were to be bombed, so that invariably they were deserted by the time operations began. The aim, as the RAF repeatedly pointed out, was to disrupt the

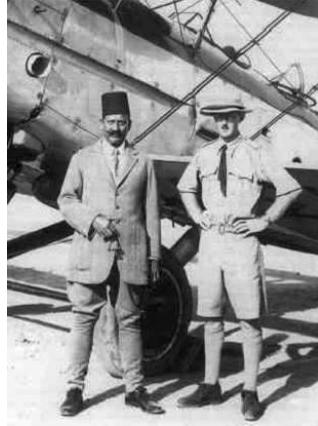


An attack on Al Heija on 22 September 1937, one of the few occasions when the RAF resorted to direct air action in Aden between the wars.

normal pattern of life – not to kill or maim – and casualty rates on the ground were consequently very low. A two-month operation against the Quteibi tribe in 1934 resulted in only six or seven fatalities, which were caused by tribesmen tampering with unexploded bombs rather than by direct air attack.¹⁴ On many occasions rebel groups capitulated after warnings were issued, making the use of force unnecessary.

Beyond this there were other means by which air power could be employed to maintain order. Upon taking responsibility for Aden's security the RAF began building a network of air strips across the Protectorates. This allowed both government and military personnel to reach remote areas far more easily than before. The flow of intelligence improved considerably, and the RAF appointed a number of specially trained intelligence officers to facilitate this process. As a result the authorities were often alerted to the potential for tribal conflict or unrest at an early stage, and it was possible for political officers to intervene before any overt outbreak of hostilities or dissidence.¹⁵

On the right, Flt Lt Aubrey Rickards who joined the Air Staff of Aden Command in March 1928 as its first Intelligence Officer.



Air policing was employed very successfully in Aden in the 1930s, but for the limited purpose of dealing economically with the Yemeni problem and with a minimal amount of tribal unrest. During the decade following the Second World War some far more formidable challenges emerged. Beyond the Suez Crisis there were no very obvious turning points. After Israel's creation in 1947 riots swept through Aden Colony, suggesting that some limited radicalisation had taken place among the population during the war. But the post-war development of the economy – particularly the oil industry and the port – drew in migrant workers (including many Yemenis) by the thousand, and they were to play a central role in the turbulence that finally culminated in Britain's withdrawal. Many of the migrants retained links with their villages, and this provided a conduit by which subversive political ideas spread to the Protectorates. North of the frontier, 1948 witnessed the accession of a new Yemeni Imam, who promptly repudiated the 1934 treaty with Britain and began supplying arms to rebellious Protectorate tribes. Tribal dissidence nevertheless gave few grounds for concern until the mid-1950s, when it began to assume more significant proportions.

With hindsight we can therefore see three major sources of opposition emerging in Aden by the mid-1950s consisting of radical political groups in Aden Colony, The Yemen, and the more rebellious tribal factions within the Protectorates. Here were the makings of a far more serious confrontation than the British had faced during the inter-war years. Initially, however, they were slow to grasp the severity of the threat. They certainly increased their military presence; Khormaksar air base in Aden Colony ultimately became the busiest station in the RAF.¹⁶ Tactics evolved: very few genuinely independent air proscription operations had ever been mounted in Aden, but by the



In the mid-1950s airlift was provided by the Khormaksar-based Valettas of the Aden Protectorate Communications and Support Squadron which became No 84 Sqn at the end of 1956. This one was photographed at Nairobi in 1958. (MAP)

mid-1950s virtually all internal security operations were jointly executed, ground forces playing an increasingly prominent role as it became possible to airlift troops into areas that had previously been beyond their reach.¹⁷ But even limited proposals for constitutional change were rejected out of hand. Most colonial administrators and senior officers were veterans of the air policing era, and were unwilling to accept that some fundamentally new political departures were required if stability was to be maintained. But even those who were more progressive in their outlook were left with very little room for manoeuvre, for in London both the government and the Chiefs of Staff were adamantly opposed to reform in Aden, which in their view could only weaken the British position.¹⁸

The extent of Yemeni backing for rebellious Protectorate tribes ultimately became clear in the mid-1950s, when the British suffered their first serious defeat. In 1954, after a series of disturbances along the remote Wadi Hatib, the Aden government decided to build a new fort at Robot. This isolated outpost quickly became the focus of tribal resistance, which was countered by typical proscription bombing techniques and by the airlift of troops into the affected area. Air operations were sustained around the Wadi Hatib throughout the second half of the year, and patrols were also mounted along the frontier in an attempt to interdict supplies from The Yemen. By December insurgent activity had declined considerably, but hostilities



Operating from up-country strips could be demanding on the aeroplanes. This Aden Communications Squadron Anson burst a tyre on take off from Air Ruseis on 4 June 1954. (MAP)

were renewed in the spring of 1955, when the rebels were again subjected to proscription-type measures by the RAF and (on the ground) the APL and British troops. Gradually it became clear that the Robot fort was a liability; it was too difficult to defend and maintain, and its presence merely encouraged tribal dissidence. After one further substantial airlift in July 1955 it was abandoned. Soon afterwards it was levelled by the insurgents.¹⁹

To the British it seemed clear that The Yemen was chiefly responsible for this setback, and additional steps were therefore taken to reduce the flow of supplies across the frontier. Air patrols were stepped up but the border was too long to be closed completely, so measures were instead initiated to deter the Imam from further interference. These are not especially well documented, but British strategy was apparently to engage Yemeni forces in the border area, presumably to divert the Imam's attention towards his own security and away from the Protectorates. There was no authorisation to mount unprovoked attacks into Yemeni territory and predictably enough the Yemenis were not always willing to initiate combat at times and places favourable to the British. So a system of 'spikes' developed:



A Venom FB 1 of No 8 Sqn at Khormaksar in 1955. (P H T Green)

one approach involved dangling targets in front of Yemeni gunners on the other side of the border, as No 8 Sqn's Operations Record Book describes:

'In view of the continued violation of the border by Yemen forces in the Qataba area near Dhala it was decided to launch an operation against them on 30 January [1958]. During the past few weeks Yemen forces have built up their strength in this area and an estimated 1,500 troops and irregulars together with machine guns, heavy machine guns (anti-aircraft) and artillery (75mm) were occupying well prepared positions on the south side of Qataba directly opposing the Protectorate fort of Sanah.

The operation started at 0700 hrs on 30 January when a troop of armoured cars of the 13/18 Hussars patrolled the border in an attempt to incite the Yemen forces to fire on them. In the event of this happening the Protectorate forces were then to launch a full-scale retaliation. Venom aircraft were flying a continuous 'Cab Rank' ten miles south of the area . . . However, it was not until 1000 hrs that the Yemen forces opened fire on the patrol.

Two minutes after the first shell was fired, a pair of Venoms rocketed both enemy guns and silenced them. From then on Venoms were continually rocketing and strafing Yemen positions to the East and South of Qataba, concentrating mainly

on gun positions and their accompanying sangers. The aircraft were not cleared to fire on the main Yemen troop positions.²⁰

Protectorate tribesmen were also sent into Yemen to undertake acts of sabotage and attacks on the Imam's troops. When the Yemenis responded by mounting their own operations across the frontier, such actions could again be used as a pretext for retaliation.²¹

Recent scholarship has criticised British policy in this period on two grounds. First, it is argued that the cross-border operations stimulated Yemeni protests to the United Nations, encouraging unwelcome criticism of Britain from around the world, and so restricting her later freedom of action. Second, the border war is said to have contributed significantly to the decline and ultimate collapse of the Yemeni imamate, opening the door to an Egyptian-backed republican regime which posed a very much greater threat to British interests in the region, and which almost immediately began a far more systematic and effective programme of agitation and subversion in Aden.²²

While there is some limited evidence to support the first of these contentions, the second is unquestionably exaggerated. The near-total cessation of Yemeni backing for dissident tribes in Aden in 1959 itself occurred for a variety of reasons and was not primarily the result of British pressure along the frontier. In the words of Air Vice-Marshal M L Heath, the Commander British Forces Arabian Peninsula from 1957-59, it was 'largely due to the internal affairs of The Yemen'.²³ At the same time Britain's perspective on the war was also changing. Policy-makers were becoming increasingly aware of the danger that, as Heath put it, 'in all probability Nasser's intention is eventually to overthrow the regime in The Yemen and establish a republic under Egyptian influence.'²⁴ Hence by mid-1959 the cessation of hostilities clearly served the interests of both The Yemen and Britain, and so it was that the war was halted more than two years before Heath's prediction was fulfilled. Britain did not exert any tangible influence on internal Yemeni affairs in this period.

Meanwhile, the British administration finally accepted the case for political reform. In 1958 it was decided that the Protectorates should be transformed into a self-governing Federation. At first this was simply viewed as a buffer zone for Aden Colony, but as it became

clear that Britain would also have to grant some form of self-government to the Colony, its potential merger into the Federation was soon suggested. A conservative federal constitution would enable Britain's traditional allies among the tribal rulers to dominate the Colony's more disruptive urban political forces. With a friendly government controlling the port, Britain's long-term use of its facilities would be guaranteed. Central to this strategy was the co-operation of the Protectorate tribes; but while the majority were dependable, there were in several areas factions opposed to the established tribal leaders, who were now all the more central to British plans. If the Federation was to stand any chance of survival, the threat posed by these dissident elements had to be removed. They therefore became the focus of British counter-insurgency operations between 1959 and 1961 – operations in which the RAF inevitably played a major part.²⁵

Again, recent research has sought to illustrate the shortcomings of this strategy. On the basis of a campaign against the Ahl Bubakr tribal faction in the Upper Aulaqi Sheikhdum it has been suggested that as a counter-insurgency weapon air power was ineffective. Allegedly, although employed with mounting intensity, aerial proscription was unable to overcome Ahl Bubakr resistance and 'the failure of air operations led to a punitive expedition into the proscribed area by ground forces, in this case, the Aden Protectorate Levies.' Furthermore, these operations are said to have been self-defeating because they accelerated the process by which formerly localised tribal unrest was turned against the British and the Federation. The rapid overthrow of established tribal leaders in 1967 is cited in support of this thesis.²⁶

There are two basic problems here. First, as we have already noted, by the late 1950s air power was rarely employed independently of ground operations in Aden, and this was certainly true of the campaign in the Upper Aulaqi Sheikhdum. The campaign extended from April 1959 to May 1960 and during this time there were two 'peaks' of air activity. The first occurred in August 1959. According to 8 Squadron's record, 'the operations were in support of Aden Protectorate Levy troops.'²⁷ Subsequently the operational tempo fluctuated and the records do not reveal any discernible trend either in the number of sorties flown or in the quantity of munitions released.



From 1958 No 84 Sqn's Valettas were supplemented and eventually replaced by Beverleys.

