



# SCIENTIA MILITARIA

South African Journal of Military Studies

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## ARTICLES

**The South African security predicament: Making sense of the objective realities**

*Abel Esterhuysen*

**Promoting psychological adaptation among navy sailors**

*Charles van Wijk and Jarred Martin*

**Hypersonic weapons and the future of nuclear deterrence**

*Eben Coetzee*

**The German attack on the Witboois at Hornkranz, Namibia, April 1893**

*Piet van Rooyen*

**The South African National War College military history staff ride as a deep learning experience**

*James Jacobs and Johan Wassermann*

**A reassessment of the tank battle between 4th Armoured Brigade and Panzerregiment 5 during Operation Crusader in North Africa on 19 November 1941**

*Andreas Biermann*

## BOOK REVIEWS

**Ratels on the Lomba: The story of Charlie Squadron (Leopold Scholtz)**

*Jean-Pierre Scherman*

**Soldaat en mens (Georg Meiring)**

*Abel Esterhuysen*

**The Opportunist: The political life of Oswald Pirow, 1915-1959 (Alex Mouton)**

*David Katz*

**Gunship over Angola: The story of a maverick pilot (Steve Joubert)**

*Anri Delpont*

**The Battle of Bangui: The inside story of South Africa's worst military scandal since Apartheid (Warren Thompson, Stephan Hofstatter and James Oatway)**

*Evert Kleynhans*

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## **Contents**

From the Editor .....	<b>i</b>
-----------------------	----------

### **ARTICLES**

The South African security predicament: Making sense of the objective realities .....	<b>1</b>
---	----------

*Abel Esterhuysen*

Promoting psychological adaptation among navy sailors .....	<b>23</b>
---	-----------

*Charles van Wijk and Jarred Martin*

Hypersonic weapons and the future of nuclear deterrence .....	<b>35</b>
---	-----------

*Eben Coetzee*

The German attack on the Witboois at Hornkranz, Namibia, April 1893 .....	<b>57</b>
---	-----------

*Piet van Rooyen*

The South African National War College military history staff ride as a deep learning experience .....	<b>75</b>
--	-----------

*James Jacobs and Johan Wassermann*

A reassessment of the tank battle between 4th Armoured Brigade and Panzerregiment 5 during Operation Crusader in North Africa on 9 November 1941 .....	<b>91</b>
--	-----------

*Andreas Biermann*

### **BOOK REVIEWS**

Ratels on the Lomba: The story of Charlie Squadron .....	<b>115</b>
--	------------

*Jean-Pierre Scherman*

Soldaat en mens .....	<b>119</b>
-----------------------	------------

*Abel Esterhuysen*

The Opportunist: The political life of Oswald Pirow, 1915-1959 .....	<b>123</b>
--	------------

*David Katz*

Gunship over Angola: The story of a maverick pilot .....	<b>127</b>
--	------------

*Anri Delpont*

The Battle of Bangui: The inside story of South Africa's worst military scandal since Apartheid .....	<b>133</b>
---	------------

*Evert Kleynhans*

**South African Journal**  
*of Military Science*

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# South African Journal *of Military Science*

## Editorial

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During the first half of 2021, and amidst the continuing throes to combat the global COVID-19 pandemic, there have been several notable developments that directly influenced global security and defence. Across the globe, countries have started vaccinating large segments of their populations against the COVID-19 virus in the hope of achieving population, or so-called ‘herd immunity’. In developed countries, these processes have achieved some measures of success, with large numbers of people, including healthcare workers and persons at risk, receiving vaccinations in a timely manner. There has also been a gradual easing of rather stringent lockdown measures coupled with the introduction of these vaccinations. However, in developing countries, the situation regarding the introduction of vaccinations and the imposition of stringent lockdown measures remains problematic. Governments are struggling to obtain the necessary funds to procure the needed vaccinations on the global market, but these are often in short supply. The tardy introduction and administration of vaccinations further complicate matters. Moreover, when adding chronic mismanagement and corruption into the equation, along with a growing number of failed and ineffective states, the situation has – and will have – a distinct influence of human security across the globe. These issues will undoubtedly continue to develop over the course of the next few months.

Following the outcome of the 2020 United States presidential election, Joe Biden was inaugurated on 20 January 2021 as the 46<sup>th</sup> president of the United States of America. Biden’s election as president heralded in a new era for the United States, especially in terms of the realms of security and defence. Some of the most notable developments during Biden’s first five months in office are his overtures to the North Atlantic Treaty Organisation (NATO) countries to rebuild trust, as well as his formal announcement that US troops will be fully withdrawn from Afghanistan by September 2021. In February 2021, while addressing the Munich Security Conference virtual event, Biden reaffirmed the commitment by the United States to the NATO alliance and the principle of collective defence – this, of course, being diametrically opposed to Donald Trump’s ‘America First’ foreign policy. At the end of February, the United States and the Taliban had signed a peace agreement that would see the gradual withdrawal of all regular American

troops from Afghanistan. In April, the Biden administration formally announced that they expect the withdrawal of troops to be completed by 11 September 2021, a decision that was mirrored by other NATO troop-contributing countries. The withdrawal of US troops in theory signals the end of a twenty-year-long deployment to Afghanistan that followed in the wake of the 9/11 attacks. However, while the withdrawal of US troops from Afghanistan is generally welcomed, it comes with several caveats. The withdrawal of US troops may leave a power vacuum within the country, which may see the collapse of the Afghan government that could result in a takeover by the Taliban. The worst case scenario would be the outbreak of a fresh Afghan civil war.

The rising Israeli–Palestinian tensions remain a cause for concern too, more especially following the outbreak of violence across Gaza and Israel in early May. The recent conflict, which has been marked by several indiscriminate attacks from both sides, occurs against the backdrop of mounting religious tensions and a recent court decision that would allow for the removal of Palestinian families from an East Jerusalem neighbourhood. The conflict, which has been marked by Hamas rocket attacks into Israel and retaliatory Israeli air strikes into Gaza, is gauged as the most violent since the so-called ‘Gaza War’ of 2014.

In southern Africa, the escalating conflict in the resource-rich northern province of Cabo Delgado in Mozambique between government forces and a local armed group linked to the Islamic State of Iraq and the Levant (ISIL) remains a cause for concern in terms of defence and continued security across the region. The inability of the Mozambican government to deal effectively with the insurgency in Cabo Delgado, coupled with the withdrawal of several multinational companies from the region, the use of South African mercenaries, and the recent attack on Palma, has prompted the Southern African Development Community (SADC) to reassess the security situation. This resulted in the recent SADC fact-finding mission to Mozambique to assess the situation on the ground and to decide on an appropriate regional response to the insurgency. This occurred against the backdrop of continuing pleas from Mozambique for foreign intervention to help curb the violence in Cabo Delgado. We might therefore soon see the operational deployment of SADC troops to the ungoverned space of northern Mozambique to combat the Islamist insurgents. This will of course include the deployment of the already over-stretched – and critically underfunded – South African National Defence Force (SANDF). Such a deployment will definitely test the manpower, operational capabilities and doctrine of the SANDF, who for the past twenty years or so have been involved mainly in peacekeeping missions in Africa – principally in Burundi, the Democratic Republic of the Congo and Darfur in Western Sudan. South Africans in particular will closely monitor the situation in Cabo Delgado as it develops over the coming months.

In this issue of *Scientia Militaria*, Vol. 49, No. 1, 2021, the articles consider both historic and contemporary issues related to war and conflict, as well as defence and security-related matters. As always, it is hoped that these articles will provide key insights and act as a source of influence for individuals involved in the broader ambit of military planning, operations, management and higher education.

In his article on the South African security predicament, Abel Esterhuyse considers the key features of the South African security agenda. Historically, this security agenda has been influenced by the unique South African threat perception, which, irrespective of the ruling entity of the day, focused on security threats emanating from outside Africa, security threats facing the country from within Africa, and security threats prevalent within the borders of the country. Esterhuyse also reflects on the ability of the human security paradigm to address the unique South African security predicament, specifically against the backdrop of the domestic and regional security agenda.

Charles van Wijk and Jarred Martin propose a new approach in their article for enhancing psychological adaptation among South African Navy sailors. They argue that the mission of the Institute for Maritime Medicine is to support and enhance the operational performance of South African Navy sailors during maritime operations, while also ensuring positive long-term mental health outcomes of sailors. In order to achieve this, Van Wijk and Martin propose that the mobilisation and/or demobilisation programmes used for ship-based maritime operations need to be reoriented towards a predict-and-promote approach. According to them, such an approach will enhance the psychological adaptation of sailors to the emotional demands of deployment as well as support more adaptive forms of mental health resilience, both before and after sea-going operations.

The article by Eben Coetzee reflects on hypersonic weapons and the future of nuclear deterrence. The development of hypersonic weapons provides unprecedented advantages in warfare in terms of the speed and agility of the missiles. The increase in the speed and agility of hypersonic missiles further drastically reduces the response time of nuclear states in the event of attack, and therefore encourages the pre-emptive use of force. Coetzee also argues that the speed and agility of hypersonic missiles are likely to render existing and future missile defences obsolete. This will lead to a situation where the failure of missile defences, coupled with a reduction in the response time of nuclear states to such attacks, in fact encourages the pre-emptive use of force. Where nuclear states are unable to field survivable second-strike forces, the stability of nuclear deterrence becomes highly problematic. Coetzee also considers the challenges, if any, which hypersonic weapons pose for the militaries of technologically less-advanced states, particularly those that primarily rely on conventional (non-nuclear) means to fend off aggressors.

