

The Role of Airpower in the Rhodesian Bush War, 1965-1980

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Overview

Between 1965 and 1980, the vastly outnumbered military forces of Rhodesia, now Zimbabwe, fought a counterinsurgency (COIN) against rebel forces infiltrating the country on three sides. Although ultimately unsuccessful, the Rhodesians developed many innovative and unique COIN tactics, at both the operational and tactical levels. Many of these tactics involved their robust air force which included close air support, air mobility, and command and control (C2) aircraft. Today the United States finds itself fighting a COIN campaign with a small ground force and is incorporating very advanced air forces from several nations into this fight. The Rhodesians were able to develop numerous innovations which are applicable to today's conflict.

Background

The country of Rhodesia is approximately the size of Montana. It is bordered by Botswana and the Kalahari Desert to the West, Zambia and the Zambezi River to the North and a band of low mountains which forms the border with Mozambique to the East. It shares a border with South Africa to the South. The country's relatively high altitude gives it an overall pleasant, Mediterranean-like climate.

The modern era of Zimbabwe's history begins in 1890 when Cecil John Rhodes, a ruthless and cunning mining executive, negotiated rights from the tribal king to bring miners into the area. In 1893, white settlers intervened in a dispute between two tribes, the Shona and Ndebele, using it to seize the best grazing and agricultural areas from the Ndebele. Displaced Shona and Ndebele were relegated to "tribal trust areas," akin to Native American Reservations in the United States. The new country was named Southern Rhodesia and in 1923 became a self-governing British colony.

Despite Rhodesia's filial ties with her mother country, following World War II the white rulers of the country were increasingly at odds with Britain over expanding suffrage to include the majority native-African population in the political process. At the time, approximately 80,000 white Rhodesians held all real power and the 2.5 million native-Africans held almost none. As a result of this, on 11 November 1965, Rhodesia issued a Unilateral Declaration of Independence, or "UDI."

The UDI made Rhodesia a pariah and the subject of United Nations trade sanctions which were enforced by Great Britain and others. The sanctions would limit the import of war material, forcing the Rhodesians to become exceptionally self-sufficient. With majority participation in government now unlikely, various insurgent groups began a military effort to meet their objectives. This was the start of what Rhodesians called "The Bush War" and Zimbabweans call the Second Chimurenga or Liberation Struggle.¹

The Opposing Forces

Several types of forces were arrayed against each other during the war. On the Rhodesian side were small but capable military and police forces. Due to the small white population, these forces were well integrated and used a national combined operations center and five regional joint operations centers which focused efforts of the Army, Air Force, and police. The Army consisted of several units which had legacies going back to the First World War including the Rhodesian African Rifles, the Rhodesian Light Infantry, and armored car, artillery, and horse-borne scout units. They also had two elite units, the Selous Scouts and the Rhodesian Special Air Service (SAS). The Selous Scouts were an elite unit of trackers who specialized in operating in small units to hunt down and kill guerillas. This feared unit also contained a large number of former guerillas who had changed sides.² The Rhodesian SAS began as C Squadron of the British SAS. It specialized in reconnaissance and clandestine operations, especially across borders in supposedly neutral border nations.³ The police, formally known as the British South African Police, were a paramilitary organization with a large reserve which combined both policing and internal security functions. It is important to note that all but a few of these units included both white and native-African members.⁴ In fact, the term “native African” is deceptive since many of Rhodesia’s white inhabitants were from families that had lived in Africa for generations.

As a former part of the British Commonwealth, the Rhodesian Air Force (RhAF) of 1965 was robust by African standards, second only to South Africa in sub-Saharan Africa. The RhAF consisted of 71 aircraft, including 12 Hawker Hunter fighter-bombers, 17 Canberra light bombers, 14 Vampire bombers, eight C-47 Dakota transports, 12 Provost T-52 trainers, and eight Alouette III helicopters. They also had a reserve of civilian aircraft (Cessnas) which were used for reconnaissance. Despite international sanctions which severely limited the availability of spare parts and new aircraft, by 1980 the RhAF had 132 aircraft, most of the additional aircraft being helicopters.⁵ The RhAF was composed of approximately 1,300 personnel trained in the British manner, which had all members of the crew, operational as well as support, performing very sophisticated maintenance. The personnel were highly motivated and by 1978, the aircraft still had an 85% serviceability rate, despite shortages.⁶