What is certain, however, is that the Aden authorities did not 'respond to the failure' of these preliminary operations 'by resorting to larger scale air attacks.'²⁸ No 8 Squadron flew 92 sorties over the Upper Aulaqi Sheikhdome in August 1959, but only 18 in September; in October they flew none at all. The tempo increased briefly in November when the squadron mounted 36 sorties in this area, but then declined again. There was virtually no operational flying over the Sheikhdome in February or March 1960.²⁹

The second peak then occurred in April and May. There was a limited amount of flying between the 2nd and the 8th of April (8 Squadron flew 17 sorties) but on the 12th an operation named DAMON was launched to soften up resistance prior to the deployment of 4 Battalion APL into the proscribed area for a reconnaissance in strength. Offensive flying in support of DAMON finished on the 14th and there were no further operational air missions until the 27th, shortly after the commencement of further activity on the ground. The 8 Squadron diarist recorded that

'Operation 'Outmost' commenced at first light on 25th April when troops of No 3 Battalion Aden Protectorate Levies were flown into Mahfidh in Beverley aircraft of No 84 Squadron. On

disembarkation, these troops moved north into the proscribed area south of Museinah, and at the same time No 4 Battalion Aden Protectorate Levies . . . moved into the area from the north.’

The operation then continued throughout May until the last of the dissidents fled into Yemen.³⁰

Hence it is quite wrong to suggest that ground operations were launched *after* intensified air attacks had failed to defeat the insurgents. In fact (in a pattern repeated in Helmand Province in Afghanistan in 2006) the peak periods of air activity *coincided* with the peak periods on the ground, and the records confirm that the air and ground operations were inextricably linked: the heaviest air bombardments were orchestrated to provide firepower for the APL. Therefore the campaign in the Upper Aulaqi Sheikhdom cannot reasonably be employed in support of any thesis concerning the effectiveness or ineffectiveness of air action against insurgencies. If we view the campaign as a failure, then clearly this outcome was the result of both air and ground action; if on the other hand we consider the operation to have been successful, then air power must deserve at least some of the credit.

Second, considerably more evidence would be required to demonstrate any tangible link between British counter-insurgency operations in the 1959-61 period and the events of August-November 1967. For whereas these operations were very localised, with attention being overwhelmingly focused on the Upper Aulaqi and Lower Yafa regions,³¹ the collapse of Aden’s traditional tribal elites in 1967 was general. It encompassed all the former British Protectorates, the majority of which had not recently been subjected to military action.³² Counter-insurgency operations may have exerted some influence in the few areas that were targeted, but other more important and far-reaching processes were evidently at work. British policy is more open to criticism on the grounds of its failure to mount an effective parallel information strategy to sell the new federal constitution to the Aden population as a whole. By contrast, in Lee’s words,

‘A virulent programme of [anti-British and anti-Federation] propaganda streamed out continually from Radio Cairo, Radio Sana and Radio Taiz. It was both clever and entertaining and

could be heard coming from transistor radios in almost every house and back street in Aden.³³

This comprehensive defeat in the information war had profound consequences. As a result, Aden's ailing traditional power structures gave way to new institutions which lacked the essential element of legitimacy, so that no one was prepared to defend them when they came under direct attack later in the decade.³⁴

By the beginning of 1962 little overt opposition to the Federation remained in the Protectorates. Where internal security operations were concerned both 1962 and 1963 were, from the RAF's perspective, quiet years and they were rarely called on to provide more than 'air presence'. Again, the main commitment was The Yemen in its new republican guise: border patrolling once more became a priority.³⁵ But in the meantime the situation within Aden Colony was deteriorating steadily. Strikes, rioting, and civil disobedience became increasingly commonplace, and an even greater threat emerged in the form of urban terrorism. The British armed forces had some experience of urban terrorism but by 1963 the scale of the problem in Aden was rapidly assuming unmanageable proportions. Unable to quell the urban insurgency but desperate for a means to demonstrate its authority and force projection capability, the British administration decided to launch a further operation against some of the more unruly Protectorate tribal factions. The result was the first Radfan expedition – Operation NUTCRACKER.

The British headquarters in Aden had changed from an air command to a joint command in 1959, and from a local command to a theatre command – Middle East Command – in 1961. The first commander of Middle East Command was an Air Chief Marshal (Sir Charles Elworthy), but in May 1963 he relinquished his post to Lieutenant General Sir Charles Harrington. Harrington viewed NUTCRACKER primarily as a land operation in which the RAF would play a supporting role to the ground forces. He was keen to assess the capability of the new Federation army, known as the Federal Regular Army, but they were to be augmented by regular British Army tanks, artillery and engineers.

Launched in January 1964, NUTCRACKER merely repeated the basic mistake that had been made a decade earlier in the Wadi Hatib.



A Hunter FGA9 of No 8 Sqn over the Radfan. (PRB-1-28429)

As an exercise in force projection it was quite successful. The air support was highly effective, as it should have been given the resources available and the RAF's extensive experience in theatre. But once the initial objective of NUTCRACKER had been achieved there was little option but to pull back from Radfan, for there were insufficient troops to garrison the area and maintain security across the rest of Aden. The insurgents then moved back in, while Yemeni and Egyptian radio claimed that a great victory had been won over so-called 'puppet imperialist forces'.³⁶

So the decision was taken to mount a second operation. The British ground component was enlarged by Parachute Regiment, Royal Marine and Special Forces elements, as well as by other regular Army units. The first incursion at the beginning of May was partly planned as an airborne operation, but insurgents intercepted the SAS team which had been tasked with marking the drop zone. The airlift was therefore cancelled, leaving 45 Commando and 3 PARA to advance into the Radfan mountains largely on foot. The offensive developed into a classic exercise in air-land integration, as 3 PARA often found themselves beyond the range of their artillery. Ground attack aircraft – Hunters – were frequently called in to strike rebel forces only just ahead of forward British units. In one instance a British soldier was injured by a spent cartridge case ejected from a Hunter overhead.³⁷

Once British forces had reached their initial objectives, the nearby airstrip at Thumier was enlarged so that additional ground troops could be brought into Radfan, and two tactical landing grounds were established known as Monk's Field and Blair's Field. While the build up was in progress frequent air strikes maintained pressure on the



Fort Thumier. Left, Federal National Guards (PRB-1-28431) and, right, gunners of No 37 Sqn RAF Regt. (PRB-1-28424)

insurgent tribes. The subsequent advance towards Bakri Ridge was supported by artillery which had been airlifted by helicopter into mountain-top positions overlooking the rebel stronghold. But the operation also witnessed further exceptional collaboration between 3 PARA and the Hunter squadrons.

After the ridge had been taken the final objective became the 5,500ft Jebel Huriyah, which could not be approached without the preliminary capture of two wadis. When elements of 3 PARA found themselves cut off and under fire in the Wadi Dhubsan, the supporting Hunters actually flew up the wadi at ground level to attack rebel positions. The final assault was executed early in June and by the 11th Jebel Huriyah had been secured. This did not bring an end to resistance in the Radfan, and operations were maintained in the area for several months afterwards; but it did begin a process whereby dissident tribes started to sue for peace. The final pocket of resistance



One of No 26 Sqn's Belvederes airlifting 105mm guns to a firing position during the Radfan campaign.

came under heavy attack in November, and the last of the rebel tribes then capitulated.³⁸

The period encompassing the Radfan campaign in Aden has been characterised as an 'era of proscription'.³⁹ Yet this was certainly not true from the RAF's perspective. Indeed the renewed employment of air power on a large scale for internal security purposes during 1964 occurred not because of any revival of enthusiasm for aerial proscription but, once again, because of the fire support requirements of major ground operations. In any case, in appearance Radfan owed less to the proscription concept than to the sort of punitive expedition that the British Army had periodically launched in the 19th Century. Mounted in response to a specific terrorist incident in Aden Colony, the operation was, in Lee's words, intended to 'teach' the Radfan tribes 'that they could not challenge the authority of the Federal Government with impunity.' They were to receive 'a proper lesson, and one which it was hoped would have a salutary effect upon the subversive elements in Aden itself.'⁴⁰ The tribes concerned were not actively engaged in urban terrorism but were instead singled out because (unlike the urban insurgents) they presented a clear and distinctive target, and because (on the basis of past experience stretching back to 1934) they could be counted on to offer active



Although there was no scope for offensive air action during the later years of the British presence in Aden, the RAF was still able to provide support that was essential to sustain troops up-country through the use of fixed wing transport aircraft, like this Twin Pioneer of No 21 Sqn, and, increasingly, helicopters. (P H T Green)

resistance. Lawlessness among the Radfan tribes was an established fact and had been tacitly accepted by the British authorities for many years.⁴¹

At considerable expense the Radfan operations dealt with one source of opposition in Aden, but not a very significant one. And, contrary to the more optimistic British expectations, the campaign did nothing to discourage the urban insurgency.⁴² Indeed, it merely handed another propaganda weapon to Egypt and The Yemen. Moreover, along with subsequent operations in the Dhala area, the expedition may have played some part in undermining tribal support for the Emir of Dhala – an important British ally – although again it is not clear that this was the decisive factor in his ultimate downfall in 1967.⁴³ And if Radfan did exert any beneficial effects at all, they were quickly nullified by strategic developments. In 1964 the new British Labour government announced that the South Arabian Federation would be granted independence ‘not later than 1968’, although Britain might retain a base in Aden. The announcement had the effect of creating a deadline for the attainment of Arab nationalist aims and caused the security situation in Aden Colony to deteriorate more rapidly still. It was followed by a further statement in February 1966, which declared that the Aden base itself was no longer essential. This



During 1967, the Argosies of No 105 Sqn moved from Khormaksar to Muharraq and from there were instrumental in exercising the RAF's participation in 'managing the withdrawal' from Aden. (MAP)

implied a total British withdrawal, and the removal of British military backing for the Federation and for Aden's traditional rulers.⁴⁴

In later attempts to keep order the RAF's role was confined largely to maintaining the operation and security of Aden's main civil and military air bases. There were limited further air operations in western Aden and along the Yemeni frontier, particularly in response to a number of cross-border incursions by Yemeni and Egyptian aircraft. But the RAF could play little direct part in combating the urban insurgency. With minimal intelligence and with the relatively inaccurate weapons of the period, it was virtually impossible to strike insurgents in built-up areas from the air; aerial reconnaissance was of limited effectiveness, and there was no scope for employing traditional air policing techniques.⁴⁵ There were leaflet drops, and helicopters were often used to lift troops to particular trouble spots at short notice, or to position them for cordon searches; fitted with machine guns they also had some deterrent value.⁴⁶

But increasingly the RAF's task in Aden became one of managing withdrawal. The challenge was vastly complicated both by terrorism directed towards the security forces, and by the increasingly bitter struggle between rival political groups in the Federation. Any residual support for the British presence collapsed, even the indigenous police and armed forces becoming unreliable. Force protection gained a heightened importance against this background, as terrorists frequently sought to target airfields and other RAF installations; this

was a particularly busy period for the RAF Regiment, although airfield guard duties were also performed by many other RAF personnel. The final British departure from Aden came in November 1967, some months earlier than originally planned. The nightmare scenario of a fighting withdrawal was at least narrowly avoided, but the Federation collapsed and all the established tribal rulers were overthrown.⁴⁷ The new People's Democratic Republic of Yemen afterwards remained a serious threat to British interests in the region as the primary sponsor of the Omani insurgency across the border in Dhofar.⁴⁸

Conclusion

The RAF's record in Aden between the World Wars was an impressive one. Between 1928 and 1939 air policing achieved its basic objectives, halting Yemeni encroachment and suppressing such limited tribal dissidence as periodically occurred. But in the post-war years the security situation in Aden steadily deteriorated, and when Britain finally withdrew in 1967 conditions of virtual anarchy prevailed. As we have seen, recent research on British operations in this period has suggested that they were so counter-productive that they actually fuelled the insurgency that they were supposed to suppress, but this was only true to a moderate extent. How else, then, can the Aden debacle be explained?