In his article on the Battle of Hornkranz that took place in 1893, Piet van Rooyen reports on an overlooked event in the broader Namibian struggle for liberation. He argues that the liberation of Namibia is traditionally equated to the more recent struggle of the South West African People's Organisation, instead of against a bigger historical backdrop of anti-colonial resistance. Van Rooyen maintains that contemporary historians habitually overlook the brutal era of German colonisation when they write about the struggle for Namibian liberation. He argues that the Namibian struggle for liberation lasted nearly a century, and started for example with the battle that occurred between the Witboois and Germans at Hornkranz in April 1893.

In their article, James Jacobs and Johan Wassermann consider the South African War College military history staff ride as an education and training method related to the curriculum of the Senior Staff programmes presented at the college since 2002. They argue that the education and training process at the college, with specific reference to the staff ride to military battle sites and the associated application of the theory of operational art, was researched according to the tenets of the theory of deep learning. Jacobs and Wassermann further contend that, while it is possible to claim some deep learning successes using the military history staff ride, continuous reflection and educational interventions are needed to maintain the successes achieved and to use these as a building platform for deep learning during future military history staff rides.

In the final article, Andreas Biermann presents a reassessment of the tank battle that occurred between the British Fourth Armoured Brigade and German Panzerregiment 5 during Operation Crusader in North Africa on 19 November 1941. By utilising primary documents, such as war diaries, messages and reports, Biermann provides a new perspective on the established view of the battle. He further reassesses the comparative tank combat performance in the early phase of Operation Crusader by analysing the first engagement between Allied and German armour with a view to correcting the misconceptions that have clouded the historical record until now. By using primary archival material, Biermann sheds new light on the losses in tanks suffered by both sides during the battle and considers how the opposing forces performed in the context of their operational objectives.

A selection of several contemporary published works reviewed by Jean-Pierre Scherman, Abel Esterhuysen, David Katz, Anri Delpont and Evert Kleynhans concludes this issue of *Scientia Militaria*.

## **The Editor**

*Evert Kleynhans*





# **The South African security predicament: making sense of the objective realities**

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## **Abstract**

This article reflects an effort to make sense of the objective realities of the South African security predicament. The objective realities on the security agenda are rooted in the practical reality of experience and are open for public discussion, debate and speculation. These realities are informed by the threats facing South Africans on a daily basis. Government provides security with subjective content to the extent that political power demarcates the threat agenda, prioritises the items on the threat agenda, and foos the security bill. Since the creation of the Union in 1910, South Africa has had to find a balance between the security realities emanating from three key security domains – irrespective of the ruling entity: security threats from outside Africa, those threats facing the country from within Africa, and security threats from within the borders of South Africa. The article aims at a scholarly demarcation of some of the most critical, important, and key features of the South African security agenda using these three domains as a framework for discussion. On a secondary level, the discussion also critically reflects on the ability of the human security paradigm to address the South African security predicament.

## **Introduction**

There seems to be a general agreement between those looking at South Africa from the outside, and those looking from inside the country, that South Africa faces a considerable security predicament.<sup>2</sup> South Africa embraced a “powerful approach to security”<sup>3</sup> in the 1990s, depicted as human security; first popularised and outlined in the United Nations, Human Development Report 1994.<sup>4</sup> However, the security situation in South Africa has deteriorated in recent times to the extent that the Minister of Police, Mr Bheki Cele, recently noted that, the murder rate in the country has turned South Africa into a place that “borders on a war zone”.<sup>5</sup> In short, it will not be wrong to argue that South Africa is faced with a major disequilibrium, maybe even a disconnect, between the ideals of the human security paradigm and the practical, perhaps severe, realities of security confronting South Africans on a daily basis.

The threat agenda is a critical objective reality and the essence, one may argue, of the security debate. Frank Hoffman noted in a recent article in honour of Colin S Gray:

[S]trategy will retain its utility as long as security communities have interests, and as long as policymakers and military commanders need to counter challenges and align resources to obtain desired objectives.<sup>6</sup>

Thus, and by implication, as long as security communities exist, they will have to deal with the harsh realities of the threat agenda as a key driver of all security and strategic processes. Of course, the threat agenda is not the only variable and driver for security communities in their strategic processes. Yet, it is safe to argue that no strategic process will be legitimate without due consideration of the critical objective security realities of the threat agenda.<sup>7</sup>

The intelligence community has a decisive role in the exploration of the threat agenda. In general, the intelligence and scholarly communities make use of the same methodological practices to process information. The intelligence community processes information into actionable intelligence; the scholarly community processes information into purposeful knowledge. In the case of the intelligence community, the gathering and processing of information and the final intelligence products, comprises a closed, often confidential process, which is covered in secrecy. This brings a complex dynamic to the fore in terms of the reliability and validity of intelligence products and the range of variables and factors that have to ensure precisely that.<sup>8</sup> In the academic community, the approach is always to be as transparent and as open as possible, and to submit the data, the methodological processes, and the final product of research to open and public debate and the scrutiny of peer reviews. The scholarly community in South Africa has an important responsibility in asking critical questions about the threat agenda as a key driver of the security debate.

Since the creation of the Union in 1910, South Africa has had to find a balance between the critical threat realities emanating from three key security domains – irrespective of the ruling entity: security threats from outside Africa, from within Africa, and from within the borders of South Africa.<sup>9</sup> From these three, the domestic threat agenda has always been the most prominent, and the current security situation is no exception in this regard. Thus, although all three threat domains have been analysed, it was done with an understanding that the current security situation is almost exclusively and predominantly shaped by domestic realities.

The article aims to present a scholarly demarcation of some of the most critical, important and key features of the South African security agenda using these three threat domains as a framework for discussion. The aim is not to downplay or discredit the intelligence processes or the human security agenda. Rather, an analysis of the South African threat agenda, by implication, is to raise serious concerns about the ability of the human security paradigm to deal with the current threat realities facing the country. The article also does not aim to reflect a detailed analysis of every item on the security agenda. Instead, the intention is to provide a framework for scholarly analysis and debate of the key features driving the South African security agenda. Methodologically, the article is inductive in nature, relying almost exclusively on a literature review and qualitative analysis of the issues under discussion. Arguing from a strategic studies perspective, the author relies almost exclusively on a neo-realist paradigm.

## **A word on security predicaments and threat perspectives**

The idea of human security has its roots in the theoretical perspectives on security popularised by Barry Buzan and others in the 1980s and early 1990s. Buzan delineates security as the pursuit of freedom from threat and the ability of states and societies to maintain their independent identity and their functional integrity against forces of change, which they see as hostile.<sup>10</sup> For Buzan, security does not only concern the survival of the entity to be secured, but it also reasonably includes a substantial range of concerns about the conditions of existence. The 1990s consequently saw an existential debate on security in the post-Cold War literature on the so-called deepening and broadening of the security agenda. The ‘deepening debate’ centres on questions about which entity or entities, other than the state, should be secured, whilst the ‘broadening debate’ concerns the conditions of that security. The security debate in the 1990s culminated in a general agreement that the state is not the only referent object of security, and that the security forces are not the only pathway to security; in fact, security – it is argued – is also about a range of political, economic, social, and other conditions that define the nature of security for the referent object.<sup>11</sup>

However, the debate on the all-embracing definition of security was very much a normative inside-out reflection on security as an ideal condition; an effort to conceptualise the ideal theoretical nature of security as a risk-free condition. Although the debate recognised that security is threatened from the outside, it did not concern itself much with the outside-in practical realities of the threat agenda in the post-Cold War world. The deliberations tended to centre mainly on domestic vulnerabilities as primary driver of security. In fact, as the debate on security unfolded in the 1990s, the threat agenda was very much open for debate and in flux. As the realities of the post-Cold War era unfolded in the 2000s, it became quite clear that the end of the Cold War was not, in the words of Francis Fukuyama, the end of history or the era of perfect peace that the world has been waiting for throughout its existence.<sup>12</sup> More specifically, a view evolved that perhaps too much emphasis was placed on the de-militarised conceptions of security without due consideration of the harsh realities of the threat agenda and their influence on security. There was a growing recognition that, although other referent objects of security assisted in the creation of an understanding of what had to be secured, the role of the state and its security apparatus remained fundamental in and central to the process of security.<sup>13</sup>

Security, like strategy, is a highly philosophical notion with no independent physical reality; it is by nature highly elusive and conceptual.<sup>14</sup> However, like strategy, security is at the same time, very much a practical notion rooted in questions about how it is to be achieved, whether the idea will work, and how it must be done.<sup>15</sup> The question for South Africa is how to debate security in such a way as to contextualise the elusive theoretical setting; yet, at the same time, address the concrete practical realities of security facing South African citizens on a daily basis. In short, it is about how to breach the divide between the conceptual and the practical realities of security in South Africa.

From a theoretical perspective, security has both an objective and subjective reality. It is objective to the extent that the threats facing South Africa are fundamental in affecting every citizen directly. The security and threat agenda, as such, is open for public discussion, debate, and speculation. The threats facing South Africans daily are a harsh objective reality. However, security is also subjective to the extent that it is government – i.e., political power – that provides security with content, demarcates the threat agenda, prioritises the items on the threat agenda, and foots the security bill. How do we align the practical objective realities of security facing South African citizens on a daily basis with the subjective, often ideological, views of government on security?