Despite having a common goal and enemy, insurgent forces were divided into two factions which roughly corresponded with the tribal groupings within the country. The factions were the Zimbabwe African National Liberation Army (ZANLA) and the Zimbabwe People’s Liberation Army (ZIRPA). ZANLA was a Shona-based organization ultimately led by Robert Mugabe. It initially operated out of Zambia but shifted its focus to Mozambique after that country won its independence from Portugal in 1975. ZANLA had Chinese support and conducted its operations as a classic Maoist people’s struggle. Its forces consisted of small bands which infiltrated into safe areas in Rhodesia from which it conducted terrorist and insurgent attacks. ZIRPA, which operated from Zambia, was a Ndebele-based organization led by Joshua Nkomo. With advisors from the Soviet Union, ZIRPA built up a large motorized conventional force which it coupled with marginally effective guerillas operating within Rhodesia. ZIRPA’s war-time strategy was to allow the Rhodesians and ZANLA to fight each other to a standstill before committing its motorized forces to achieve its victory.⁷

Overview of the War

The Bush War can be divided into two distinct phases. The first phase, which took place between 1964 and 1972, consisted of amateurish incursions by insurgent forces infiltrating from Zambia. The insurgent forces, although operating from the same host country, were divided into the two factions as described above. They also lacked adequate and even standardized training. For example, in one ZANLA platoon three men had been trained in Cuba, two in Algeria, another in Zambia, and their commander in Russia.⁸

Tellingly, the first “battle” of the war, the “Battle of Sinoia,” was a police action in April 1966 against a group of insurgents who were attempting to conduct terrorist attacks against white farmers and incite the majority population to join the insurgency. However, Rhodesian security forces detected the group and the “battle” was in fact simply the killing of seven insurgents with no casualties for the Rhodesians. Although not a significant battle, the anniversary of the event is celebrated today as “Chimurenga Day.” “Chimurenga” is the Shona word for struggle.⁹

Strategically, the defining feature of this first phase of the war was that Rhodesia only faced infiltration from one front, the border with Zambia, and had sympathetic regimes to their south with South Africa and to the east with Portuguese-controlled Mozambique. This allowed the Rhodesians to focus their limited manpower exclusively in one area. Also, because the various insurgent groups allied themselves with South Africa’s African National Congress, the apartheid-era South African government covertly assisted the Rhodesians with manpower, logistical support, and military equipment.¹⁰

Insurgent objectives in this phase of the war were fairly modest - to attack white-owned farms and to cut the oil and power line link to Mozambique.¹¹ The guerrillas made little effort to co-opt the local populace, which would have given them sanctuary.¹² The insurgents also faced a natural barrier, the Zambezi River, as well as flat, open terrain which enabled Rhodesian Security Forces to detect infiltrators. This forced the insurgents to break into small groups to avoid detection and weakened them militarily.¹³

Even with their small numbers, the Rhodesians were the clear-cut winners of the first phase of the war. By the late 1960s, they had hunted down and eliminated insurgent forces within the country, effectively sealing the border with Zambia. They also felt confident enough to allow the release of leaders jailed early in the conflict, including Robert Mugabe.¹⁴ By the end of this phase, the insurgents had retreated back to their sanctuaries, were licking their wounds, and started retraining for a new phase of the conflict.

The Rhodesian Government’s euphoria was short-lived, however. The second phase of the war, running between 1972 and 1979, saw a complete reversal. Unfortunately, the Rhodesians’ earlier success caused them to overlook the insurgents’ growing menace. The rebel groups spent 1969 in intense training with Soviet, Cuban, and Chinese advisors.¹⁵ The Chinese advisors to the ZANLA would be of particular importance since they advocated a Maoist “People’s War” which would lead ZANLA to establish extensive strongholds in the countryside. The Soviet advisors to ZIRPA would help create an extremely formidable conventional threat, but it would ultimately prove ineffective.