The British experience of counter-insurgency warfare in the 1950s and '60s varied considerably from one country to the next. But the contrast between Britain's failure to control the Aden insurgency and the success of their concurrent operations in nearby Oman is striking, and a comparison between the two theatres certainly sheds some interesting light on what ultimately went wrong in Aden.⁴⁹ First, Aden's relative stability in the inter-war period lulled the British into a false sense of security. They were consequently slow to realise in the 1950s that they were facing a challenge to their presence in the region which extended far beyond the limited tribal unrest of earlier years, and the insurgency was allowed to emerge and gain a foothold before it was subjected to any very energetic counter-measures. In Oman, on the other hand, they tended to respond rapidly to insurgent activity.⁵⁰

Second, whereas the Omani rebellion of the mid-1950s was effectively contained and isolated, the insurgency in Aden was

allowed to spread, and its expansion was fuelled by propaganda and by weapons and other supplies from both Yemen and Egypt.

Third, in Aden the British were confronted by very much stronger and more widespread opposition than they were in Oman, which was made all the more difficult to defeat because of its strength in urban areas. The Omani insurgency was a purely rural phenomenon. The scale and nature of the Aden insurgency reflected the fact that it stemmed from a complex interaction between economic, social, political and cultural processes in both Aden and The Yemen which was never likely to be halted by military action alone. A bold political strategy was required too. In its absence, while the RAF and the other armed forces could fight and win many consecutive battles, Britain was always destined to lose the war.

Notes:

¹ Lee, Air Chief Marshal Sir David; *Flight from the Middle East* (HMSO, London, 1980).

² Cochrane, Squadron Leader R A; 'The Work of the Royal Air Force at Aden', *Royal United Services Institution Journal*, February 1931, pp88-90.

³ On the emergence of internal opposition to British rule in Aden see Carapico, Sheila; *Civil Society in Yemen* (Cambridge University Press, Cambridge, 1998), especially Chapter 4.

⁴ Cochrane, *op cit*, pp90-91.

⁵ TNA AIR10/2194, CD 58, Report on Operations Against the Zeidi Imam, 25 June-25 August, 1928, issued by the Air Ministry, November 1928.

⁶ TNA AIR27/113, 8 Squadron F.540, entry of 20 October 1933; Air Historical Branch file, 'Aden', chronology of operations in 1933.

⁷ CD 109, Report on the operations carried out from Aden against the Quteibi tribe from the 22nd March to the 21st May 1934, issued by the Air Ministry, February 1935 (held at Air Historical Branch), p3.

⁸ *Ibid.*, pp3-5; Air Commodore C F A Portal, 'Air Force Co-operation in Policing the Empire', *Royal United Services Institution Journal*, February 1937, p351.

⁹ Lee, *op cit*, p202.

¹⁰ Cochrane, *op cit*, p96.

¹¹ Boyle, Andrew, *Trenchard* (Collins, London, 1962), p509.

¹² This conclusion is based on a survey of TNA AIR27/112 and AIR 27/113, 8 Squadron F.540s, 1927-1938, and on the chronology of RAF operations in Aden in the 1930s held in Air Historical Branch file 'Aden'.

¹³ Taylor, H A; *Fairey Aircraft since 1915* (Putnam, London, 1984), p145. In 1935 8 Squadron was re-equipped with Vickers Vincents, which could carry 1,000lb of bombs.

¹⁴ CD 109, Report on the operations carried out from Aden against the Quteibi tribe from the 22nd March to the 21st May 1934, p13.

¹⁵ Cochrane, *op cit*, p97. For an account of the work of one of the intelligence officers, see Shipman, John; 'Aubrey Rickards: Winged Pioneer', *British-Yemeni Society Journal*, July 2002, <http://www.al-bab.com/bys/articles/rickards02.htm>.

¹⁶ Lee, *op cit*, pp110-137, 148-162, 204.

¹⁷ The first significant deployment of British Army troops in Aden after the Second World War occurred in 1955, when 1st Battalion Seaforth Highlanders participated in operations along the Wadi Hatib. In the late 1950s and early 1960s the Army presence increased considerably. See Lee, *op cit*, p147.

¹⁸ Mawby, Spencer, 'From Tribal Rebellions to Revolution: British Counter-Insurgency Operations in Southwest Arabia 1955-67', *Electronic Journal of International History*, Article 5, <http://www.history.ac.uk/ejournal/art5.html>, para 9.

¹⁹ Lee, *op cit*, pp142-148.

²⁰ TNA AIR27/2729, 8 Squadron F.540, January 1958.

²¹ Mawby, *op cit*, paras 11-12.

²² *Ibid*, paras 14-15; Lee, *op cit*, p201.

²³ Heath, Air Vice-Marshal M L; 'Stability in the Arabian Peninsula', *Royal United Services Institution Journal*, May 1960, p179; see also 'Yemen: The Imam's Peace', *Time Magazine*, 14 September 1959 and 'Aden: Truce in the Desert', *Time Magazine*, 29 February 1960. The former article records that the decisive factor was the Imam's visit to Rome for medical treatment early in 1959: 'No sooner was the Imam gone than his troops mutinied, his courtiers began to intrigue, and tribal chieftains began to fight out their ancient grudges against each other.'

²⁴ Heath, *op cit*, p179.

²⁵ Mawby, *op cit*, paras 16-20; Lee, *op cit*, p196.

²⁶ Mawby, *op cit*, paras 21-28.

²⁷ TNA AIR27/2729, 8 Squadron F.540, August 1959. Although not the only squadron which participated in these operations, 8 Squadron was always the first to be called on and was by far the most regularly involved. Their account also records the few occasions when other squadrons were committed to the campaign.

²⁸ Mawby, *op cit*, para 26.

²⁹ TNA AIR27/2729, 8 Squadron F.540, September 1959-March 1960.

³⁰ *Ibid*, April-May 1960.

³¹ The Lower Yafa operations extended from May to August 1961. See TNA AIR27/2729, 8 Squadron F.540, 1956-1960; TNA AIR27/2900, 8 Squadron F.540, 1961-1965.

³² http://en.wikipedia.org/wiki/Federation_of_South_Arabia.

³³ Lee, *op cit*, p202.

³⁴ The topic of legitimacy has been a major focus for much recent writing on counter-insurgency warfare; most notably legitimacy is described as 'the main objective' in the current US Army and Marine Corps doctrine on counter-insurgency operations. See Field Manual 3-24, *Counterinsurgency* (Headquarters, Department of

the Army, December 2006), paras 1-113 to 1-120.

³⁵ Both the 8 Squadron and 208 Squadron Operations Record Books present a similar picture in this respect, with recorded operational weapon releases being confined to just one month (July 1963) over the entire two-year period. See TNA AIR27/2900, 8 Squadron F.540, 1961-1965, and <http://www.radfanhunters.co.uk/208-1962.htm> and <http://www.radfanhunters.co.uk/208-1963.htm>.

³⁶ Paget, Sir Julian; *Last Post: Aden 1964-67* (Faber & Faber, London, 1969), p49.

³⁷ Lee, *op cit*, pp209-211.

³⁸ *Ibid*, pp212-216.

³⁹ Mawby, *op cit*, para 29.

⁴⁰ Lee, *op cit*, p204.

⁴¹ *Ibid*, p.202; CD 109, Report on the operations carried out from Aden against the Quteibi tribe from the 22 March to 21 May 1934, p13. According to this latter source, the arrival of an RAF armoured car section in the Radfan during the air proscription operation of 1934 was assumed by the tribes to herald the appearance of a substantial ground force. 'As soon as the prospect of a force to which they could offer active resistance was presented to them, an assembly of the whole Jebel Radfan tribal confederacy at once agreed to bring the whole force of all the tribes in the confederacy to the aid of the Quteibis in the event of a land attack.'

⁴² Lee, *op cit*, p217.

⁴³ Mawby, *op cit*, para 39.

⁴⁴ Lee, *op cit*, pp220 and 227.

⁴⁵ *Ibid*, pp220-229.

⁴⁶ Dowling, J R; *RAF Helicopters: The First Twenty Years, Part 2* (unpublished official narrative, Air Historical Branch, 1987), pp302-303.

⁴⁷ Lee, *op cit*, Chapter 13.

⁴⁸ Dowling, J R and Wood, P R; *The RAF Wessex Detachment in Oman* (unpublished official narrative, Air Historical Branch, 1977), p5

⁴⁹ For a succinct recent account of Oman see Dye, Air Vice-Marshal Peter; 'The Jebel Akhdar War: The Royal Air Force in Oman, 1952-1959', *Royal Air Force Air Power Review*, Vol 11, No 3, Winter 2008, pp18-32. (NB This is the paper reproduced at pp88-109 of this edition of the *RAF Historical Society Journal*. Ed)

⁵⁰ On the critical importance of prompt action, see Hoffman, Bruce and Taw, Jennifer; *Defence Policy and Low Intensity Conflict: The Development of Britain's 'Small Wars' Doctrine during the 1950s* (Rand, Santa Monica, 1991), *passim*.

UTILISING JOINT FORCE HARRIER IN AFGHANISTAN'S COUNTER INSURGENCY CAMPAIGN

Wg Cdr Harvey Smyth



Harv Smyth joined the RAF in 1991 and has been flying the Harrier with Nos 1, 3 and 4 Sqns on and off ever since. In the process he has participated in operations in Bosnia, Kososvo, Serbia, Iraq and, latterly as OC 4 Sqn, in Afghanistan. His extensive practical experience has been put to good use as the Harrier desk officer at the Air Warfare Centre and more recently, in connection with the Harrier's replacement, as a member of the F-35 Joint Combat Aircraft team.