The South African threat agenda is expansive, open for debate and often constructed from the eye of the beholder. Expansive approaches to security, human security in the case of South Africa, are unavoidable if security is understood as being about alleviating the threats faced by the people rather than the state. However, expansive security agendas are notoriously difficult to deal with. Firstly, as Booth and others point out, placing threats in order of priority is a problem that must be resolved in the political process. Political processes are messy and loaded with animosity.<sup>16</sup> The debate about the threat agenda then often translates into a threat-induced process.<sup>17</sup> This is a very true and visible reality of security in South Africa with factors such as race and economic inequality often being important drivers in the debate about security.

Secondly, expansive security approaches tend to steer away from the military core of security and run the risk of being too broad to be of any practical value. In short, it is difficult to operationalise expansive approaches to security. Debates on human security often translate into deliberations about the general well-being of society.<sup>18</sup> Quite where societal concerns cease to merit the urgency of the ‘security’ label – which identifies threats as significant enough to warrant emergency action and exceptional measures including the use of force – and become part of everyday uncertainties of life, is one of the difficulties of human security.<sup>19</sup> Thus, expansive definitions of security that tend to place the emphasis on the well-being of society may translate into security as a concept losing much of its value as a theoretical and planning construct for the security community. Has this perhaps been the case in South Africa?

### **International realities of South African insecurity**

It is difficult to make security predictions in a time that has seen the spreading of the COVID-19 virus as a major global ‘black swan event’. It is possible, however, to demarcate a number of international developments that inform South African security realities at present. **Firstly**, and from a global balance-of-power perspective, the Trump doctrine of ‘America first’ seems to have created some interesting international leadership vacuums and opportunities as the United States (US) is stepping down from its role as international policeman and, more importantly, the funder of international organisations.<sup>20</sup> The world order, constructed in the aftermath of the Second World War to serve mostly Western interests, and the post-Cold War era of US hyper-power status, is ending. The political and economic aspirations of both Russia and China – and perhaps India as well – are on the rise, and both Russia and China approach the

West with suspicion and distrust.<sup>21</sup> From a strategic perspective, however, they face in opposite directions with Russia looking west and China looking east.

From a futures perspective, it is quite clear that Western countries are increasingly stepping away from involvement in African security or maintain a light footprint in terms of military boots on the ground.<sup>22</sup> The strategy of the West towards African security is Clausewitzian in nature. Europe prefers old-school government-to-government diplomacy. The United States relies on trade, the economy, low-level security assistance and, if they have to, the employment of unmanned kinetic systems for security purposes.<sup>23</sup> The rising powers, specifically Russia, China and Turkey, tend to favour an indirect Sun Tzu approach. Their preference seems to lean towards long-term engagements with diplomacy that is much more personal, party-to-party and issue-driven.<sup>24</sup> Their security involvement in Africa is often informed by arms transfers,<sup>25</sup> cyber-driven approaches, and – if direct deployment is required – the employment of private military contractors as an extension of their intelligence apparatus. There is no doubt that they have extensive exploitive economic interests in Africa from both a raw materials and market perspective. Africa is however increasingly viewing their involvement in the continent in neo-colonial terms. It also set these powers up in direct competition to South African economic and security interests in Africa.<sup>26</sup>

**Secondly**, changing big-power geostrategic realities closely intertwines with regional security rivalry, dynamics and insecurities, and the evolvment, role and influence of failing and rogue states. For quite some time, the attention of the world, in this regard, has been on the Middle East region, and on countries like North Korea and Iran. The American idea of a Global War on Terror (GWOT) not only destabilises the balance of power relationships in the Middle East; it also creates new interregional animosities, complex emergencies and alliances. Moreover, it draws external forces of instability into the region. The ignition of smouldering regional instabilities, through external interference, is also spreading to and unfolding in Africa. This is clearly visible in places like Libya, Mali and the Sahel region. East Africa, with Somalia as epicentre, is also a growing concern. In Africa, outside interference is not always of a military nature. In the case of Mozambique and the arch of instability in the central regions of Africa, much of what had unfolded was – and still is – the result of economic opportunities.<sup>27</sup>

**Thirdly**, worldwide, political security is in decline; politics in general seems to be in a credibility and legitimacy crisis.<sup>28</sup> More specifically, the 1990s idea of democracy as the general and quick-fix solution for many of the political problems in the world has faded with the Western liberal political agenda progressively turning on itself in a paradoxical self-destructive manner.<sup>29</sup> Worldwide, the middle class is politically and economically in decline; the rich are getting richer and the poor are getting poorer. In a computerised globalised financial system, capital moves fast and easily to safe and stable locations.<sup>30</sup> A number of key trends unfold in tandem with the growing political tension of a disappearing middle class and a liberal agenda that are to affect South African security directly.

Since the end of the Cold War, ideology has lost much of its attractiveness or flavour as a tool for political enlistment. Instead, political mobilisation increasingly relies on anti-establishment rhetoric and religious preferences. Moreover, individualised political leadership and in-group/out-group political rhetoric drives the rise of political populism. Populism covers the broad political spectrum and includes a range of political stances that emphasise the idea of ‘the people’ and often juxtapose this group against ‘the elite’.<sup>31</sup> The decline in liberal political tolerance, anti-establishment rhetoric and rising populism translates into a culture of violent protest at grassroots level. What unfolded in France and the United States were textbook examples in this regard.<sup>32</sup> Violent protest is issue-driven and not necessarily based on party politics. Mobilisation is bottom-up, often highly emotional, and ranges across the broad political spectrum. Identity politics, lack of service delivery, religion and culture are key drivers of violent protests.<sup>33</sup>

**Fourthly**, demographics have always been and are again coming to the fore as a key feature of international politics and security. Both positive and negative migration reflects the reality of the current world order and of the African security landscape. Uncontrolled migration unfortunately often leads to tension and mutual feelings of enmity between the developed and developing worlds. The developing world is under pressure in the provision of basic needs and services, and the developed world is facing the reality of a growing pensioning population, skills shortages, and the policing of hardened borders. The impact of these political security realities is already unfolding in Southern Africa and is due to influence the South African security outlook in the years to come.<sup>34</sup>

**Lastly**, cyberspace is becoming both a positive and negative reality of international relations and security. Cyberspace relations are increasingly tying the world together, and the possibilities of cooperation and interaction between countries and a multitude of actors at different levels and in different spheres in the international domain are almost innumerable. The cyber domain is increasingly not only a complementary domain, but also an independent low-cost platform of near instantaneous interaction between states, and between state and sub-, trans-, and non-state actors. The stealth nature of cyber power, the possibility of non-attribution, and the dangers of cyber security raise the possibility of the offensive use of the cyber domain as an instrument of strategic effect.<sup>35</sup> South Africa, in particular, is very vulnerable in this regard.<sup>36</sup> The South African economy, its banking sector in particular, relies quite heavily on the cyber domain in its interaction with the rest of the world – and South Africa has not yet invested comprehensively in the cyber security domain.<sup>37</sup> Both domestic and foreign criminals continue to target South African businesses, with increasing cases in the healthcare and financial services industries as a cause for concern.<sup>38</sup> Thus, as the grandiose plans of the South African government for a “knowledge-based economy” unfolds, cyber security, especially protection against the offensive use of cyber from outside the African security domain, is to become a critical security concern.<sup>39</sup>

## African and regional insecurities

What are the key features of the African strategic landscape that influence and shape South African security? This question is rooted in the reality that South Africa cannot exist as an island of stability – or instability – in a sea called Africa. African insecurity – conflict, violence and war in particular – always had a defining influence on the South African security outlook. As a point of reference, it will serve South Africa well to reflect on who the actors and the victims are in the contemporary African security landscape. States are not necessarily the only actors in the African security domain anymore. International, continental, and regional organisations and sub-, trans-, and non-state actors are growing as key role players in the African security domain. Indirect deaths, or what the West euphemistically refers to as ‘collateral damage’, is responsible for most of the deaths resulting from African insecurity: members from non-governmental organisations (NGOs), humanitarian aid workers, refugees, women and children. These deaths are often exacerbated by disease and malnutrition in complex security emergencies.<sup>40</sup> It is also worth noting that the political geography of African insecurity still matters with threats that are experienced more intensely in some areas than in other. These include war zones, informal settlements, townships and shanty towns, refugee and displacement camps and rural areas.

Insecurity in Africa, **firstly**, is mostly associated with armed conflict, and conflict has been a recurrent reality of African insecurity. African conflicts are diverse in nature – from post-colonial struggles to boundary and territorial disputes, secessionist movements and annexations, access to resources, identity conflicts, and conflicts induced by poverty, denial, and perceived or real injustices.<sup>41</sup> The predictors of conflict in Africa, however, persist, and conflict is due to re-emerge. African states remain relatively poor; governments are weak; race, ethnicity, religion and geography divide societies; and populations are growing with large numbers of energetic, yet unskilled, unemployed and frustrated youths in urban concentrations. Moreover, most African democratic structures remain relatively weak, skills are low, finances scarce, incentives in favour of the private sector are rare, and identity and patronage remain an operating principle. In addition, there is no intellectual alternative to democracy in Africa. The process of democratic consolidation, however, is difficult, and democracy in Africa is not necessarily translating into good governance, services, and goods.<sup>42</sup>

In Africa, the use of armed forces at state level is driven principally by the struggle for access to state power and resources. Conflict occurring on the margins or outside of the society of states occurs for reasons other than acquiring state power and by a range of non-state actors. These include warlord factions, clans, tribes and various types of militias. Conflict in Africa will continue to unfold as protracted interstate violence, as contested government transitions are rooted in problems of democratic deficits and often minority rule, and violence manifests as mutual destabilisation between states.