A second event helped change the nature of the war. ZANLA's undisciplined conduct led to expulsion from Zambia, but ZANLA ultimately found a new sanctuary in Mozambique.¹⁶ Although nominally under Portuguese control, vast areas of Mozambique's territory were under the control of the Front for the Liberation of Mozambique (FRELIMO), Mozambique's indigenous insurgent group. With common objectives, both FRELIMO and ZANLA cooperated and created large bases in the border areas with Rhodesia. Coupled with the existing ZIRPA infiltration routes from Zambia, this added an additional 1,231 kilometers of border for the Rhodesian Security Forces to cover. Once FRELIMO won their war in 1975, this support for ZANLA became overt.¹⁷

Beginning in 1971, Rhodesia had to commit all of its security forces to battling the insurgents. The tactics of the rebel groups continued to be small hit-and-run raids, but now with much larger formations of up to 100 insurgents. Their targets remained isolated farms and infrastructure with farm workers often bearing the brunt of their attacks. However, they also conducted reprehensible terrorist attacks such as the shooting down of civilian airliners with SA-7 surface-to-air missiles and the subsequent slaughter of crash survivors in 1979.¹⁸

Adding to Rhodesia's woes, South African forces were withdrawn in the face of international criticism and Botswana was added as an insurgent sanctuary. Facing attacks from three fronts forced Rhodesia to cede control of the Northeastern Tribal Trust lands as well as most rural areas to the insurgents. As in Vietnam, they controlled the day but the insurgents controlled the night. Despite these limitations, the Rhodesians fought an exceptionally innovative campaign in an attempt to limit the number of insurgents within Rhodesia. The tactics they employed included using groups of former insurgents emulating insurgent groups to draw out real insurgents.¹⁹ They also used very advanced air-mobile operations known as "Fire Force" missions to rapidly engage insurgents with their limited available forces. Finally, they flagrantly ignored international borders to engage insurgent base camps in neighboring countries. While militarily sound, these attacks were countered in the international media by the insurgents, who characterized them as attacks on refugee camps.²⁰

Although winning battles, by 1979 the Rhodesians were being swamped by insurgents crossing from three different countries. As early as 1976 the Rhodesian government realized they needed some form of majority rule. Despite high kill ratios, the continued effect of extended military call ups and sanctions had their effect. In 1979, Bishop Abel Muzorewa, a moderate African leader, was elected Prime Minister of the country, now referred to as "Zimbabwe Rhodesia." The new constitution allowed for greater participation in elections but was far short of what ZANLA and ZIRPA wanted. Therefore, the war continued. In response, the Rhodesian SAS conducted a spectacular campaign against Zambia's infrastructure, cutting all trade routes and crippling their economy. With Mozambique knowing it was next, both countries urged ZANLA and ZIRPA to sign an accord, which they did on December 20, 1979. The next year, Robert Mugabe became Prime Minister after Zimbabwe's first election with universal suffrage.²¹

The Role of Airpower in the Conflict

Airpower played a central role throughout the war. Strategically, covert airlift was used to violate sanctions and bring much-needed hard currency and military supplies to the country. In addition,

the RhAF played a key role in the collection of intelligence, using Canberras supplemented with civilian Cessnas for photo reconnaissance and one of their venerable C-47 Dakotas, nicknamed “Warthog,” as an electronic intelligence collector. This aircraft collected and analyzed electronic communications as well as missile and surveillance radar data. Given the remoteness and the lack of friendly forces in areas where insurgents established bases, the strategic importance of these intelligence platforms cannot be understated.²² However, the RhAF had its greatest impact at the operational and tactical levels.

Operationally, the RhAF used airpower to overcome the Rhodesian Security Forces’ lack of manpower. With a total of 42,800 security forces (including reserves) to cover 409,542 square kilometers of territory, the RhAF used airpower to rapidly bring combat power to bear on insurgents. It provided vitally needed reinforcements and close air support for the small formations of soldiers operating in the bush. Airpower was also often employed to provide needed killing power or to maneuver insurgents into infantry-based kill zones. Finally, with limited long-haul communications, airpower provided high-level command and control, especially during cross-border operations.