'Harriers have given me excellent support throughout this tour...they give the ground commander an accurate suppression and neutralisation effect. Overall, the pilots are the key. When I hear a British pilot's voice it definitely puts me at ease . . .'

Capt C S H Hewitt RA
Kajaki Dam, Afghanistan, 29 March 2009

The Royal Air Force has had Combat Air assets, in the form of Joint Force Harrier (JFH) and most recently the Tornado GR4 Force,¹ in Afghanistan supporting Operation HERRICK² since September 2004. This paper will discuss briefly what we, from a fast-jet pilot perspective, have learned as regards how to utilise Combat Air assets in a Counter Insurgency (COIN) campaign. Both the capability, and use of, the RAF's Harrier aircraft has increased and broadened dramatically during the last five years whilst delivering air effect, kinetic and non-kinetic, for the Land element of the International

¹ Tornado GR4s replaced JFH in Op HERRICK in July 2009. This change of aircraft type not only happened seamlessly, but the momentum of Combat Air operations has been maintained; the Tornado Force is already well settled in theatre and, testament to their complementary capability, they have been matching the Harrier Force's excellent reputation for delivering proportional and precise air effect. (*Note, that this paper was drafted in September 2009. Ed*)

² Operation HERRICK is the nickname covering all operations conducted since 2002 by British forces prosecuting the war in Afghanistan. **Ed**



A Harrier GR9 of No 4 Sqn over Afghanistan. MOD

Security Assistance Force (ISAF) in Afghanistan. This paper will provide an overview of how UK Harriers have been employed during Counter Insurgency (COIN) operations across the whole of Afghanistan, by initially describing the role and contribution of Joint Force Harrier, then by highlighting the dichotomy of COIN operations from a fast jet perspective and lastly, by explaining how JFH has adopted an ethos of ‘graduated response through tuneable effect’ in order to remain relevant and productive within such a difficult and delicate campaign.

The role of the Harrier has been to provide air support across the *piste* of Afghanistan’s COIN operations. The aircraft are tasked daily by the Combined Air Ops Centre situated in the United Arab Emirates (UAE), to deliver air effect for the whole of ISAF, not just the British troops located in and around the Helmand Valley. Moreover, and this is where the first major shift in thinking as regards utilisation of fast jets occurs, the fast jet tasking is not just about bombing and firing rockets, colloquially the ‘kinetic’ end of the spectrum of effect, but about using Combat Air’s agility and adaptability to deliver a precise *tuneable* effect, proportionate to the requirements of the scenario. From September 2004 until July 2009 RAF Harriers flew over 8,500 sorties in support of coalition troops in Afghanistan and, considering



A CRV-7 pod containing nineteen 2.7-inch rocket; until the first rocket is fired, they are protected by a frangible nosecone. (MOD)

that each sortie supported *at least* two different ground patrols, that is conservatively more than 17,000 foot patrols and vehicle convoys that have received dedicated air support from RAF Combat Air assets. The vast majority of these missions provided armed over-watch, where the pilot uses the Harrier's advanced targeting pod, the Sniper, to provide an immediate surveillance capability for the ground commander in order to build his situational awareness of his battle space in real time however, on average, 1 in 10 missions has resulted in ordnance being employed, mostly under self defence Rules of Engagement (ROE). This statistic does not necessarily indicate that 'heavy ordnance' has been employed on 1 in 10 missions but rather that some form of kinetic response, such as a single CRV-7 rocket fired into open ground as a warning shot, has occurred.

COIN operations are by far one of the most difficult arenas within which to appropriately utilise Combat Air assets. As described above, operations of this type are not only difficult but also incredibly delicate. Make no mistake, at present there is a fight to be fought in Afghanistan and we must continue to employ both kinetic and non-kinetic means to defeat the insurgency and provide security and stability for the local population; however, we must always remember



The digital Joint Reconnaissance Pod and (nearest) the Sniper advanced targeting pod on a Harrier's belly hardpoints. (MOD)

that we are in Afghanistan to help rebuild a country, and with this in mind, we have more to gain from letting an insurgent escape than we do by engaging him with the risk of civilian casualties or destruction of an Afghan's property or home. This is, and always will be, the dichotomy faced by military practitioners during a COIN campaign. Without a doubt in Afghanistan, Combat Air provides ISAF with a battle winning strategic advantage. However, and this is the 'delicate' part of the conundrum, Combat Air can also very quickly become our strategic vulnerability, especially as regards single kinetic effects causing mass civilian casualties. These facts are widely acknowledged within the RAF and hence, the use of proportionality, requisite restraint, utmost discrimination and a constant appreciation of the potential for civilian casualties and property damage are the key tenets of employing Combat Air in Afghanistan. The question every Harrier pilot asks before releasing ordnance of any kind is not 'Could I drop this weapon?' (ie 'Am I within the ROE?') but rather, 'Should I drop this weapon?'

Throughout the five years of supporting Op HERRICK, the Harrier's capability has exponentially developed and improved. Whilst the aircraft had hitherto proved itself as a robust Close Air



A Terma 1 defensive aids pod; the Terma 2 features the addition of missile approach warning. (MOD)

Support and Air Interdiction platform in the Kosovo War and latterly in Op TELIC, the second Iraqi War, the early years of its use in Afghanistan were frustrated by inappropriate equipment and sensors to conduct COIN ops.

Today however, the Harrier is arguably a world-beater in this arena. From a non-kinetic perspective each aircraft now carries an advanced targeting pod in the form of Sniper, from which footage can be data-linked to the ground in real-time; alongside this pod are carried two other podded systems, the Joint Reconnaissance Pod (JRP), which takes high definition digital imagery, and the Terma³ Defensive Aids pod, which offers countermeasures against all threats in theatre. Furthermore, each pilot is provided with a Helmet Mounted Cueing System (HMCS), which employs a holographic aiming site within the visor of his helmet, either to guide his eyes to a point of interest or to be used by the pilot to designate a point of interest. With a view to delivering graduated kinetic effect, each aircraft carries CRV-7 rockets, which can be fired individually, or in multiples up to a total of 38, and two Paveway IV 500 lb GPS- or laser-guided bombs.

³ 'Terma' is the manufacturer, a Danish company which specialises in advanced technologies applicable to the fields of aerospace, naval and defence in general.

This full suite of ‘soft and hard’ capability affords each Harrier pilot the ability to practise ‘graduated response through the delivery of tuneable effect’ therefore allowing him flexibility of capability to practise proportionality, restraint, discrimination and above all, precision.

To examine how the Harrier’s capability was exploited in Afghanistan’s COIN operation, I will use the four threads of PROJECT, FIND, STRIKE and PROTECT.

Combat Air’s immediate and most apparent strength is its ability to cover vast distances quickly in order to PROJECT an array of effects. It is not uncommon for fast jets to receive tasking that takes them the length and breadth of Afghanistan in a single sortie. Combat Air is also incredibly flexible; it is therefore commonplace for a fast jet to get airborne with a plan to conduct a pure reconnaissance mission, only to be retasked immediately after take off to support a frenetic troops-in-contact situation elsewhere in the country. Exploiting such ubiquity and responsive flexibility and capability makes good military sense. This capability also comes with a relatively small footprint in theatre, therefore producing ‘maximum bang for the buck’.⁴ We go even further to exploit Combat Air’s ability to PROJECT, by providing assured support in the form of GCAS, or Ground Alert Close Air Support, whereby aircraft and crew are poised on the ground ‘24-7’, ready to be scrambled to support whatever unforeseen scenario may have developed.

From a FIND perspective, the Harrier primarily uses the Joint Reconnaissance Pods to take high fidelity digital images of pre-planned areas of interest; these images are then used by ground commanders to add much needed clarity to their planning processes. This imagery is in high demand from Coalition Special Forces, especially to help plan for deliberate raids, for example against a known Improvised Explosive Device (IED) making factory. Specialist RAF Image Analysts exploit these images and glean information such as how thick walls are, whether windows open in or out, whether there is livestock in or around compound, etc. Again, this allows the ground commander to remove some of the ‘unknown unknowns’ from his

⁴ The deployed strength of the single Harrier squadron in Afghanistan amounted to approximately 100 personnel.



Because a Harrier could be re-tasked during a mission, and/or could be required to engage a variety of targets, it was customary to fly with a mixed load of ordnance to confer as much flexibility as possible. This is a typical example – left to right: Paveway IV, CRV-7, BOL 510 (AIM-9L Sidewinder launch rail cum chaff dispenser), drop tank, Sniper targeting pod, Terma 2 defensive aids pod (with Missile Approach Warners), drop tank, BOL 510, Maverick AGM-65 JX (TV guided), Paveway IV. (MOD)

planning thereby massively reducing the risk in his mission. Possessing this capability on a fast jet can make intelligence gathering incredibly reactive, thus offsetting, to a degree, the fact that we do not have enough dedicated Intelligence, Surveillance and Reconnaissance (ISR) assets in theatre to monitor the whole of the country continually.

The less-appreciated FIND function carried out by the Harrier, which actually constitutes the bulk of its support to the Land element in Afghanistan, is called 'armed over-watch' or Non-Traditional Intelligence, Surveillance and Reconnaissance (NTISR). This is where Harrier pilots use their Sniper pods to become the 'eye in the sky' for the troops. This pod provides the pilot with an incredibly high fidelity TV or IR picture in the cockpit; its primary design function is to 'laser spike' laser-guided ordnance to its desired point of impact (DPI). However, Sniper's secondary use is in the field of NTISR. Pilots can use the pod to scan areas of interest, such as pre-determined vulnerable points where insurgents are known to place IEDs, or inside compounds where suspicious activity is taking place. This surveillance footage is concurrently data-linked to the ground commander, who can displace himself from the potential area of threat while still observing his immediate battle space in real time, thus affording him the advantage of making appropriate decisions based on his receipt of up-to-date and relevant ISR. Utilising Harrier in this purely non-kinetic way helps remove risk from the Land element's mission. On a daily basis RAF Harriers have used armed over-watch like this to guide foot patrols or vehicle convoys through high-walled streets and alleyways, where they cannot see what is around the next corner. The pilot, effectively acting like an in-car 'Tom Tom' sat nav, can steer Friendly Forces away from likely danger, such as potential ambush points or 'hot spots' found on Sniper's infrared scene, which could indicate a recent IED emplacement; this over-watch obviously goes a long way to ameliorate some of the risk to the Land operation.