State-based armed conflicts are on the rise in Africa. This is also true of popular protests. Religion is a growing driver of conflict in Africa. And as is the case elsewhere in the world, African conflict will see a rise in the use of remote forms of violence, especially improvised explosive devices (IEDs) and suicide bombings. Environmental changes, together with a lack of growth in service delivery capabilities, nurture the growth of livelihood struggles in Africa.<sup>43</sup> Armed conflict often translates into regional insecurities and complex emergencies.

**Secondly**, religion is a growing source of conflict, instability, and insecurity in Africa. For South Africans, the idea of radical Islam comes heavily loaded with ideological and political baggage and provokes strong emotions either way.<sup>44</sup> Paul Collier argues that the rise of radical Islam, together with an exponential growth in natural resource extraction, is the most critical threat facing Africa.<sup>45</sup> A recent report by the African Center for Strategic Studies, notes that African militant Islamist groups have of late seen a nearly uninterrupted growth in violent activity. However, the focus of these groups shifted over time. Militant groups in the Sahel, the Lake Chad Basin and Mozambique have exhibited the sharpest increases in violent activity over the past year. This goes hand in hand with an expansion in violence against civilians<sup>46</sup> (see Figure 1).

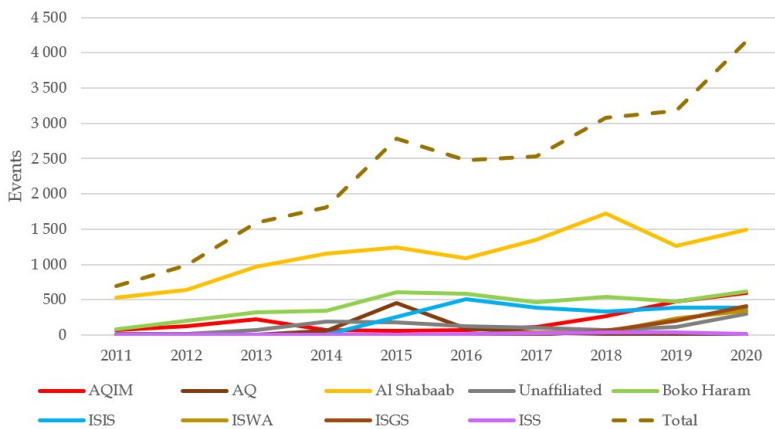


Figure 1: Violent events involving militant Islamist groups in Africa.<sup>47</sup>

Islamic induced conflicts in sub-Saharan Africa are at the receiving end of an influx of so-called ‘foreign fighters’, with the influx in Mozambique having the potential to affect South African security directly.<sup>48</sup> Foreign fighters may join a militant group from a foreign state, regional or otherwise. In Africa, foreign fighters normally arrive in small groups from a neighbouring state. Three particular factors seem to underpin the current influx of foreign fighters: the growing propagation of Islamic insurgency; the escalation of inter-militant competition in various complex emergencies; and the detrimental effect of the COVID-19 crisis on state capacity, border security and economic growth. These trends are clearly visible in Mozambique, for example. The arrival of foreign fighters



tends to make Islamic insurgencies more resilient to military defeat, as these fighters have an expanding effect on the tactical toolbox of the insurgent movement. Moreover, foreign Islamic insurgents often increase the severity of targeted violence against civilians in a conflict area.<sup>49</sup> Mozambique is a textbook example of what happens if these trends coincide in time and place. The convergence of radical Islam, natural resource exploitation, and influx of foreign fighters in the future will cause African insecurity to increase in complexity and intensity.<sup>50</sup> For South Africa, in particular, this will have direct security implications.

**Thirdly**, resource exploitation, the so-called ‘resource curse’, is not a new phenomenon in Africa. The exploitation of African resources by out-of-area actors has a history that predates the colonial period in Africa. Yet, Africans mostly associate the colonial and the post-independent Cold War periods with the exploitation of African resources.<sup>51</sup> From a security perspective, Africa’s economy is dependent on both resources and the export of raw materials. Yet, it is also vulnerable because of its resources. Africa’s real economic challenge is its inability or failure to industrialise and process its resources and raw materials into consumer goods and products inside Africa. Without a value-added industrialised economy, the resource curse will persist. And Africa will remain dependent on exports and without the jobs that are urgently needed for the growing population.<sup>52</sup>

At present, though, Africa is moving into a third cycle of dependency and exploitation in the aftermath of, firstly, the colonial era and, secondly, the Cold War period of conflict and exploitation. Whereas European countries plundered African resources in the colonial period, and Russia, the United States and countries like Cuba were the key role players in Africa during the Cold War, it seems as if China, and more recently also Russia and Turkey, have become the primary beneficiaries of African resources in the post-Cold War era. The models of exploitation differ from period to period. More recently, China seems to be willing to invest comprehensively in the building of infrastructure and capital projects in Africa. Whereas the Western model was based on keeping Africa dependent by means of ‘aid’, China is providing their assistance by means of favourable loans that have to be paid back over time, often through favourable access to African resources. Many of the capital projects in Africa, however, are executed with foreign capital, foreign labour and foreign equipment. The projects do not necessarily translate into knowledge and skills transfer, African job creation, and the development of the African labour market. South Africa, in particular, has seen a tremendous process of de-industrialisation in the last 20 years. Not only does South African companies have to compete with these powers in Africa but, as a state involved in a process of de-industrialisation, South Africa will also become more dependent on the export of raw materials and resources to many of these powers.<sup>53</sup>

**Fourthly**, organised crime is a growing driver of insecurity in Africa that will affect South African insecurity directly.<sup>54</sup> Organised crime is closely linked to corruption from a stability and security perspective. In Africa, organised crime networks – as is the case in Mozambique at present – have been involved in the illicit trade in wildlife, timber, gems, gold and narcotics, including heroin, as well as human trafficking.<sup>55</sup> The

corruption that the organised crime networks promote often involve state actors, such as the police. Corruption in African security forces frequently exacerbates the public's distrust of government and feeds the narrative that the government is not on the side of populace.<sup>56</sup>

Transnational organised crime obviously has a regional and often also international interface. Tanzanians and people from Mali, Ethiopia, the Democratic Republic of the Congo, Rwanda, Somalia, Nigeria and Cameroon, for example, are involved in the criminal markets of northern Mozambique. The same is true of criminal groups from South Asia (heroin), China (timber and ivory) and Thailand (gems) in various countries in Southern Africa. Drugs produced in Afghanistan are transported along the maritime trade routes along the East African coastline from Somalia to northern Mozambique. Heroin enters Mozambique via the port of Pemba in Cabo Delgado and that of Nacala in neighbouring Nampula Province. Large shipments of heroin are also entering Mozambique by road from Tanzania and Kenya. Bribery and a general lack of law enforcement accompany these criminal activities. The heroin arriving by road and in the ports is then shipped by road to South Africa and much of it by air to Europe.<sup>57</sup>

Organised crime and resource exploitation often converge in the growing insecurity resulting from the exploitation of African wildlife, flora and fauna. African wildlife, flora and fauna are also in competition with the livelihood struggles of African people due to worldwide climate and environmental changes.<sup>58</sup> The most critical so-called 'green security issue' in Africa is the surging demand for ivory and rhino horn, especially in Asia, which has put Africa's elephants and rhinoceroses on the path to extinction.<sup>59</sup> Yet, as the Organised Crime Index Africa 2019 points out, organised crime is often overlooked because the harms caused by organised crime are usually obscured in the 'underworld', hidden in the shadows of remote borderlands, concealed in secret jurisdictions, or felt most keenly by underserved communities in Africa.<sup>60</sup>

**Fifth**, the realities of African insecurity are affecting African demographics, as people are trying to escape conflict, hunger, poverty and deprivation.<sup>61</sup> The 2018 *State of peace and security in Africa (SPSA) report* notes that intra-African migration towards cities and more prosperous countries and regions will continue to accelerate and grow into a bigger challenge in the years to come as the migration overlaps with other structural weaknesses that African governments are not in a position to tackle with determination.<sup>62</sup> More specifically, African governments seem to have little political will and capacity to deal with the problem of illegal migration in a comprehensive manner. Simply throwing money at the issue is unlikely to address the underlying structural issues that create youth and citizen vulnerabilities underpinning the problem of illegal migration.<sup>63</sup>

In South Africa, the large influx of illegal and undocumented migrants already led to an outburst of xenophobic attacks, especially in poor and informal communities where these immigrants compete with South Africans for jobs and access to goods and services. France Maphosa and Christopher Ntau outline the nature of this problem in Africa by arguing that, while migrants in general, whether documented or undocumented, are

targets of violence, exploitation and discrimination in many countries, undocumented migrants are particularly vulnerable because of their 'illegal' status. Although violence against undocumented migrants is not formally endorsed by African states, their description as a problem or a threat to society places such migrants in a state of exception, which is virtually outside the protection of the law.<sup>64</sup> This is not a problem that will fade from either the African or South African security landscape in the years to come; instead, it is growing in intensity and scope.<sup>65</sup> In South Africa, for example, this has most recently played out in deadly attacks on 'foreign' truck drivers.