The Rhodesians used air mobility primarily for Fire Force operations. The geography of Rhodesia includes rock formations known as “kopjes,” isolated steep-sided prominences, similar to the mesas of the American Southwest. Many of these kopjes had vegetation and made outstanding observation posts. When one of these posts located a target, a three-helicopter force consisting of two “G-Car” troop helicopters would deploy two “sticks” of four soldiers each onto the target. Later a “K-Car” or “killer” attack helicopter was added to the formation.²³ Until 1976, the G-Cars were armed with a machine gun operated by their technician. After 1976, the single machine gun was replaced by twin machine guns. The K-Cars were armed with a 20 millimeter cannon.²⁴

While eight soldiers seems small, early in the conflict when insurgent formations were small, it was more than adequate. At other times, when facing a larger formation of insurgents, a mortar team would be deployed via helicopter to attack the insurgents. Operating from the RhAF’s many forward airfields, these forces were able to rapidly respond to contacts.²⁵ To extend the range of their helicopters, forward refueling points were established using a convoy of tankers drive to within 10 minutes of the target area. If this wasn’t possible, C-47s would air drop fuel drums along the helicopters’ flight path.²⁶

With the success of these operations, paratroop drops and fixed-wing close air support were added to the mix. In the paratroop drops, the sticks of troops from helicopters would establish blocking positions to stop the insurgents from escaping. Paratroopers would then deploy from C-47s, the same aircraft used in the World War II Normandy invasion, to flush insurgents into open area killing zones.²⁷

Fixed-wing aircraft were also often used to pin down insurgents or to drive them into blocking positions. An example of this type of operation took place in April 1979. After Rhodesian intelligence identified a large ZANLA logistics base across the border in Mozambique, the military planned an operation to destroy the base and accumulated supplies, as well as to capture several members of the ZANLA hierarchy. The RhAF started the attack with air strikes by

Hunter aircraft dropping traditional bombs and strafing, accompanied by Canberras dropping cluster bombs. The air strikes served as cover for the insertion of troops by helicopter on the outskirts of the camp. As dazed ZANLA insurgents took stock after the air strikes, they were stunned to see a line of Rhodesian troops sweeping through their camp.²⁸

In addition to direct insertions, the RhAF used C-47s to deliver troops to areas inaccessible by their helicopters, especially during cross-border strikes. The Rhodesians were particularly fond of airdrops and consequently the entire SAS and approximately half of the rest of their forces trained as paratroopers.²⁹ Aircraft were also used to extract isolated sticks of troops in emergency situations. Troops operating outside of Rhodesia wore special harnesses which they could quickly attach to trapeze bars lowered from helicopters to rapidly hook up and depart under fire.³⁰ Airdrops were also used to resupply troops operating away from supply areas.

The RhAF also used airpower in more traditional roles. When patrols encountered formations larger than they could handle, they would call in close air support to deliver needed killing power. For example, in November 1977, an SAS patrol operating in Mozambique set up a mine-triggered ambush along a known ZANLA and FRELIMO supply route. However, when the supply convoy arrived, it consisted of over 400 troops supported by anti-aircraft artillery (AAA), a far too formidable target for either the fifteen men in the SAS patrol or helicopters. Fortunately for the SAS, the ZANLA stayed in place after the lead vehicle in the convoy struck a mine, giving the RhAF time to bring in Hunter aircraft and let the SAS stay hidden.³¹

Similar to this were the “pseudo-gang” operations of the Selous Scouts. As former guerillas themselves, the Selous Scouts would emulate legitimate guerilla groups. Originally these missions were to gather intelligence. However, they would also identify targets for Fire Force missions or air strikes.³²

Air strikes were also used in classic interdiction roles to destroy known fixed targets, often in conjunction with ground forces who swept through camps to capture or kill survivors and to gather intelligence and weapons. For example, in November 1976, the Rhodesians planned a large attack against a ZANLA camp complex housing over 8,000 inhabitants near Chimoio, Mozambique. The plan called for paratroopers from the Rhodesian Light Infantry (RLI) and SAS to take up blocking positions on two sides while 40 helicopters placed RLI troops on a third side. The fourth side would be covered by K-Car attack helicopters, completely boxing in the insurgents. Close air support was used to cover the air assault, and these strikes would also drive the insurgents into the blocking positions around their camp. The air strikes were in turn covered by a civilian DC-8 airliner which flew over the camp to condition the insurgents to the sound of aircraft and keep them from scattering when they heard the RhAF aircraft.³³

Initial air strikes were planned to coincide with the morning parade at 0800. As planned, the insurgents fled to trenches when the civilian DC-8 flew overhead and had just returned to their formations when the Hunters struck. A total of eight Hunters, six Vampires, and three Canberras conducted repeated strikes over the course of the day. As the initial air strikes were ongoing, the paratroop drops took place, allowing the fighter-bombers to suppress AAA fire. Also as expected, insurgents fled from the camp and into the killing zones of the waiting Rhodesian forces. The operation, code-named Dingo, was a complete success with over 2,000 enemy killed.