As stated above, on average only 1 in 10 missions results in the need for a kinetic, or destructive, effect. In the 72 hours surrounding the Afghanistan Governmental Election held in mid-2009, ISAF's Combat Air assets supported 164 troops-in-contact (TIC) scenarios, with only 12% delivering weapons. The bulk of TIC situations were defused by fast jet air presence alone. All TICs were supported by armed over-watch, or NTISR, and most importantly, there were no Air



*A 500 lb Paveway IV and CRV-7 pod, complete with nosecone.
(MOD)*

related civilian casualty events. With these statistics in mind, it is clear to see that whilst Combat Air possesses a potent STRIKE capability, this is only called into effect *in extremis*. It is also abundantly clear that we can easily defeat the insurgents in the symmetric fight, because of the asymmetric edge that our air power gives us. However, there is a double edge to this sword: Air is our strategic advantage, but can very quickly become our strategic vulnerability if not employed with restraint and precision.

Of all Harrier weapons expended in Afghanistan, most were employed in self-defence scenarios where there was an imminent threat to the lives of friendly forces. When ordnance is required, Harrier pilots use a graduated response, perhaps firing a single rocket over the heads of the enemy into an empty area of desert, in an attempt to have the desired effect – which is generally to persuade the enemy to disengage. Should pilots be forced to employ heavier ordnance, such as a precision guided bomb, then today's technology allows for incredible discrimination and precision. The Harrier's newest bomb, the Paveway IV, can have its fuse and flight path reprogrammed from the cockpit therefore allowing exact weapon effects to be achieved; this can be used to minimise potential collateral damage. More importantly, unlike many other weapons such as artillery, Harrier pilots retain ownership of these weapons until they actually impact the target because they can be laser guided: if, during the weapon's time-

of-flight to the target, something untoward happens, the Sniper pod's laser can be used to guide the bomb away, into an open and uninhabited area, exercising discrimination throughout the whole attack from identification of target, to impact of weapon, to bomb damage assessment. Obviously, this 'whole targeting cycle' cannot be completed by land-based weapon systems like artillery or mortars.

Finally, it can be argued that by utilising Combat Air's responsive and flexible capabilities across the areas of PROJECT, FIND and STRIKE, we are able to provide the PROTECT element to ISAF forces: be that in the form of non-kinetic air presence, reconnaissance imagery or, when the scenario calls for it, the graduated use of force to deliver ordnance precisely. The bottom line is that if it were not for the support provided by Combat Air, such as Harrier, all ISAF land forces would be suffering markedly more casualties; in fact one could argue that these casualty figures would be wholly unacceptable by both the Government and by the UK populace as a whole. Fast Air is a critical enabler for Land forces' operations in Afghanistan because it removes risk from their mission and provides a precise and measured punch when required: a punch that far outmatches that of the insurgent. However, to remain credible and relevant, this punch must be utilised with proportionality, restraint and the utmost discrimination.

In conclusion, and by way of closing thoughts, today's Ministry of Defence finds itself embroiled in a politically charged COIN operation in Afghanistan. Against this backdrop, the UK is in recession and the economic climate is bleak. Therefore, the reality is that today's war-fighter must make do with what is at his current disposal; moreover, he must endeavour to exploit and develop our current military capabilities in order to deliver war-winning products to the front lines of Afghanistan. RAF Combat Air, specifically the Harrier, is a prime example of this initiative in practice. At a time when all three Services are fighting for their slice of the ever-decreasing Defence Budget, we must ensure that critical enabling capabilities are not 'lost in the noise'. Combat Air might fight its battles from the air but in reality, especially when employing kinetics, it delivers a land-based effect. The unfortunate mistake that many of the uninitiated make is that when we talk about 'land effect', they think we are solely talking about the Army; hence, they argue that our limited resources should



A Harrier launching IR decoy flares. MOD

be aimed towards the Land element. If such misguided arguments win through, there is a very real chance that Combat Air will be removed from the COIN fight in Afghanistan. If this happens, the repercussions for our soldiers could be disastrous and ultimately our chances of success dashed.

AFTERNOON Q&A

Mike Meech: Wg Cdr Smyth, you spoke of the problems involved in Close Air Support when friendly troops are in close proximity to the enemy. In Palestine in 1918, friendly troops identified themselves with flares or reflective panels – shiny discs. You made mention of the Blue Force Tracker, but this only identifies units. Could you use the Sniper pod to identify specific soldiers?

Wg Cdr Harvey Smyth: Yes. That is exactly what we do, and it's been a huge advance. I have been doing Harrier ops since the early 1990s, starting with close support in Bosnia. The first operational sortie I ever did was over Mostar, conducting CAS by just looking out of the window, and it took 45 minutes to decide what was the actual target – and even then there was always a lingering doubt in the back of your mind. You were never 100% sure until the Forward Air Controller came up with 'That was a direct hit'. If he didn't, it was too late to do anything about it, of course. With the Sniper pod, the Ground Commander tells you his location and you direct the pod at his co-ordinates. He can see on his lap top (or whatever device he is using) what you can see on the cockpit display so he is confident that you are looking directly at him, which confirms that we are both working from the same datum. From there, he can direct you to 'aim' the pod by saying 'Up a bit – stop; go left – stop; go left – stop. Can you see those three guys?' 'Yes.' 'Well they are your target.' The fastest I did it from initial radio contact to impacting stores was 2½ minutes. So it is both precise and quick, which allows us to be on the front foot when dealing with the bad guys.

Wg Cdr Mike Dudgeon: I am most impressed by that degree of precision, but you are using quite a big bomb – a 500 pounder. Do you ever wish for a smaller weapon, or do rockets meet that need?

Smyth: That's a good point. The sad fact is that ninety-nine times out of a hundred, when delivering air effect in Afghanistan, the target set is human. It's not like other campaigns where a typical target might be a tank or, as was often the case in Kosovo, a bridge or a communications mast – something essentially mechanical or inanimate. In Afghanistan the target tends to be three or four guys that you can see on your pod, follow with your laser spot and hit precisely.

But you would be surprised how often two of those four will run out of the bomb blast, apparently unscathed. I have never seen anyone do that with a 1,000 pounder, but it does happen with 500 pounders. So, it's a matter of balance but, if you are going to do it, you have to do it right – and do it right first time. You don't want to drop bombs and not achieve the aim and then have to drop more. So I think that 500 pounds is about the right answer, especially if you have a smart link to the fuse that allows you an even finer degree of discrimination.

Rockets? Yes, they do give you some flexibility, an ability to deliver a graduated response, and the new Brimstone, which is already available on the Tornado and will shortly be coming to the Harrier, provides another intermediate stepping stone to the 500 pounder.

Margaret Fricker: It was said that there were six to eight squadrons on the North West Frontier. Following the destruction of the airfield at Quetta by an earthquake in 1935, could you tell me whether the survivors were redeployed elsewhere, and in which case where they went, or was a new airfield built somewhere?

Clive Richards: I believe that the airfield stayed open but, off the top of my head, the short answer to that has to be that I don't know.¹

Dr Christopher Morris: It is interesting to observe that in 1920 Sir John Salmond recommended that the air force in India should be autonomous – a recommendation that was not accepted – yet just two years later he became the first AOC in Iraq. Was this because Iraq was a grotty country that the Army simply didn't want to be in, whereas India was well-established with a comfortable Hill Station, a Viceroy and all that went with that – or were there other reasons?

Richards: I think that India was something of a special case because, being an imperial possession, it was already relatively well-developed, while most of the other places where air control was tried were not.

¹ Subsequent to the earthquake, the RAF did maintain a long-term presence at Quetta but not as a flying station. The survivors of the two operational units that had been based there, Nos 5 and 31 Sqns, were evacuated to Karachi where they were eventually re-established at Drigh Road. The (Army) Staff College at Quetta had escaped serious damage, but, as a precautionary measure, beginning in 1936, it was progressively rebuilt to an 'earthquake-proof' design and it is still there, now serving the Pakistani Army. **Ed.**

Finance was also a factor, one which was fundamental to the air control concept, and Whitehall was quite content for Delhi to pay. So, by giving them a colonial role in India, Trenchard was able to sustain a number of squadrons at little or no expense to his budget. The trade off, of course, is that he who pays the piper calls the tune, so the RAF's problem in India was that it was committed to providing a capability while lacking the ability to control it, and it stayed that way throughout the inter-war years.

Jefford: British India was a well-established enterprise that had been there for 200 years. There already was an Indian Government and when aeroplanes became available, it simply absorbed them into its existing infrastructure and put them to use – whether it did this very well or not is another matter. By contrast, the acquisition of a new expanse of quasi-empire in the Middle East happened more or less overnight in 1918 when we were presented with a vast tract of desert which begged the question ‘How are we going to deal with it?’ It was answered at the Cairo Conference in 1920 when it was decided to do it with aeroplanes – which solved a colonial problem for Churchill and saved the RAF by giving it something to do.

Dr John Peaty: Wg Cdr Smyth made some reference to American 500 pounders malfunctioning, but you didn't tell us anything about malfunctions of our kit. Some people call me a technophobe; I'm not, but I don't believe that, under operational conditions, any of our kit has ever done what its manufacturer said it would do. Could you say something about the reliability of sensors and weapons?

Smyth: I am as much of a sceptic as you but, to be honest, I have been pretty impressed. Most of the equipment that has been added to the Harrier over the last five years or so has actually outperformed the minimum requirements that we specified. There are still improvements that could be made, of course. For instance, I would like to see the current Paveway IV's fixed fuse replaced with an adjustable MFBF (Multi Function Bomb Fuse). But, that said, in terms of the way in which the weapon performs and how it does its business once it has been released, it has been excellent. Of all the weapons dropped by the squadron over a five-month period, every one was a direct hit and only two failed to go bang. Those two were a pair aimed

at a moving vehicle – an IED team escaping from an attack – and one of them actually hit the car, which did the business anyway . . .

The Sniper pod has been fitted in place of our previous targeting pod and it has not yet been fully integrated into the system so, from a pilot's perspective, some of the keys around the VDU screen in the cockpit still don't have the appropriate labels. So, to fire the laser, for instance, you may have to press a button marked with some other function. But that's more of an inconvenience than a real 'problem'. A pilot doesn't really spend his time reading the labels; we just learn a sequence of switch selections or button presses and after a few trips it's not even an issue. So – while, there is always room for improvement – and we will *always* want something better – I have to admit that what we have today really is pretty good.

Air Mshl Sir David Cousins: I would like to raise the issue of blue-on-blue. For Seb Ritchie, has there been any research done into the incidence of in-theatre blue-on-blue engagements over the period that you discussed? And for Harvey, when you spoke about discrimination and the sensitivity associated with dropping weapons were you implying that there was extreme sensitivity about the risk of friendly fire incidents and that this actually inhibited your ability to drop?