**Lastly**, from a statutory defence perspective, the point needs to be made that Africa is perhaps the most under-defended piece of real estate in the world.<sup>66</sup> Foreign military interventions in Africa exacerbate this problem as it often translates into a lack of urgency and professionalism in African armed forces – a mentality of 'someone else will take care of our problems'.<sup>67</sup> Otto von Bismarck is often quoted for having said that there will always be a military within the borders of the state: either one's own or that of someone else. In Africa, that 'other' military is often a rebel movement, an intervening non-African foreign military, a peacekeeping force, or the military of a neighbouring state. This is not to say that professional armed forces are not to be found in Africa.<sup>68</sup> In Africa in general, however, nothing is indicative of the fact that the disregard for their armed forces is due to change in the near future, as African states continue down the path of military neglect, military corruption and under-budgeting for defence.<sup>69</sup>

The lack of credible defence capabilities in many African countries is a key driver in the efforts by the African Union to develop a comprehensive peace and security architecture for Africa. The so-called African Peace and Security Architecture (APSA) focuses specifically on conflict prevention, conflict management and peace building.<sup>70</sup> APSA is operationalised by initiatives that include a Continental Early Warning System (CEWS) and an effort to set up an African Standby Force (ASF) by means of a so-called Regional Mechanism (RM). One of the enduring challenges facing APSA, however, is capacity. Financially, it is strongly dependent on external sources, and for troop and capacity contribution, on the member states.<sup>71</sup>

South Africa is a key state in the security structure of the Southern African Development Community (SADC). Although South Africa's declared approach to security challenges in Africa has always emphasised the need for cooperation and multilateral approaches, the reality of South African involvement in APSA is one of pragmatism. South African military deployments in Lesotho, Burundi, the Central African Republic and the Democratic Republic of the Congo clearly reflected this reality.<sup>72</sup> How this is to unfold in future in South Africa's involvement in APSA and how it is to influence South African security itself, are open for debate.

### **South African domestic insecurities**

South African domestic security always had a dynamic of its own. The dialectic between external threats and internal vulnerabilities drives this dynamic. A number of key variables decisively influence South African dynamics at present.

**Firstly**, South African **border security** is located on the fault line between external threats and internal vulnerabilities and will grow in importance in future. The effective management of South African borders underpins three critical domains of South African insecurity: negative and illegal migration from the rest of Africa, the interaction of violent and organised crime from within with what is unfolding in the region, and transnational green and environmental security.<sup>73</sup> The latter is a direct result of the poaching of South African wildlife on land and at sea. The critical challenge that has not yet been resolved by South African security forces is that these challenges are neither domestic nor foreign; they unfold in the fault lines between these domains. As a forthcoming attraction, the doubt within the South African security services about who is responsible for what in addressing these security challenges, needs to be resolved. Moreover, the question of whether South African borders should be managed as hard or soft borders has to be settled as a matter of urgency in the name of improved security.<sup>74</sup>

**Secondly**, it is almost impossible to consider and assess the drivers, and the dialectic among the drivers, of the growing **criminal insurgency**<sup>75</sup> facing South African society. However, the insurgency is deeply rooted in the lack of economic growth, government corruption and – because of the interplay between these two – an exponential decline of governance and services. This is amplified by a growing lack of proficiency in the government sector, especially in rural areas. These realities ought to be tied to the argument by Killebrew that crime, terrorism, and insurgency differ mainly in scale, and distinctions are becoming less meaningful in the contemporary era.<sup>76</sup> One must accept that the scale of the problem is a threat to the security and stability of the state. No doubt, though, that organised crime, corruption, lawlessness, and extreme levels of homicide in certain geographical areas and communities in South Africa are increasingly threatening the stability of the country as a whole.<sup>77</sup> Mentally and geographically, South Africa increasingly functions in enclaved mode at provincial, municipal and neighbourhood level. Instead of becoming a more integrated and open society, it tends to be more siloed, exclusive and cocoonistic.<sup>78</sup> There is absolutely no indication that government will be able to alter these trends and realities significantly in future.<sup>79</sup>

**Thirdly**, recent developments involving the professionalism of the **security forces** in the SADC region do not bode well for the future. The security forces are often closely aligned with the ruling party and enmeshed in its factional politics.<sup>80</sup> Their constitutions may insist that the security services must be politically non-partisan. However, the executives and the ruling parties constantly blur the boundaries between the party and the state bureaucracy.<sup>81</sup> This situation is reinforced by the enduring affinity between politicians of the ruling party and members of the security forces who served together during the liberation struggles.<sup>82</sup> Not only are officers who are seen as loyal often not retired from service; their service increasingly appears to be based on personal loyalties and connections rather than on professional integrity and loyalty.<sup>83</sup> Thus, instead of the security community and political domains serving the interests of society, society and the security forces are increasingly expected to serve the interests of the ruling elite.<sup>84</sup>

In South Africa and from a civil-military perspective the oversight over the security forces is a growing cause of concern. This is tied to the growing disregard in both the

executive and the security forces for the position and role of Parliament. Not only are senior members of the security forces reluctant to appear in front of oversight committees of Parliament;<sup>85</sup> they also treat these committees with an attitude of “we are not their clients and [we] only take instruction from the Commander-in-Chief (President Cyril Ramaphosa)”.<sup>86</sup> Oversight is also hindered by a growing tendency to cloud all issues of a security nature in excessive secrecy. Obviously, certain matters need to be kept secret.<sup>87</sup> Nevertheless, confidentiality should be informed by the democratic principle of what is in the public interest. As Laurie Nathan points out, higher levels of secrecy tend to lead to less public scrutiny and a greater risk of abuse of power.<sup>88</sup>

From a practical and operational perspective, the security forces in South Africa seem to be increasingly reluctant to act and to enforce law and order. This is perhaps a legacy of the Marikana incident.<sup>89</sup> Operational doubt seems to be rooted in several key trends that will be decisive in how security forces in South Africa fulfil their roles in future. A lack of political will or, to put it differently, the difficulty of grassroots-level interpretation of the mixed bag of intentions and double-talk at political and policy level creates tactical confusion and an understanding that there is no institutional or political accountability for operational misfortunes; the individual will be thrown under the bus.<sup>90</sup> Professional trust, up and down the line of command, seems to be lacking. In addition, a lack of sufficient and professional training and experience feeds professional doubt in the security forces. A question in the mind of the individual member of the security forces about precisely how to deal with a particular situation, immediately translates into reluctance to act. Professional behaviour cannot be of a high standard if the training an individual receives is not of a high standard.<sup>91</sup> Moreover, social media scrutiny implies that security forces are under observation at all times and, thus, they are reluctant to act. Unfiltered recording and distribution of security force behaviour are difficult to deal with and, unlike the security forces of more advanced states, the South African security forces have not exploited the benefits of in-time recordings.

**Lastly**, and this is not necessarily part of the threat agenda per se, much of the stability inside the country centres on the ability of **the ruling ANC** alliance to resolve the tensions within the ruling entity in a peaceful and constructive manner. In the process, the ANC needs to deal with a number of ideological, structural and political tensions that threaten to pull the organisation apart. A tension with which the ANC has had to deal since 1994 is the contradiction between the ANC as liberation movement and the ANC as governing entity. As an umbrella movement for liberation, the ANC accommodated ideological diversity. For the ANC as a governing entity, ideological diversity translates into policy vagueness and an absence of clear policy decisions. ANC governance is therefore characterised by incoherence, confusion and even gridlock as policy vacillates to appease various factions.<sup>92</sup>

Another tension is the unstable balance between labour – COSATU<sup>93</sup> by implication – and the SACP,<sup>94</sup> on the one hand, and the South African business sector on the other. For the ANC as a ruling entity, this translates into a dichotomy of what is economically essential for South Africa, is often politically unacceptable for the ANC as political movement; and what is politically feasible for the movement is often economically

destructive for the country.<sup>95</sup> This tension is due to growth in intensity as a virtually bankrupt National Treasurer needs to manage the public sector wage bill and possible job losses. A last tension is the underlying factionalism in the ANC with its roots in economic self-interests, corruption and state capture. The project to repair the integrity of the state has to reveal the depth of the underlying conflict between these different factions within the ANC. The calibrated management of this process of state healing may have a defining effect on the security of the country as a whole.

## **Conclusions and recommendations**

Looking towards the future from a continental and regional security perspective, outside-of-Africa involvement in African insecurities will affect the South African security and leadership positions directly. Two critical questions drive the South African security debate from this perspective. The first is whether and how South Africa should be involved in regional security instabilities – diplomatically, militarily or economically? The second is what the effect on South African security will be, whether or not the country becomes involved in these regional complex emergencies, probably alongside non-African powers. Mozambique will be the first serious case study. Direct involvement may have a serious knock-on effect. Not doing anything will however have exactly the same outcome.

The negative synergy between a negative democratic agenda, the credibility and legitimacy crisis of politics in South Africa, and a growing culture of political populism and violent protest will sustain political insecurity in South Africa in years to come. The economy will be affected in both an input and output reality. The lack of economic growth and recovery in the wake of the COVID-19 crisis is to become a key driver in the growing process of instability. Political insecurity, violence and uncertainty, at the same time, inhibit South African economic growth, recovery and service delivery. A difficult challenge to manage! From a security perspective, border management and protection should be a matter of priority. Not only should the South African decision-makers articulate a clear vision in terms of the hard or soft management of South African borders; in the management of South Africa's borders, there should be clarity in terms of precisely who is responsible for what from a security perspective.