The camp was destroyed along with vast amounts of supplies and weapons. Rhodesian losses were one airman, who was killed as a result of crash landing his Vampire in Rhodesia, and one soldier.³⁴ However, this was a temporary success, since the camp was soon rebuilt requiring a similar but less successful attack in 1979.³⁵

The Rhodesians also developed several innovative tactical uses for airpower. One example was the use of long-range dog handling. Early in the war when security forces were often tracking one or two guerillas, tracking dogs were used to hunt them down. To increase their range and mobility, security forces outfitted tracking dogs with harnesses carrying two-way radios and an orange panel. The dog's handler would then watch the dog from a helicopter which also held a team of soldiers. By listening to the dog's breathing and heartbeats, the handler could follow the hunt, giving commands by radio as needed. Once the dog had cornered its quarry, the soldiers on board the helicopter would be employed to deal with the insurgents. This tactic was successful early in the war before insurgent bands became larger.³⁶

The RhAF also used modified C-47s as "Command Daks," airborne command posts, similar to the EC-130 Airborne Battlefield Command and Control Center (ABCCC). While helicopters were used for command and control throughout the conflict, their limited dwell time and range required the RhAF to retrofit a C-47 with additional communications and other command systems. The Rhodesian innovation with these aircraft wasn't in the concept, but in the employment. Unlike the ABCCC, which was a forward extension of the Air Operations Center with a lieutenant colonel as the senior passenger, the Rhodesian Commander of Combined Operations (analogous to the Chairman of the Joint Chiefs of Staff) and the RhAF Director of Operations (analogous to the Chief of Staff of the Air Force) were often the passengers on Command Daks. While it put two irreplaceable leaders in harm's way, it also gave them unprecedented ability to control operations. Operating Command Daks with these passengers became standard practice, especially during cross-border operations, given the limited range of land-based communications.³⁷

A final tactical innovation was in the use of indigenously-built weapons systems. Given international sanctions, the Rhodesian military was forced to create whole classes of weapons themselves, all of which were built to kill as many insurgents as possible. One of these weapons was the "alpha bomb," a completely spherical cluster munition. Upon impact, it compressed and bounced, creating an airburst effect. Canberra bombers carried up to 300 alpha bombs in hoppers allowing them to saturate areas. Another innovation was the frangible tank, nicknamed the "frantan," an elongated (with fins), napalm-delivery system built from plastic resin. The RhAF believed this design gave the weapon a better flight profile than normal tanks and the plastic construction ensured that it shattered on impact, dispersing its payload. Another innovative weapon was the "golf bomb," a small munition designed for small aircraft such as Lynx helicopters. It was a cylinder filled with nitrate fertilizer and diesel fuel for explosive.³⁸

COIN Lessons From the Conflict

The extreme lack of manpower and military resources forced the Rhodesians to optimize how they employed their resources at the operational and tactical levels. They also had fifteen years

of confronting two very different foes during which to refine their tactics. Although this conflict took place over twenty-five years ago, we can still draw lessons from it.

The best example of innovation was the establishment of unified commands, which fused police, ground, and air commanders at local levels. While a unified command is common in COIN operations it is unusual for unified commands to exist below the operational level. For example, currently in Iraq, while Airmen are assigned to multi-national divisions, they fill specific roles in intelligence and close air support. The first place where a true joint command exists is at Multi-National Forces-Iraq. However, just as in Rhodesia, local conditions create vastly different combat environments throughout the country. For example, in Iraq in 2007, conditions in Al Anbar Province were vastly different, focused more on reconciliation, than those prevailing in other parts of the country. By creating joint commands at local levels, the Rhodesians were able to adapt their efforts to their particular adversary in their region.