Dr Sebastian Ritchie: I can give you a very short answer to that one. In the work I have done on Aden I have come across no reference to blue-on-blue, other than the single incident that I noted where someone was hit by a spent cartridge.

Smyth: I am touching a piece of wood here but, thus far, the Royal Air Force has not been involved in a blue-on-blue incident in Afghanistan – and I put that down to robust procedures and aircrew who are appropriately briefed and who really know the Rules of Engagement. The first thing we did when my squadron arrived in-theatre was to spend three days with the lawyers, learning the ROE inside out. On top of that, with the Sniper pod you can actually tell whether a man is wearing body armour and carrying a day sack or whether he's wearing a dish-dash and carrying an AK-47 – although even that capability does not always take account of the 'fog of war'. And the Sniper pod doesn't work in all cases. As, for example, on Christmas Day last year when we were conducting low-level CAS at

100 feet, shooting visually-aimed rockets, pretty much as one would have done in WW II. We still do that sort of stuff when the weather is bad and I wouldn't want to see that change. In fact I am very proud that the RAF still does it, because it makes us, as an air force, stand head and shoulders above the rest, because we were the only people in theatre able to do it. But it has to be said that, when you do that sort of old-school work, there is a finite risk of a blue-on-blue, or a blue-on-green, involving civilian casualties. You have to weigh it all up at the time – you discuss it with the Ground Commander to quantify the risk as best you can and then decide whether that risk is worth taking.

Chris Shores: The term Joint Force Harrier was used two or three times. I would just like to make the point that the Harrier is not an exclusively RAF affair. Would you care to comment on the Fleet Air Arm element?

Smyth: With pleasure. For those who aren't aware, Joint Force Harrier has three front-line Harrier squadrons, one of which is dark blue. They are the guys who used to fly the Navy's Sea Harriers and when those were withdrawn from service, a deal was done with the RAF and we were amalgamated into a joint outfit. All three squadrons fly the same aeroplane; all three fly the same roles; all three have been deployed to Afghanistan; all three go to sea the same amount. In fact I have only just got back from a summer spent on the carrier. Standing at the bar when we first went aboard, I soon discovered that, apart from the captain, I had more time at sea than any other officer on the ship (*Laughter*) which just goes to show how 'joint' we really are. This is not a new thing, incidentally, I have spent my whole Harrier career going to sea on aircraft carriers. The third squadron actually calls itself the 'Naval Strike Wing' – that is a tactical ploy because within the 'wing' are two embedded squadrons, permitting the Navy to sustain the number plates of 800 and 801 Squadrons so that we will eventually be able to field four full squadrons, two RAF and two RN, when we transition to the Joint Strike Fighter.²

² Since this event, the accelerating run down of the Harrier fleet has reduced the force to just two squadrons – No 4 Sqn disbanded on 31 March 2010, leaving No 1 Sqn as the sole RAF element, and the Naval Strike Wing has been reduced to squadron status as No 800 NAS. **Ed**

Shortly after the seminar, the Editor received the following (lightly edited) email from SqN Ldr Colin Richardson.

You may recall that I approached you after the lecture which you read (on behalf of AVM Peter Dye) to the RAF Historical Society to say that I had extra information which you might, or might not, consider worth including in the Journal. It was obvious to me that AVM Dye had got a lot of his information from the first edition of my book.¹ There is nowhere else it could have come from. More research turned up additional information for the second edition.²

The lecture mentioned only one sky-shout Pembroke, which was detached to Sharjah. I do not now believe that this was the aircraft that was damaged by ground fire. I was at Sharjah as a Venom pilot, and went on one of the sky-shout trips over the plateau of the jebel. The shouting was conducted at low level and low power which was asking for trouble.

Unknown to me at the time, and when I wrote the first edition, there was a second sky-shout Pembroke which was detached to Bahrain. It was this one which was seriously damaged by a rebel heavy machine gun on the plateau. One bullet severed the elevator cables and passed between the knees of the audio technician (who supplied me with this information). Another bullet severed the aileron controls. A third hit the port engine oil reservoir. The engine seized almost immediately. The loudspeakers were under the wings and provided lots of drag. Luckily the pilot could jettison them. From low level and low power the pilot was just able to clear the edge of the plateau to the south where there was a gravel airstrip 5,000 ft lower down near Firq. On asymmetric power the pilot landed there using the aileron and elevator trims – an outstanding feat of ability. The crew withdrew to the mess at Nizwa to await the arrival of the rectification team. The rebels brought a machine gun into action on the lower slopes and, firing at long range, they hit only the fin and rudder of the Pembroke. Rectification took over a month, and wisely neither Pembroke went to the jebel again.

There is another snippet of information which has come my way.

¹ AVM Dye cites Richardson's book among his sources. **Ed**

² Richardson, C G; *Tales from a Desert Island* (Lancaster, Scotforth Books, 2003).



Flt Lt Owen Watkinson of No 8 Sqn, the RAF's only combat fatality during the Jebel Akhdar campaign.

This concerns the earlier Buraimi Incident when the dispute went to arbitration at Geneva. Our delegation was led by Sir Hartley Shawcross, and in recent years I met a retired high court judge who was his assistant at the time. Judging by past experience at Buraimi, Sir Hartley thought it highly likely that the Saudis would again resort to bribery. He was right. A Saudi delegate was alone in the lift with a Pakistani judge who was an adjudicator. Their conversation, and the bribe, were recorded. The tribunal collapsed.

To put you in the picture about my involvement, I was a Venom pilot with No 8 Sqn throughout the Jebel Akhdar war and was often Detachment Commander at Sharjah. Immediately after the SAS success I joined a two-man SAS patrol on the jebel, and found the wreckage of Owen Watkinson's Venom and the cairn of stones where he had been buried. A couple of years ago I was at the memorial service at the Ruwi Cemetery where a plaque in memory of him was unveiled by the British CDS. I delivered an address at the ceremony, which was also in memory of two other British servicemen who had been buried where they were killed.

CHAIRMAN'S CLOSING REMARKS

Air Mshl Ian Macfadyen

Ladies and Gentlemen – as your Chairman for the day, I have to say that I believe that this has been one of the most interesting and thoroughly absorbing days that this splendid society has mounted. (*Applause.*) We have covered a great deal of ground and it was interesting to hear from our final speaker that, even today, air power can still be effective, using a mere ‘show of force’ to deter people on the ground – something that hasn’t changed since the very beginnings of military aviation, even before WW I. It is also clear that RAF operations in the Middle East, in both peace and war, have consistently demonstrated the versatility of air power and, of course, its economy of effort.

Before closing, I wish to thank, on your behalf, Michael Fopp, the Director General of the Museum, and his team who have looked after us so well today, not forgetting the caterers, and especially Gwain Cox, who has done a splendid job managing the visual aids and audio taping. And, of course, I need to thank the speakers who have put in a great deal of effort in order to provide us with a really first class day. Finally, I also thank you, the audience, for being here – this has, I believe, been our best-attended event ever. Long may that continue, because it is your support that makes it all worthwhile.

Air Mshl Sir Freddie Sowrey. I would echo all of that and in addition, I congratulate the Committee for their choice of subject. It is one that has long been in the Royal Air Force’s blood and is particularly apposite today. I would also add my personal thanks, and admiration, for the professionalism of the speakers, and particularly for the presentation on Joint Force Harrier which provided us with an insight into what the young men and women of today’s RAF are doing on our behalf. Thank you too, to the audience, for your questions and comments because those help the Editor to produce a Journal that can be read and enjoyed by those members of the Society, indeed the majority, who were unable to attend our seminars in person. And finally, thank you Ian for running the show for us.

SHAIBAH – THEN AND NOW

The upper pictures were taken by LAC Jim Montellier while doing his National Service as a wireless mechanic at Shaibah in 1954, the lower ones by his son, Wg Cdr Clive Montellier (or one of his colleagues), while on the staff of the Shaibah Logistics Base during Op TELIC in 2004.



Air Traffic Control.





The hangar with, above, visiting Vampire FB 9s of No 6 Sqn.





The swimming pool.





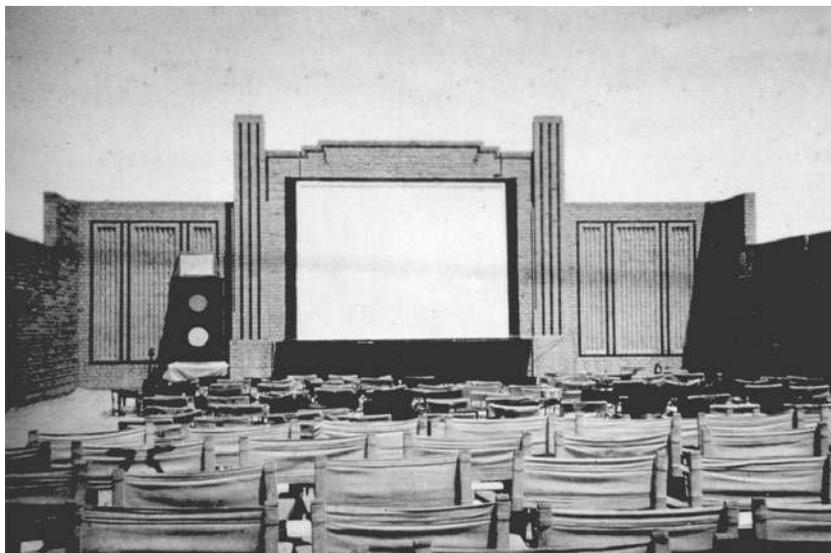
The Main Guardroom.





Station Sick Quarters.





The 'Astra' cinema.



BOOK REVIEWS

Cavalry of the Clouds by John Sweetman. Spellmount; 2010. £20.00.

War Over the Trenches by E R Hooton; Ian Allen; 2010. £22.50.

This review addresses two recent books on the First Great Air War. John Sweetman's 224-page hardback, *Cavalry of the Clouds*, is subtitled *Air War Over Europe 1914-1918*. Professor Richard Holmes' commendation on the dust jacket is more precise about the book's scope in that he describes it as the 'best brief history of the Royal Flying Corps on the Western Front.' Unfortunately, he is much too generous in his praise. The narrative essentially comprises a series of personal reminiscences and letters. It is well-written and well presented, but lacks a clear focus and is so full of errors that one wonders about the quality, if not the depth, of research. For example, the author believes (p70) that the BE2c was a pusher. This may be a simple error, but to describe (p72) the FE2b and DH 2 (both pushers) as inferior to the Fokker when these types were directly responsible for gaining and sustaining air superiority during the Battle of the Somme betrays a startling ignorance. As there are no footnotes, it is not possible to determine exactly where the author gained these views. There are also errors in transcription, such as the data (p102) for the operational strength of the RFC in 1916 where availability and serviceability have been confused. There are many other examples scattered through the book that reflect a shallow knowledge of the subject, such as the apparent belief (p176) that the RAF was operating the Handley Page O/100 in July 1918 as part of the Independent Force. The index is equally deficient. An idle check of the entries for the Sopwith Dolphin discovered pages empty of any reference while other pages, that do mention the aircraft, are un-referenced. A similar lassitude has affected the photographs which, while plentiful, often have no relevance to the subject with captions that sometimes verge on the banal. Potentially, this was an excellent book but it is let down by its poor research and many errors. It cannot be recommended.