It is quite clear that it is perhaps also time to reflect critically on the human security paradigm as a pathway to address the key features of the South African security predicament. At present, very few of the key drivers of the South African security agenda have their roots in the human security domain. In fact, South Africa seems to have come full circle from national security before 1994, to human security under Mandela, to state security under Zuma. However, the problem with a more traditional and state-driven approach to security and – specifically from a security sector perspective – is that the security services increasingly serve out of loyalty and at the behest of the president and the ruling party, not necessarily the citizens or the Constitution.<sup>96</sup> This poses a severe threat to democracy in South Africa and the ability of the country to deal with the key features of the security agenda. The professionalism of the security forces in South Africa should be a matter of priority.

The private security industry is indeed a flourishing and, very often, effective alternative in the domestic security domain. Yet, it cannot address the full spectrum of security challenges facing the country. This brings the critical dichotomy of strategy to the fore. If political and security decision-makers are unwilling to make tough decisions on security, they – in fact – abdicate their ability to shape the outcome of South Africa's security predicaments. Strategic reality does not pause for decisions in anticipation of what may be; it necessitates and dictates decisions! Strategic paralysis in the security domain is therefore often catastrophic.

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## ENDNOTES

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- <sup>1</sup> Abel Esterhuyse is an Associate Professor and Head of the Department of Strategic Studies at the Faculty of Military Science at Stellenbosch University.
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- <sup>12</sup> Fukuyama is known for his book *The end of history and the last man*, which was published in 1992. In the book, Fukuyama argues that following the rise of Western liberal democracy after the Cold War and the disintegration of the former Soviet Union (1991), the world has reached “not just ... the passing of a particular period of post-war history, but the end of history as such: That is, the end-point of mankind’s ideological evolution and the universalization of Western liberal democracy as the final form of human government”. Stated differently, he argues that the world has entered a period of permanent and sustainable peace. See F Fukuyama, “The end of history?” *The National Interest* 16. Summer 1989. 4.
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- <sup>15</sup> See the introduction to Baylis *et al. op. cit.*
- <sup>16</sup> See K Booth. *Theory of world security*. Cambridge: Cambridge University Press, 2007.
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# Promoting psychological adaptation among navy sailors

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## **Abstract**

The mandate of the Institute for Maritime Medicine (IMM) is to support and enhance the operational performance of sailors of the South African Navy during maritime operations, while also ensuring positive long-term mental health outcomes of sailors who serve their country at sea. To achieve this, the IMM proposes to re-orientate the mobilisation and demobilisation programmes used for ship-based maritime operations towards a predict-and-promote (P&P) approach, to enhance the psychological adaptation of sailors to the emotional demands of deployment as well as to support more adaptive forms of mental health resilience, both before and after sea-going operations.

First, this article aims to present the proposed P&P approach for enhancing psychological adaptation during and after seaward deployments, with a specific focus on assessing personal emotional regulation (ER). For effective implementation, this approach is contingent on several clinical assumptions about ER in the operational environment, namely: the absence of significant psychopathology; the stability of the ER measure; the role of dispositional factors in operational adaptation; and the availability of population-specific normative data, which act as an interpretative guide of ER profiles for sailors. The second aim is to consider support for these assumptions, using previous experience during the mobilisation and/or demobilisation of ships involved in maritime operations. Support was found for all four assumptions, indicating the clinical and operational utility of the P&P approach at the IMM broadly, and the assessment of ER for sailors in particular.

**Keywords:** adaptation, mental health promotion, navy deployments, resilience.

## **Background**

The past decade has seen an increased operational tempo for the South African Navy (SAN), particularly in support of anti-piracy operations and maritime border security, in addition to regular training, international exercises, and diplomatic missions. It is well documented in deployment psychology studies that such operational demands typically require increased mental health support to military personnel in order to help them adjust to the personal and emotional demands of operational deployments, as well as integrating back into regular life at home after returning from operations.<sup>99</sup>



According to the doctrine of the South African Military Health Service, the Institute for Maritime Medicine (IMM) is responsible for providing maritime health support to the South African National Defence Force.<sup>100</sup> By virtue of its geographical location in Simon's Town, the IMM is the primary point of maritime health support and service provision for the South African Navy Fleet. Included in the mandate of the IMM are the objectives to: support and enhance operational performance during maritime tasks (e.g. of sea-going units); and support adaptive long-term mental health outcomes of sailors who serve their country at sea.

One mechanism to achieve these objectives with sailors participating in maritime operations is to use the operational phases of mobilisation and demobilisation. The purpose of the involvement of military psychologists in mobilisation and demobilisation programmes is:

- to enhance psychological adaptation (PA) during missions (operationalised as the ability to fulfil a mission role, i.e. 'personal performance'); and
- to enhance PA after missions (operationalised as adaptive long-term mental health outcomes).

In short, IMM uses the institutional and operational mechanism of mobilisation and demobilisation both before and after operations to promote PA and enhance mental health resilience.

This promotion of PA for maritime operations takes the form of, accurate *screening* of SAN personnel, with the aim of identifying individuals potentially at risk of poor PA during operations; and timeous and appropriate *streaming* for targeted intervention, with the aim of mitigating the identified risk to effective PA.<sup>101</sup>

In this context, PA can broadly be defined as an individual's ability to adjust to changes in their environment, in order to optimise personal functioning. This is particularly relevant in the psychology of isolated, confined and extreme (ICE) environments.<sup>102</sup> ICE environments refer to settings characterised by hostile external conditions, exposure to a range of context-specific physical, mental and social stressors, and often require engineering technology to maintain human survival.<sup>4</sup> ICE environments are, for instance, underwater habitats, spacecraft, remote weather stations, polar outposts, and of particular relevance here, ships at sea. Within ICE environments, PA is reflected by three indicators (the so-called 'Antarctic triarchy'),<sup>4,103,104</sup> namely:

- task ability (referring to the quality of work output);
- sociability (referring to the quality of interpersonal interaction); and,
- emotional stability (referring to the quality of internal self-regulation).

While all three indicators can be measured, it is a complex process to do so in ICE environments, and many have followed the route of choosing to measure a single factor that underpins all three indicators, for example emotional regulation.<sup>105</sup>



Emotional regulation (ER) refers to a “set of automatic and controlled processes involved in the initiation, maintenance and modification (i.e. ‘regulation’) of the occurrence, intensity and duration of feeling states”.<sup>7,106,107,108</sup> ER underpins personal performance across many aspects of daily life, such as family, work and sport.<sup>9</sup> As such, it can be used to operationalise PA, in that individuals with more adaptive ER should be expected to manage their personal performance across work output, social interactions, and affective states effectively, especially under the psychological demands unique to ICE environments.<sup>7</sup> In contrast, individuals with less adaptive ER are assumed to present with greater difficulties in managing their personal performance across these three indicators.

The aim of the rest of this article is two-fold. Firstly, it presents the approach followed by the IMM to the promotion of PA, in ICE contexts and after return to regular life, using the mobilisation and demobilisation programme for ship-based maritime operations. This approach is contingent on a number of assumptions, and effective implementation is subject to these assumptions being met. A second aim is to consider support for the assumptions, using previous experience during the mobilisation and/or demobilisation of ships involved in maritime operations.

### **Predict and promote: A new approach towards supporting the psychological adaptation of SAN sailors**

Historically, various approaches to facilitate operational adjustment have been employed, including at the IMM. Preparation of sailors for their deployment (in the case of mobilisation) or return to home life (in the case of demobilisation) are typically done through one or more group-based presentations, where the deploying ship’s company would be required to gather en masse to participate in the mobilisation and/or demobilisation programme. The programme then takes the form of sharing information on what to expect (before or after deployment), based on the assumption that advance knowledge will prepare individuals to cope with stressful situations should they occur. However, there are a number of limitations to this approach:

- such approach is based on the understanding that coping is situational, rather than (at least partially) dispositional;
- in the case of ship-based deployments, sailors are usually already serving on the vessel, have at least done multiple work-up trials at sea, and are thus familiar with both their specific tasks and the general routine on-board the ship; and
- there is little substantial empirical evidence available that this approach has much *practical* benefit to sailors or their families.<sup>109</sup>

Against the dearth of available evidence that this form of knowledge sharing through group presentations has beneficial effects on subsequent PA, the IMM proposed the adoption of a different strategy.

To achieve the promotion of operational adaptation – whether during or subsequent to a maritime mission – the IMM has developed a predict-and-promote (P&P) approach, to be implemented as part of the mobilisation and demobilisation programme of ship-based maritime operations.

Adaptation in ICE environments is indicated by the triarchy of (sustained) quality of work output, interpersonal interaction, and internal emotional stability, and ER facilitates adaptation in ICE environments in that it underpins this triarchy. As such, ER can be viewed as an indicator of psychological adaptation in context (conceptualised here as the ability to regulate internal responses to changes in that environment).

Therefore, within this framework, measurement of ER would enable the identification of risk for poor PA, both during mobilisation (for subsequent mission performance) as well as during demobilisation (for subsequent adverse mental health outcomes after return to regular life).

This would be accomplished through developing ER profiles using psychometric instruments. Within this framework, more or less adaptive forms of ER could then be visualised in the relationship between an individual's psychometric scale profile, and normative profiles for that naval population. For example:

- adaptive ER would be evidenced by psychometric scale profiles that lie within normal limits for that naval population, and which would indicate the ability to maintain PA better; and
- less adaptive (i.e. poorer) ER would be evidenced by psychometric scale profiles that deviate from normal (i.e. expected) profiles found in normative naval populations.