Authors James S. Corum and Wray R. Johnson in their book *Airpower in Small Wars*, identified the need for joint operations in COIN campaigns. As they stated, “We cannot emphasize enough that successful counterinsurgency and counterterrorism operations are joint operations.”³⁹ Corum and Johnson expand their model of joint operations to include police forces and civilian intelligence services as well as military and civilian civic action teams; however, they do not discuss at which level this integration should take place, probably to allow for adaptation to the specific conditions of the conflict.⁴⁰

Army and Marine Corps COIN doctrine echoes the need for planning at low levels, stating, “COIN planning is often fluid and develops along short planning and execution timelines, necessitating informal and formal coordination and integration.”⁴¹ The Air Force’s irregular warfare doctrine, while acknowledging the need for integration at low levels, diverges from this idea by arguing, “IW [irregular warfare] requires a planning structure that is equally focused at the local level and attuned to the dynamic environment. Airmen appropriately positioned at the lower levels with respective input and reachback to the AOC [Air Operations Center] may allow more effective use of airpower at the tactical level freeing other assets to conduct other operational level operations.”⁴² Air Force doctrine assumes that a small body of planners at local levels, who are, in practice, close air support and intelligence specialists, can fully integrate airpower into COIN planning with reachback to the AOC. The Rhodesian experience does not reflect this and reinforces the need for joint planning at low levels in COIN campaigns. Their success in rapidly responding to local events is a direct result of this integration.

The second innovation worthy of praise was in the use of airpower as the dominant combat force for engagements where the insurgents vastly outnumbered Rhodesian forces. These engagements ranged from the small SAS patrols on the tops of kopjes to the large cross-border operations in Mozambique. In these scenarios, smaller Rhodesian forces were able to call in airpower on insurgent patrols to destroy larger forces while ground units provided blocking positions, keeping the insurgents in the killing zone and preserving the Rhodesian’s limited manpower.

On the surface these operations resembled the beginning of Operation Enduring Freedom in Afghanistan where tactical air control parties operating with Special Forces teams called in air strikes on Taliban and Al Qaeda forces. However, these operations were used in conjunction

with irregular forces to take territory.⁴³ The Rhodesians used these operations in an economy of force mission to disrupt the insurgents in areas which they didn't intend to retake. In addition, these operations enabled the Rhodesians to provide combat presence over a larger ground area and provided extremely lethal killing power, which made up for the limited ground combat power. These concepts can be applied to ongoing operations in sparsely populated areas to disrupt insurgent lines of communications and sanctuaries.

While not an innovation, air mobility once again proved its value in allowing the Rhodesians to rapidly move their small ground forces around the country. Coupled with innovations such as fuel moved forward by either land convoys or airdrops, this enabled the Rhodesians to cover large areas with their small land forces. Both Air Force and Army/Marine Corps doctrine echo this requirement. Air Force doctrine states, "Rapid repositioning of small teams through the air allows for a greater chance of tactical surprise across great distances and difficult terrain. Air mobility permits leaner ground-based operations, improving force protection during transport."⁴⁴ Similar statements can be found in Army/Marine Corps doctrine: "Airlift provides a significant asymmetric advantage to COIN forces, enabling commanders to rapidly deploy, sustain and redeploy land forces... airlift bypasses weaknesses insurgents have traditionally exploited."⁴⁵

A final lesson learned from this conflict is that innovative tactics and methods should be encouraged. These innovations included remote-controlled tracking dogs, C-47s modified into national-level aerial command posts, and unique weapons systems. Each of these innovations, forced upon the Rhodesians by embargoes and lack of resources, serves as a reminder that COIN operations require outside-the-container thinking. Corum and Johnson echo this when they endorse the low-key aspect of airpower in small wars. As they point out, "Air forces with limited resources have often devised new and ingenious uses for civilian and obsolete military equipment in small wars."⁴⁶

Conclusion

While a little-remembered conflict, the Rhodesian Bush War remains a fascinating subject for study, due to the length of the conflict, the differing doctrines of the two insurgent groups, and the disparity in the size of the opposing forces. Throughout the COIN campaign airpower played a key role. Given the current conflict and the push in the Air Force to optimize the role of airpower in this conflict, we should incorporate the hard learned lessons of the Rhodesian military. Their conflict demonstrated that airpower can provide extremely lethal effects if integrated into joint planning at local levels. It also reinforced the need for innovation and the key role that air mobility plays in COIN operations.