The same cannot be said of Edward Hooton's, 336-page *War Over The Trenches*. Subtitled, *Air Power and the Western Front Campaigns 1916-1918*, this work is a welcome addition to the slim historiography of First World War air power studies. It is not quite the ground breaking book claimed in the Introduction (John Morrow's *The Great*

War in the Air, published in 1993, probably remains the best detailed overview of the air war on all fronts), but it does bring a rigour and freshness to the subject. The narrative makes full use of original material (including both French and German sources) and, as with the author's previous books on the *Luftwaffe* (*Phoenix Triumphant* and *Eagle in Flames*), presents copious (fully referenced) data in easily digestible form within the text. The footnotes are extensive and reflect a genuine mastery of the subject, although the book is not without fault. For example, there is little about training (which had a significant impact on operations, particularly in 1917) and logistics (which provided the foundation for the RFC's success in 1918).

I would also argue that the influence of Paul du Peuty on Hugh Trenchard's thinking was more significant than suggested. There is material within the Trenchard Papers at the RAF Museum that sheds light on their relationship, as well as demonstrating Trenchard's willingness to adopt best practice at both the tactical and operational level (see *France and the Development of British Military Aviation*, RAF Air Power Review Vol 12, No 1, 2009). The Epilogue is also weaker than might have been anticipated – in light of the incisive and persuasive arguments deployed in earlier chapters. In this respect, much more could have been made of the doctrinal challenges inherited by the RAF. Air Cdre Neville Parton's 2008 article, *The Development of Early RAF Doctrine* (The Journal of Military History, Vol 72, No 4) brings welcome light to this subject but does not feature in the bibliography. Nevertheless, this is an important, well-written and well-researched book that is thoroughly recommended. It brings a new perspective to a neglected subject and undoubtedly sets a very high standard for future studies of the First Great Air War.

AVM Peter Dye

Flying from the Black Hole by Robert O Harder. Naval Institute Press (Annapolis, MD), 2009. £19.13 (from Amazon).

Not an 'RAF' book, but one concerned with military aviation, and a good one too. While *Flying from the Black Hole* includes an account of the evolution of the theory and practice of air navigation and of free-fall bombing techniques, and a short history of the USAF's Strategic Air Command, these are merely scene-setters. The core of this 300-page hardback provides a description of the way in which a

B-52 navigator/bombardier was taught his trade and then goes on to tell the story of ARC LIGHT – the eight year campaign conducted by B-52s, mostly the big-finned D-models, during the Vietnam War. The climax is a blow-by-blow account of the eleven-day Operation LINEBACKER II which brought the North Vietnamese back to conference table – 15,000 tons of bombs delivered in 729 sorties at a cost of fifteen aircraft, and that was just the B-52s; another twelve aeroplanes were shot down flying a variety of support missions.

The author spent four years as a B-52 navigator and, having flown 145 ARC LIGHT sorties himself, he writes authoritatively and with both humour and passion. Known around the bazaars as ‘the Buff’, short for Big Ugly Friendly Fellow (rhymes with ‘sucker’), Harder conveys a clear impression of how these missions were planned and conducted, mostly from Guam, although U-Tapao in Thailand was also used later on. The narrative is enlivened by first-hand accounts of what was going on at each crew station throughout a mission, conveying a vivid impression of the boredom of routine twelve-hour sorties and the tension when things went awry – which they sometimes did.

He is critical of the planners back at Omaha who, still committed to SAC’s ongoing primary task of maintaining the nuclear deterrent at a high state of readiness, sometimes lacked the flexibility necessary for conventional operations, and of the reluctance of SAC’s senior generals to heed the advice being fed back from the air commander in the field. Harder considers a combination of these factors to have been the root cause of the losses sustained during LINEBACKER II. He also highlights the stress created by the length of the ARC LIGHT campaign, the inexorable grind of repeated six-month-long detachments, interspersed with ‘normal’ weekly stints on QRA when back in the USA, and the corrosive effects that all of this had on far too many SAC marriages.

Almost inevitably, because it is written by an aviator, much use is made of acronyms, but they are American acronyms and as such will be unfamiliar to British readers, which makes for a slightly bumpy read at times. There is a comprehensive glossary, however, and one soon begins to pick them up. Problems? I would not dream of taking issue with any Buff-related facts but there a few others. The design of the CFS bombsight of 1915, for instance, is conventionally accredited

to Bourdillon, rather than Wimperis as the author has it, and his description of the operating principle of GEE is less than precise. Harder's ballistic theory also seems to have grown a little rusty with the passage of time. On two occasions he describes the horizontal distance a bomb travels after release as 'trail', whereas that is surely its 'forward throw', trail being the distance that a bomb lags behind the aeroplane that dropped it when it hits the ground (the bomb, not the aeroplane).

But these are mere pin pricks. I really enjoyed reading this book and would recommend it to anyone with an interest in the Vietnam War, or the B-52. It will be of particular interest to 'proper' navigators, those who were reliant on the Dalton computer and could handle a sextant, and it will resonate especially among those who flew with the V-Force.

CGJ

Kept in the Dark. The Denial to Bomber Command of Vital ULTRA and Other Intelligence Information During World War II by Wing Commander John Stubbington. Pen & Sword; 2010. £30.00.

John Stubbington has produced a scholarly study of aspects of the combined bomber offensive of World War II which sheds considerable light on the relationships existing between Whitehall and Bomber Command, in particular, viewed through the prism of Signals Intelligence and the manner of its use. Almost in the margins, he considers the processes of target selection and of delivering often unsuitable weapons onto those chosen. His description of the evolving capabilities and tactics of both Bomber Command and the US 8th Army Air Force is comprehensive, as are his observations concerning the apparently different relationships enjoyed by the Americans with the Air Ministry and, crucially, Bletchley Park's Air Section.

Three major strands of argument emerge from this very densely written work. First, Stubbington's principal argument is that Bomber Command was denied direct access to high grade, ULTRA, SIGINT information, except as filtered through Air Intelligence in the Air Ministry. He paints a picture of 'Nanny knows best', in the dogmatic denial by Air Intelligence of direct liaison between High Wycombe and the Air Section of the Government Codes and Ciphers School at

Bletchley Park. That was only achieved later in the war. By contrast, HQ 8th AAF enjoyed such access, as part of the RAF's provision of SIGINT and other intelligence material. Interestingly similar constraints were imposed on the other home commands, Fighter and Coastal, although the latter was able to work around this by virtue of its close working relationship with the RN.

The second major subject covered at some length in this book is the question of bombing accuracy and the widely held view that, whereas Bomber Command was largely capable only of area bombing, the USAAF was a precision bombing force. John Stubbington's analysis of this aspect is exhaustive and his conclusion sheds a new light on the use of the word 'precision' which he characterises as the product more of public relations effort than of observed damage on the ground.

The third subject concerns the workings of the entire Whitehall machine in the target selection process and the author focuses on the two divergent schools of thought, those who favoured oil as a priority target set and those who fought the transportation corner. Stubbington comes out clearly and with some repetition in favour of the latter, arguing that transportation was a pervasive economic and military necessity: oil in the wrong place is as little use as no oil at all. His argument goes further into the availability of other raw materials, notably coal, of which German industry was starved as a result of the transportation campaign.

This incredibly detailed 446-page hardback, with its eighteen appendices, glossary, bibliography and index, touches on many other areas of interest, not least the internal politics and bureaucracy of the Air Ministry and Whitehall, never forgetting the unequal struggle forced upon Harris by the behaviour of Air Commodore Bufton, Director of Bomber Operations later in the war. It is not an easy read, but a highly rewarding one and is plainly the result of much dedicated research and of the author's deep knowledge of the subject.

AVM Sandy Hunter

Nuclear Illusion, Nuclear Reality – Britain, the United States and Nuclear Weapons, 1958-64 by Richard Moore. Palgrave Macmillan, 2010. £65.

Although British scientific brains had made a material contribution

to the development of the atomic weapons dropped on Hiroshima and Nagasaki, the end of the war saw the door firmly closed on further nuclear co-operation between Britain and America. Although nearly bankrupted by the war, the Attlee government nonetheless determined that to remain influential in world affairs, Britain would need to develop its own atomic bomb. The country therefore was set on the nuclear path that it still follows today. It was, however, not until 1958 that formal agreement was reached to exchange nuclear know-how with the US and it is worth remembering that it was by no means all one way traffic; British developments in penetration aids were among a variety of areas of interest to the Americans. By this time Duncan Sandys' 1957 Defence White Paper had moved the UK's defence emphasis away from conventional forces towards a reliance on missiles and nuclear weapons.

In 'Nuclear Illusion, Nuclear Reality' (a tribute to Sir Solly Zuckerman), Richard Moore considers the period from 1958 to 1964, significant and formative years for Britain's armed forces. Moore has the ability to pare away the surrounding veil of 'rainbow codes', OR numbers, codewords and Ministry of Supply designations to make clear the very complex history of Britain's nuclear weapons development, infighting amongst the Service Chiefs, political agendas, Britain's role East of Suez, nuclear test bans, the underlying debate on the independence of a UK deterrent and much more. Our nuclear weapons were, as he points out, militarily aimed at the Soviets, but politically they were aimed at the US. And even today our nuclear arsenal remains, as it perhaps has always been, a political rather than a military weapon.

Of course much of the narrative refers to the Royal Air Force and will thus be of immediate interest to readers of this Journal. The period covers the incumbency of Sir Dermot Boyle and Sir Thomas Pike as Chiefs of the Air Staff, the Macmillan and Douglas Hume governments and the Eisenhower and Kennedy presidencies. At the start of the period the RAF had fewer than fifty nuclear weapons and was reliant on supplementing this number under 'Project E' arrangements whereby US nuclear weapons would be made available during transition to war for Valiants and to certain Canberra squadrons. Dual key arrangements also covered the sixty Thor missiles operated during this period by the RAF. Powerful figures

played important roles in the story, principally Mountbatten and Zuckerman who both enjoyed enormous influence of a type that one would not expect to see today. Whilst Mountbatten fundamentally had the interests of the Navy at heart, it is the RAF and its nuclear capability that occupies much of the story. Key events of the years in question were the cancellation of BLUE STREAK, an almost inevitable outcome of inadequate funding from the start and the rapid advance in technology that Britain found hard to keep up with, and the subsequent cancellation of the Skybolt air-launched missile destined for the RAF's Vulcans and a revised Victor as well as the possibility of VC-10s being used as launch aircraft. Without a follow-on aircraft, the logical successor (the Avro 730 had been cancelled following the Sandys review) the submarine launched Polaris missile system became the increasingly obvious choice.

