

Book Review

War of Intervention in Angola, Volume 5: Angolan and Cuban Air Forces, 1987–1992

Adrien Fontanellaz, Tom Cooper and José Augusto Matos

Warwick: Helion

2023, 76 pages

ISBN 978-1-9150-7055-5

Africa has often been a theatre of proxy warfare, and the Angolan Civil War (1975–2002), particularly during its climactic years in the late 1980s, was no exception. Helion's *Africa @ War* series has steadily contributed to the body of literature exploring the intricacies of these conflicts, and *War of Intervention in Angola, Volume 5: Angolan and Cuban Air Forces 1987–1992*¹ stands as a testament to this. Written by Adrien Fontanellaz, Tom Cooper, and José Augusto Matos, *War of Intervention in Angola* offers an operational and tactical analysis of the aerial dimension of the conflict, focussing on the logistical and strategic implications of Cuban and Angolan air power during the concluding years of interventionist warfare in Angola.

From a logistical standpoint, this volume provides an illuminating study of how two ideologically aligned but logistically challenged air forces attempted to sustain combat operations over a vast and often inhospitable theatre. The complexity of supporting air campaigns in such a context – amid embargoes, limited infrastructure, harsh climatic conditions, and asymmetric threats – offers a unique opportunity to examine air power projection under duress.

War of Intervention in Angola is structured to provide an in-depth look at the evolution, deployment, and effectiveness of the People's Air Force of Angola/Air and Anti-aircraft Defence (FAPA/DAA) (*Força Aérea Popular de Angola/Defesa Anti-Aérea*) and the Cuban Revolutionary Air and Air Defence Forces from 1987 until the Cuban withdrawal in 1991. Fontanellaz *et al.* have built a narrative not only around air combat operations but also around the broader logistical architecture that enabled these operations – or in some cases, constrained them.

The volume begins with a succinct strategic overview, establishing the military–political framework that influenced air operations. By the late 1980s, the conflict had reached a point of escalation, with South African forces supporting UNITA (National Union for the Total Independence of Angola) and the Soviet Union and Cuba backing the MPLA-led Angolan government (*Movimento Popular de Libertação de Angola*). The air war intensified in response to South African deep-penetration raids and the strategic importance of the Cuito Cuanavale region.

One of the standout strengths of the book is its implicit, though sometimes understated, treatment of logistical challenges. The size of Angola, the lack of infrastructure, and poor road and rail networks meant that air operations were heavily reliant on air transport for resupply over long distances. The use of forward operating bases (FOBs), notably at Menongue, Lubango, and Cuito Cuanavale, necessitated a robust logistical tail to maintain airworthy status, munitions stocks, fuel supply, and personnel rotation.

Fontanellaz *et al.* detail how the Cuban air detachment, operating from bases in southern Angola, often contended with inadequate ground support infrastructure, a shortage of spare parts, and deteriorating airstrips. The Soviet Union attempted to alleviate this by providing Ilyushin Il-76 transports and Antonov An-12s, but these solutions were not always timely or consistent. Moreover, the harsh environmental conditions of dust, humidity, and high temperatures, took a constant toll on airframes, necessitating frequent unscheduled maintenance, and reducing sortie rates.

The Cuban and Angolan forces adopted various mitigation strategies, including cannibalisation of parts from grounded aircraft and the forward deployment of mobile maintenance teams. This, however, created a brittle supply chain where delays in one area could ground entire squadrons.

With reference to aircraft and maintenance logistics, particular attention is paid to the types of aircraft involved, especially the MiG-21bis, MiG-23ML, and Su-22, as well as rotary assets, such as the Mi-24 Hind and Mi-17. Each platform had unique logistical needs. The MiG-23ML, for instance, required a sophisticated maintenance regime, and high-grade aviation fuel was not always readily available in theatre. Fontanellaz *et al.* point out that Cuban technicians often had to improvise maintenance solutions, sometimes at the cost of aircraft longevity.

Another critical logistical insight pertains to munitions management. Precision-guided munitions (PGMs) were virtually absent, necessitating low-altitude, high-risk attack profiles that placed additional stress on both pilot endurance and aircraft systems. Bombs and rocket pods were sometimes manually calibrated on rudimentary equipment, further complicating standardisation and efficacy.

The integration of Cuban and Angolan air operations introduced additional logistical hurdles. Command and control (C2) systems were often fragmented, leading to duplication of effort and inefficient use of air assets. *War of Intervention in Angola* highlights several instances where poor inter-service coordination led to delays in air support or friendly fire incidents. This fragmentation extended to logistics, where overlapping chains of command complicated the prioritisation and allocation of resources.

Despite these setbacks, the authors note significant improvements in C2 and logistics by 1989, particularly with the establishment of joint operations centres and the introduction of Soviet advisors specialising in air operations logistics. This professionalisation, albeit

partial, helped the Cubans and Angolans to increase sortie rates during critical operations around Cuito Cuanavale.

From a military logistics viewpoint, one of the most important themes is how air power shaped and enabled ground operations. Tactical airlift, medevac capabilities, and close air support (CAS) missions were vital in allowing FAPLA (People's Armed Forces for the Liberation of Angola) to extend its operational reach. Air superiority over UNITA-controlled areas allowed the deployment of light mechanised units into otherwise inaccessible regions.

Logistics limitations however meant that such operations were highly localised and often short-lived. In the absence of a robust logistical backstop, even successful offensives stalled as ammunition and fuel ran low. Fontanellaz *et al.* skilfully convey how the tempo of operations was dictated less by strategy than by logistical feasibility.

The withdrawal of Cuban forces from Angola beginning in 1989 marked a turning point. The drawdown itself became a major logistical undertaking. Dismantling airbases, redeploying aircraft and equipment, and maintaining operational readiness during the phased withdrawal required a high degree of logistical coordination. The book captures this well, describing how equipment was either repatriated, handed over to Angolan forces, or destroyed to prevent capture.

This section of the book also touches on the broader strategic implication of the withdrawal, namely the handover of logistical responsibilities to Angolan forces, who were often ill-equipped to manage them. The legacy of Cuban logistical networks, both in terms of physical infrastructure and training, would influence the operational capabilities of FAPA/DAA for years to come.

As with other titles in the *Africa @ War* series, *War of Intervention in Angola* is visually rich. Aircraft profiles, tactical maps, and photographs enhance the reader's understanding of the logistical challenges discussed. Particularly commendable are the annotated diagrams showing airbase layouts and aircraft loadouts.

The use of Cuban and Angolan sources, alongside Soviet-era documents and first-hand accounts, lends credibility and nuance to the narrative. Some of the more technical logistical data would however benefit from tabular representation or appendices for quick reference.

In conclusion, *War of Intervention in Angola, Volume 5* is a concise yet deeply insightful examination of the air power component in one of the most consequential late-twentieth-century conflicts in Africa. For logisticians, military historians, and defence analysts, the book offers valuable lessons in the practical limitations and improvisational requirements of sustaining air operations in austere environments.

By focussing not only on combat outcomes, but also on the behind-the-scenes realities that shaped them, Fontanellaz *et al.* provide a holistic view of air warfare in Angola. The result is a compelling chronicle of how logistical challenges can shape, constrain, and occasionally dictate military strategy. Despite its brevity, *War of Intervention in Angola* stands as a significant contribution to the field of military logistics and African conflict studies.

Louis M du Toit 
Stellenbosch University

Endnotes

- ¹ A Fontanellaz, T Cooper & JA Matos, *War of Intervention in Angola, Volume 5: Angolan and Cuban Air Forces 1987–1992*, Africa@War, Vol. 63 (Warwick: Helion, 2023).