Notes

1. Maj Charles M. Lohman and Maj Robert I. MacPherson, "Rhodesia: Tactical Victory, Strategic Defeat" Marine Corps Command and Staff College, 7 June 1983, <http://www.rhodesia.nl/Rhodesia%20Tactical%20Victory.pdf>.

2. Ibid.

3. Barbara Cole, *The Elite: The Story of the Rhodesian Special Air Service*, (Transkei, South Africa: Three Knights, 1984), 7-13.
4. Lohman and MacPherson, "Rhodesia: Tactical Victory, Strategic Defeat."
5. Roy Nesbit and Dudley Cowderoy, *Britain's Rebel Air Force: The War from the Air in Rhodesia 1965-1980*, (London, UK: Grub Street, 1998), 5-12.
6. J. R. T. Wood, "Rhodesian Insurgency," <http://www.rhodesia.nl/wood1.htm>.
7. Lohman and MacPherson, "Rhodesia: Tactical Victory, Strategic Defeat."
8. Ibid.
9. Nesbit and Cowderoy, *Britain's Rebel Air Force*, 29-33.
10. Lohman and MacPherson, "Rhodesia: Tactical Victory, Strategic Defeat."
11. Ibid.
12. Nesbit and Cowderoy, *Britain's Rebel Air Force*, 38.
13. Lohman and MacPherson, "Rhodesia: Tactical Victory, Strategic Defeat."
14. Ibid.
15. Ibid.
16. Nesbit and Cowderoy, *Britain's Rebel Air Force*, 55.
17. Karl P. Magyar and Constantine P. Danopoulos, eds., *Prolonged Wars: A Post-Nuclear Challenge*, (Maxwell AFB, AL: Air University Press, 1994), 220-221.
18. Lohman and MacPherson, "Rhodesia: Tactical Victory, Strategic Defeat."
19. Ibid.
20. Nesbit and Cowderoy, *Britain's Rebel Air Force*, 55.
21. Ibid., 38.
22. Ibid., 76-80.
23. J. R. T. Wood, "Fire Force: Helicopter Warfare in Rhodesia 1962-1980," <http://www.rhodesia.nl/firefor1.htm>.

24. Nesbit and Cowderoy, *Britain's Rebel Air Force*, 34-45.
25. Ibid.
26. Wood, "Fire Force: Helicopter Warfare in Rhodesia 1962-1980."
27. Nesbit and Cowderoy, *Britain's Rebel Air Force*, 34-45.
28. Wood, "Fire Force: Helicopter Warfare in Rhodesia 1962-1980."
29. Nesbit and Cowderoy, *Britain's Rebel Air Force*, 76-88.
30. Wood, "Fire Force: Helicopter Warfare in Rhodesia 1962-1980."
31. Cole, *The Elite*, 163-169.
32. Magyar and Danopoulos, *Prolonged Wars*, 207-208.
33. Cole, *The Elite*, 169-177.
34. Nesbit and Cowderoy, *Britain's Rebel Air Force*, 103-106.
35. Ibid., 44-45.
36. Ibid., 80-81.
37. Ibid., 68-70.
38. Ibid.
39. James S. Corum and Wray R. Johnson, *Airpower in Small Wars: Fighting Insurgents and Terrorists*, (Lawrence, KS: University of Kansas Press, 2003), 433.
40. Ibid.
41. Field Manual (FM) 3-24 / Marine Corps Warfighting Publication (MCWP) 3-33.5, *Counterinsurgency*, December 2006, E-4.
42. Air Force Doctrine Document (AFDD) 2-3, *Irregular Warfare*, 1 August 2007, 67.
43. Steve Call, *Danger Close: Tactical Air Controllers in Afghanistan and Iraq* (College Station, TX: Texas A&M University Press, 2007), 16-24.
44. AFDD 2-3, *Irregular Warfare*, 16.
45. FM 3-24 / MCWP 3-33.5, *Counterinsurgency*, E-4.

46. Corum and Johnson, *Airpower in Small Wars*, 431-432.

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