Much current academic opinion suggests that the Royal Navy had maintained a strong covert interest in Polaris from the start of the US programme and whilst it is true that they had kept a watching brief, Moore's view, shared by this reviewer, is that the Navy was by no means wedded to Polaris. Following the cancellation of Skybolt, however, other than the unsuitable Hound Dog missile, there was little else on offer that could extricate both countries from a very awkward situation, even though the Kennedy/McNamara wish was to eliminate the possibility of any other country having an independent deterrent. There is an illuminating section on the Nassau talks which led to the Polaris Sales Agreement. On learning of the agreement, First Sea Lord Caspar John confided to his diary, 'A filthy week. This millstone of Polaris hung round our necks'.

Fully referenced – including a quote from the Society's 2001 seminar on nuclear weapons, albeit one which went unrecorded in Journal 26! – for those wishing to delve further into the events of that time, I can recommend this book unreservedly for anyone interested in this period of the UK's nuclear history, the development of British nuclear weapons and the infighting amongst the Service Chiefs which produced the circumstances behind the transfer of the deterrent from the RAF to the Royal Navy. It is neither difficult to read nor to understand, despite the extreme complexity of much of the subject matter and for this Moore is to be congratulated.

Unfortunately how Palgrave Macmillan justify the cover price of

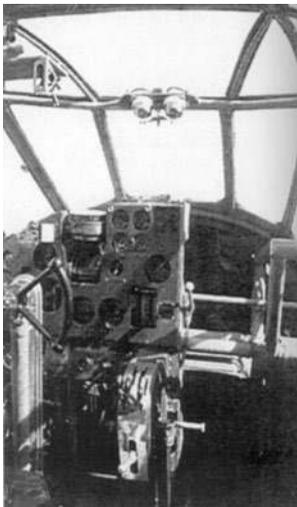
£65 for this 368-page hardback is difficult to see – one could legitimately expect a coffee table book lavishly illustrated in colour throughout for much less than this. Obviously only cash strapped centres of learning can be expected to buy it. Sadly I fear that this will be beyond the budgets of a great many people who would find this book a most rewarding and fascinating read and although local libraries will no doubt be willing to acquire copies, I fear that it will be overlooked by the wider audience that it deserves to reach.

John Boyes

Devotion to a Calling by Group Captain Harley Boxall and Joe Bamford. Pen and Sword; 2010. £19.99.

The sub-title of this 176-page hardback is *Far East Flying and Survival with 62 Squadron RAF*. Like much of the content, this is less than precise, as it tells only part of the story; the book is actually an attempt to provide an account of the life of Harley Boxall – all of it. Very briefly, Boxall joined the RAF in 1936, trained as a pilot and was posted to No 62 Sqn with which he deployed to Singapore in 1939. In April 1941 he was obliged to ditch his Blenheim west of Malaya and spend a week marooned on a small island. Stationed at Alor Star when the Japanese war started, the squadron withdrew via Singapore and Sumatra to Java whence Boxall was fortunate to be evacuated to Australia aboard the *Tung Song*. From there he went to India serving with and/or commanding a variety of units at Jodhpur, Mauripur, New Delhi and Karachi. After the war he settled in Rhodesia, and worked in the motor trade while serving in the Rhodesian Air Force Reserve from 1962 until 1980.

The book is presented in two parts. The first covers 1936-41 and is (mostly) presented in Boxall's own words but, unfortunately, that appears to have been as far as he got in writing his autobiography (he died in 1994) and the second part is Bamford's attempt to complete the story. It is evident, however, that the latter had little to go on with respect to the rest of his subject's wartime career and much of Part Two amounts to little more than an interpretation and extrapolation of the information contained in Boxall's log book and the ORBs of the units with which he served. As a result, there is a great deal of conjecture and surmise and, punctuated as it is by phrases like 'it is presumed that' and 'it is not known why', it all feels very contrived



Never a Blenheim!

and vague. Embedded within the narrative there are, incidentally, many references to Arthur Scarf, winner of the RAF's only VC in the Far East and a personal friend of Boxall – although, oddly enough, Scarf does not feature in the index.

That said, the first section of the book is well written and could (indeed should) have been left alone. Instead, Bamford has inserted passages amplifying Boxall's account. Why? If Boxall had thought it necessary, for instance, to provide his readers with a brief account of the building of Tengah airfield or a summary of AVM John Babbington's career, he would have done so; but he didn't. In overriding this decision, his co-author should have confined his random afterthoughts to endnotes, rather than disturbing Boxall's flow by his frequent interjections. More to the point, however, far too much of this additional information is wildly inaccurate. I could cite numerous instances of duff gen, dodgy geography, strange syntax and misspellings but I will confine myself to two of the more extreme examples. On p111 we are told that the 'AOC India' in September 1942 was one Air Vice-Marshal Wigg – who he?! – and the photograph purporting to be of the pilot's station in a Blenheim, is actually the cockpit of an early (pre-'standard-six' blind flying panel) Anson.

Regrettably, since it is so flawed, apart from Boxall's personal recollections, it is difficult to find grounds on which to commend this book. While clearly well-intentioned, this co-author has not really done his subject many favours.

CGJ

Blue Sky Warriors – The RAF in Afghanistan in Their Own Words by Antony Loveless. Haynes; 2009. £19.99.

In her book, *Dressed To Kill*, Army Apache pilot Captain Charlotte Madison, recounts how on her return to the UK from a tour in Afghanistan, she visited a hair stylist. The stylist commented on

Madison's suntan and asked where she had been. 'Afghanistan,' was Madison's reply: 'On holiday, was it?' queried the hairdresser! Whilst there may be many in the UK who have little idea of the precise detail of what the armed forces are doing in Afghanistan, few can be so unaware of the forces presence as the hair stylist.

The book shelves are now filling with accounts of operations in the region and it must be a close run thing as to whether there are more books about this campaign or those reprising the Battle of Britain. From an RAF perspective, however, there appear to be only a pair dealing with the air aspects in Afghanistan – and one of those was written by a Royal Marine!

In this 280-page hardback, with its colour photographs and maps, Loveless has drawn together the stories of eighteen RAF personnel who have served in Afghanistan and 'it does exactly what it says on the tin', which is to use the individuals' own accounts without embellishment. It follows that the book contains no strategic message and although Loveless makes some overarching comments, it is a series of personal vignettes.

Perhaps inevitably, the majority of contributions come from officers – which is a pity – but they do reflect a comprehensive range of experience and role. This is not a review to analyse the fine detail of the subject matter but merely to record that this is an interesting account of the RAF's participation in the campaign. Regardless of one's views as to the rights or wrongs of British involvement, this book is all about the people of today's Royal Air Force doing that which they have been trained to do and doing it extremely well in a very unpleasant environment.

Wg Cdr Colin Cummings

ROYAL AIR FORCE HISTORICAL SOCIETY

The Royal Air Force has now existed for more than ninety years; the study of its history is deepening, and continues to be the subject of published works of consequence. Fresh attention is being given to the strategic assumptions under which military air power was first created and which largely determined policy and operations in both World Wars, the inter-war period, and in the era of Cold War tension. Material dealing with post-war history is now becoming available under the 30-year rule. These studies are important to academic historians and to the present and future members of the RAF.

The RAF Historical Society was formed in 1986 to provide a focus for interest in the history of the RAF. It does so by providing a setting for lectures and seminars in which those interested in the history of the Service have the opportunity to meet those who participated in the evolution and implementation of policy. The Society believes that these events make an important contribution to the permanent record.

The Society normally holds three lectures or seminars a year in London, with occasional events in other parts of the country. Transcripts of lectures and seminars are published in the *Journal of the RAF Historical Society*, which is distributed free of charge to members. Individual membership is open to all with an interest in RAF history, whether or not they were in the Service. Although the Society has the approval of the Air Force Board, it is entirely self-financing.

Membership of the Society costs £18 per annum and further details may be obtained from the Membership Secretary, Dr Jack Dunham, Silverhill House, Coombe, Wotton-under-Edge, Gloucestershire. GL12 7ND. (Tel 01453-843362)

THE TWO AIR FORCES AWARD

In 1996 the Royal Air Force Historical Society established, in collaboration with its American sister organisation, the Air Force Historical Foundation, the *Two Air Forces Award*, which was to be presented annually on each side of the Atlantic in recognition of outstanding academic work by a serving officer or airman. The RAF winners have been:

1996	Sqn Ldr P C Emmett PhD MSc BSc CEng MIEE
1997	Wg Cdr M P Brzezicki MPhil MIL
1998	Wg Cdr P J Daybell MBE MA BA
1999	Sqn Ldr S P Harpum MSc BSc MILT
2000	Sqn Ldr A W Riches MA
2001	Sqn Ldr C H Goss MA
2002	Sqn Ldr S I Richards BSc
2003	Wg Cdr T M Webster MB BS MRCGP MRaES
2004	Sqn Ldr S Gardner MA MPhil
2005	Wg Cdr S D Ellard MSc BSc CEng MRaES MBCS
2007	Wg Cdr H Smyth DFC
2008	Wg Cdr B J Hunt BSc MSc MPhil
2009	Gp Capt A J Byford MA MA

THE AIR LEAGUE GOLD MEDAL

On 11 February 1998 the Air League presented the Royal Air Force Historical Society with a Gold Medal in recognition of the Society's achievements in recording aspects of the evolution of British air power and thus realising one of the aims of the League. The Executive Committee decided that the medal should be awarded periodically to a nominal holder (it actually resides at the Royal Air Force Club, where it is on display) who was to be an individual who had made a particularly significant contribution to the conduct of the Society's affairs. Holders to date have been:

Air Marshal Sir Frederick Sowrey KCB CBE AFC
Air Commodore H A Probert MBE MA

SECRETARY

Gp Capt K J Dearman
1 Park Close
Middleton Stoney
Oxon
OX25 4AS
Tel: 01869 343327

MEMBERSHIP SECRETARY

(who also deals with sales of publications)

Dr J Dunham
Silverhill House
Coombe
Wotton-under-Edge
Glos
GL12 7ND
Tel: 01453 843362

TREASURER

John Boyes TD CA
70 Copse Avenue
West Wickham
Kent
BR4 9NR
Tel: 0208 776 1751

EDITOR and PUBLICATIONS MANAGER

Wg Cdr C G Jefford MBE BA
Walnuts
Lower Road
Postcombe
Thame
OX9 7DU
Tel: 01844 281449