Therefore, screening of ER would support a P&P approach, in that identification of high risk for less adaptive modes of ER would initiate automatic referral for intervention to enhance an individual's adaptation.<sup>110</sup> Interventions would typically be short term and focused on enhancing PA, by, among others:

- identification and active monitoring of 'at-risk' personnel;
- enhanced personal preparation for deployment;
- fortifying more expeditious mechanisms of adaptive 'coping'; and/or
- development of situation-specific or circumstantial coping strategies, especially with regard to situations or circumstances that trigger less adaptive ER.

### *Measurement of ER*

One commonly used psychometric tool that could support the measurement aspect of ER is the Brunel Mood State Scale (BRUMS), which is available in various configurations. In its original form, the BRUMS is a 24-item Likert-type self-report scale that measures transient affective mood states.<sup>111,112,113</sup> It is used extensively internationally, and a substantial body of literature exists on its use in many domains (from sport performance to sleeping patterns to academic achievement).<sup>114,115,116</sup> Published South African norms are available, making it convenient for local use.<sup>117</sup> The scale is also widely used in clinical contexts, e.g. for intake baseline measurement and as a measure of the effectiveness of psychotherapeutic interventions.<sup>13</sup> Pertinent to military deployments, the BRUMS has previously been able to predict self-report post-

traumatic stress symptoms after maritime interdiction operations as well as to predict performance in ICE environments.<sup>118,119</sup> Good concurrent and criterion validity has been reported internationally<sup>14,15</sup> and locally.<sup>120</sup>

The BRUMS offers an effective screening of ER in two ways: firstly, by providing a current profile of mood states; and secondly, through its sensitivity to ER processes and mood state changes. As a result, less adaptive ER is more readily expected when profiles deviate from population norms and/or when the changes in ER profiles over time are characterised by a less normative scores profile. Deviations from expected profiles can be interpreted as suggesting less adaptive forms of self-regulation. This places individuals at the potential risk of poorer PA.

### *Underlying assumptions*

The effective implementation of the recommended P&P approach – that adaptation is facilitated by ER, and can reliably be predicted in ICE contexts – is contingent on a number of assumptions. The P&P approach can thus only be meaningfully employed where these assumptions can be met, such as:

- the assumption of the absence of clinically significant and ER-compromising psychopathology;
- the assumption of the stability of the ER measure, e.g. that ER profiles at mobilisation (i.e. prior to deployment) are reliably predictive of ER profiles both during the deployment and at demobilisation (i.e. in the post-deployment period);
- the assumption that adaptation in ICE environments is (also) dependent on dispositional factors (e.g. dispositional resilience), and not purely dependent on specific circumstances such as mission-unique conditions; and
- the assumption of the availability of population-specific norms to serve as normative reference framework for the interpretation of ER profiles.

### **Testing support for assumptions**

In order to consider implementation of the recommended P&P approach, the rest of this article turns to evaluating support for the above-mentioned assumptions. It does so by examining previous experience during mobilisation and/or demobilisation of ships involved in maritime operations, using data from the IMM dataset of psychological measurement of sailors deploying to sea.

### *Procedure*

IMM maintains a database for deploying sailors, consisting of general mental health screening data as well as mobilisation, mid-mission, and demobilisation ER data. The data come from actual missions, and were not collected as part of any prospective research study. This article draws from data generated during mobilisation and/or demobilisations programmes between 2015 and 2019.

## Participants

To consider the assumptions of the proposed approach, a total sample of 1 057 participants (28,6% women, 71,4% men) were available, who provided data at any time point. The mean age of the total group was 30,6 ( $\pm$  6,6). Not all sailors provided data at all time points, and thus individual analyses may reflect different sample sizes.

## Measures

A modified version of the BRUMS was administered at three time points – during mobilisation, mid-mission (typically 6–8 weeks into a 12–14-week mission), and again during demobilisation. The current 20-item modified version used five mood states (i.e. excluding ‘confusion’) to calculate a Total Mood Distress score (TMD), which formed the profile for interpretation. The TMD ranges from -16 to +64, with lower scores indicative of better ER. The BRUMS has been used extensively over the past eight years to screen for ER in deployment contexts, and considerable expertise exists at the IMM to interpret profiles in the context of maritime operations. Additionally, an existent dataset of BRUMS responses for the general Fleet (N=2 382) was also available for comparison.

The Brief Sailor Resiliency Scale (BSRS) was administered during mobilisation. This scale measures dispositional resiliency across four domains of readiness, namely mental, physical, social and spiritual, and a comprehensive sailor resiliency score can be calculated, which was used in this analysis.<sup>3</sup> **Dispositional resilience** refers to the personal quality that allows people to overcome hardships and even thrive in the face of it.<sup>121,122</sup> It is usually considered an internal trait, developed throughout life, which allows an individual to work constructively through life’s adversities, and is further considered a predictor of adaptation to stress/trauma, as well as to mental health.<sup>123,124</sup>

Clinical mental health screening data (collected during the biennial concurrent health assessment of SAN sailors) were available for 975 persons. This included markers of clinical psychopathology that would interfere with adaptive emotional regulation and impair performance across personal, social, and occupational spheres.

## Analyses

The data were examined to:

- investigate the absence or presence of clinical psychopathology, by examining available mental health screening data that could be linked to the sample;
- investigate the stability of the BRUMS across three time points (by calculating correlational statistics), and the stability of the profile changes across time (by calculating the mean difference and its standard deviations between time points);
- investigate the role of mission circumstances (by using ANOVA), as well as a dispositional factor (by calculating correlational statistics) on ER profiles.

**Mission** factors refers to the type of naval platform, type of mission, and mission duration, while the **dispositional** factor refers to resiliency; and

- provide normative reference data as baseline for future interpretation and comparison for the SAN Fleet (by developing population-specific means and standard deviations).

## Results

All sailors of the SAN undergo a biennial general mental health screening (see Assumption 1, absence of clinical psychopathology). The available screening results for the period under study, i.e. 2015-2019 (N = 975) were reviewed by a clinical psychologist, who reported that the sample was free from ER-compromising clinical psychopathology. Further examination indicated that no single mental health marker was significantly correlated to any deployment measure at any time.

Regarding Assumption 2, stability of the ER measure – the stability of ER profiles across different times are presented in Tables 1 and 2. ER profiles of the participating sailors at mobilisation predicted ER profiles mid-mission and at demobilisation. Further, the results suggest that the profiles remained stable across the time periods. The variance of scores across time frames also appeared to remain stable, as did the variance in increases between time points. The narrow band of variance – at each time point, and in the increases between time points – further suggests that deviations may be easy to identify.

Time point	N	M*	SD
Mobilisation TMD**	458	-7.8	6.4
Demobilisation TMD	488	-4.5	7.0
Mid-mission TMD	111	-5.8	7.5
Total fleet dataset TMD	<b>2 382</b>	<b>-5.5</b>	<b>7.6</b>

Table 1. Normative ER profile data for SAN Fleet per time point.

\* = Mean

\*\* = Total Mood Distress

Time points	N	TMD change between time points		TMD correlations between time points	
		M-diff	SD	Correlation statistic (r)	Significance (p-value)
Mobilisation → mid-mission	168	+2.2	6.7	.518	< .001
Mid-mission → demobilisation	168	+0.1	5.8	.677	< .001
Mobilisation → demobilisation	168	+2.2	6.5	.430	< .001

Table 2. Stability of ER profiles across three time points.

BRUMS profiles at mobilisation appear to predict ER both during and towards the end of missions. A previous study demonstrated that ER profiles developed during demobilisation predict adaptation six weeks after the mission (N = 181,  $r = .335$ ,  $p = .002$ ).<sup>20</sup> Furthermore, elevated BRUMS scores predicted self-report post-traumatic stress symptoms six weeks after an active interdiction operation ( $r = .399$ ,  $p < .01$ ).<sup>20</sup>

Referring to Assumption 3, the role of dispositional versus situational factors – not all maritime operations are equal, with different operational tempos and temporal duration across various deployments reported. This raises the question whether the framework will hold across different mission parameters. The effect of mission circumstances was investigated by entering three different mission parameters – namely type of platform (e.g. large ships vs small ships), type of mission (e.g. monitoring patrol vs active maritime interdiction), and mission duration (e.g. 6 weeks vs 4 months) – into an analysis of sailors’ ER profiles. When comparing scores across six separate missions over the four years (2015-2019) (using ANOVA), no significant differences in ER profiles were found between different deployments ( $F_{4,594} = .890$ ,  $p = .470$ ). This finding is supported by studies in other ICE environments,<sup>125,126</sup> and suggests that operational adaptation in ICE environments may rely on intra-personal factors, such as ER, rather than on external circumstances, such as mission duration.

The effects of one dispositional factor, namely sailor resiliency, are presented in Table 3. The BSRS predicted ER profiles at all three time points, which is also supported by data from other sources,<sup>3</sup> further suggesting that operational adaptation in ICE environments is also reliant on dispositional factors.

Time frame	N	Correlation (r)	Significance (p-value)
BSRS → mobilisation	390	-.459	<.001
BSRS → mid-mission (±6 weeks)	222	-.509	<.001
BSRS → demobilisation (±14 weeks)	200	-.392	<.001

Table 3. Correlation between BSRS total score and ER profiles at three time points.

Normative ER reference data relating to Assumption 4 – availability of population-specific norms – can be found in Table 1. Population-specific reference data are now available to support ethical interpretation for future use of BRUMS scores for practical purposes.

### Discussion, limitations and recommendations

This article presented the move by the IMM to re-orientate mobilisation and demobilisation programmes towards a P&P approach to PA during and after operational missions. Productive utilisation of this framework – that adaptive ER can reliably account for effective PA, and can be predicted in ICE contexts – is contingent on a number of assumptions being met.

Four assumptions were identified and considered. Empirical support was found for Assumption 1, in the absence of debilitating clinical psychopathology in the sample tested. Support was also found for Assumption 2, in the temporal stability as well as predictability of the ER measure across different time points. Assumption 3 was supported by data that indicated that the dispositional factor was a small but statistically significant predictor, while the situational factors that were tested had little predictive value on ER. Lastly, population-specific reference data for the SAN Fleet are now available in support of Assumption 4.

The outcome of health support in the military environment is often measured against the rate of medical casualties. Within an approach where PA is promoted, outcome could potentially be measured against the rate of psychological casualties (defined as a person who cannot fulfil his or her mission role because of primarily psychological-related difficulties). On ships, however, this becomes difficult to determine, as it is not always clear what would constitute a ‘casualty’ on board a ship at sea. For this article, casualty rates thus had to be calculated using estimates.<sup>127</sup>

In-mission psychological casualty rates for ship-based maritime operations have been estimated by dividing known psychological casualties by the number of sailors on a ship, per mission, over the period 2015-2019). This resulted in an estimated 0.2% in-mission psychological casualty rate.

Post-mission psychological casualty rates for ship-based maritime operations have been estimated by dividing the known cases of mental (ill)health subsequent (and at least superficially related) to specific missions, by the number of sailors on that mission, per mission, over the period 2015-2020). This resulted in an estimated 0.4% attrition rate due to pathological post-mission stress reactions.

Against the background of initial empirical support for the underlying assumptions to the approach of the IMM, their P&P approach can with some confidence be considered for continuing implementation. The usefulness of the P&P approach will have to be monitored against, inter alia, psychological casualty rates during missions, and mental health reports after missions.

### *Limitations and future directions*

A major limitation to the data presented here in support of the proposed P&P approach is the lack of objective and standardised PA indicators, such as reports from supervisors or peers, to verify and triangulate the efficacy of assessing ER as a marker of more, or less, effective PA. Future studies will need to include objective PA markers, which do not solely rely on self-report measures, e.g. third-party reports or even neurophysiological indicators, in order to investigate further the link between ER and PA, both on ships and after deployments.<sup>128</sup>

This study used a measure of dispositional resilience to evaluate trait effects on ER in this context, and it is acknowledged that trait resilience rarely explains more than a

small portion of actual variance of ER across situations. Future studies may benefit from including other dispositional factors as well.

In addition, it is worth noting that the study on which this article is based, focused on a delineated conceptualisation and measurement of a component of PA, namely ER, in the maritime operational environment of the SAN. Ultimately, individual differences in PA remain a complex configuration of social, emotional, occupational and physical dimensions of adjustment to the peculiar stressors and circumstances of particular ICE contexts and samples. Some of these were identified recently in the Isolated and Confined Environments Questionnaire, which may hold promise for future research in the local SAN context.<sup>129</sup>

In conclusion, an approach focusing on the prediction and promotion of psychological adaptation, using the mobilisation and demobilisation of ship-based maritime operations, may be a useful mechanism to support enhanced personal performance and mental health resilience during and after missions.

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## ENDNOTES

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- <sup>97</sup> Charles van Wijk is employed as a clinical psychologist at the Institute for Maritime Medicine. He is a keen diver, and his past research centred around both the neuropsychology of, and psychological adaptation in, hyperbaric environments, as well as supporting mental wellbeing in associated high-demand occupational settings. Current research interests are related to occupational mental health surveillance.
- <sup>98</sup> Jarred H Martin, PhD, is a lecturer in the Department of Psychology at the University of Pretoria where he currently chairs the Master of Arts in Clinical Psychology degree programme. He served in the SANDF from 2012-2019, during which he was deployed with the South African Battalion of the United Nations' Force Intervention Brigade in the DRC, from 2014-2015. He also participated in various naval exercises and operations while stationed in Simon's Town. His research principally focuses on critical studies of gender and masculinity.
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# **Hypersonic weapons and the future of nuclear deterrence**

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## **Abstract**

It is widely accepted today that hypersonic weapons pose insurmountable challenges to nuclear deterrence. Although speed has always been a critical factor in warfare, the development of hypersonics provides unprecedented advantages in terms of the speed and agility of missiles. The increase in the speed and agility of hypersonic missiles drastically reduces the response time of nuclear states, encouraging the pre-emptive use of force. Two arguments inform the latter claim. The first holds that the speed and agility of hypersonic missiles are likely to render existing and future missile defences obsolete. The second contends that the failure of missile defences coupled with the reduction of the response time of nuclear states encourages the pre-emptive use of force. Where nuclear states are unable to field survivable second-strike forces, the stability of nuclear deterrence becomes highly problematic. Besides these arguments, the dual-use nature of hypersonic weapons ostensibly increases the risk of nuclear escalation. Against this bleak assessment, in this article, the author questions the destabilising effects of hypersonic weapons on deterrence stability, arguing that nuclear deterrence is – and is likely to remain – deeply stable. A thoroughgoing consideration of the strategic implications of nuclear weapons provides optimism about the stability of nuclear deterrence in the face of the development of hypersonic weapons. Two arguments are advanced in support of the continuing stability of nuclear deterrence. First, missile defences have (and are likely to remain) inefficacious, with the development of hypersonic weapons merely reinforcing (rather than establishing) this fact. Second, a would-be aggressor contemplating the pre-emptive use of force would have to believe that it could destroy all of an adversary's nuclear force before any can be launched.

## **Keywords**

Hypersonic weapons; nuclear deterrence; war; emerging technologies; missile defence

## **Introduction**

Concerns over the potentially destabilising effects of hypersonic weapons on deterrence stability are mounting. The term 'hypersonic' denotes aircraft, missiles, rockets, and spacecraft capable of travelling through the atmosphere at speeds exceeding 5 000 kilometres per hour or Mach 5.<sup>131</sup> The development of hypersonics is believed to be a game-changer technology. James Miller, the principal advisor to the United States (US) High-Speed Systems Division of the Air Force Research Laboratory (AFRL) at the

Aerospace Systems Directorate in Ohio, notes that hypersonics provide unprecedented speed for “engaging time-sensitive targets” and ensuring the survivability of systems.<sup>132</sup> Moreover, weapons and weapon systems capable of operating at hypersonic speeds provide the potential for longer-range military operations with shorter response times and increased effectiveness.<sup>133</sup>

Speed has been and continues to be a critical factor in warfare, a proposition borne out by Germany’s blitzkrieg strategy during World War II and, more recently, the US “shock and awe” campaign during the invasion of Iraq in 2003.<sup>134</sup> Speed, Michael Klare correctly concludes, “is also a significant factor in the nuclear attack and deterrence equation”.<sup>135</sup> The development and deployment of intercontinental ballistic missiles (ICBMs) during the 1950s had reduced the response time of nuclear states to mere minutes. Fears emanating from the reduction of the response time of nuclear states culminated in the deployment by nuclear states of early-warning and command-and-control (C2) systems designed to detect a missile launch, and to launch a retaliatory strike before their own arsenal could be destroyed.<sup>136</sup> Today, the time between the launch of a weapon and the destruction of a target has dwindled to 10 minutes or less.<sup>137</sup> Hypersonic weapons, accordingly, drastically lessen the response time of nuclear states, with the survivability of nuclear states’ second-strike (retaliatory) forces increasingly at risk. Where nuclear states are unable to deploy survivable second-strike forces, deterrence becomes obsolete, and the risk of pre-emption (i.e. to strike weapons before they can be used) becomes very real. The conclusion reached is that hypersonic weapons will undoubtedly pose grave and new threats to deterrence stability.<sup>138</sup> The death knell for deterrence, it seems, has sounded.

However, by drawing on insights gleaned from the writings of Kenneth Waltz and Bernard Brodie, this analysis contends that fears about the potentially destabilising effects of hypersonic weapons on deterrence stability are misplaced. Consideration and appreciation of the strategic implications of nuclear weapons quickly dispel such fears and powerfully reinforces the notion that nuclear weapons can continue to work their deterrent effects in the face of the rapid development and employment of hypersonic weapons. It is against this backdrop that the current study contends that nuclear deterrence is – and is likely to remain – remarkably efficacious. The structure of the remainder of this article is as follows. I firstly consider the differences between hypersonic glide vehicles and hypersonic cruise missiles, discuss the hypersonic weapons programmes of the United States, Russia and China, and outline the claims and arguments supporting the view that hypersonic weapons will invariably lead to deterrence instability. Next, I discuss the nature and requirements of deterrence and the qualitatively different constraints of deterrence in a conventionally armed, as against a nuclear-armed world, arguing that deterrence is more easily contrived than widely thought. This is followed by consideration of the commonly perceived difficulty of creating invulnerable second-strike forces. I then show how the destabilising effects ascribed to hypersonic weapons are insufficient to upend deterrence. I conclude with a summary of the main findings and their implications for the future of deterrence stability.

## Hypersonic weapons: types, developments and fears

It is fair to say that an arms race in hypersonic weapons technology is unfolding before our eyes, with Russia, China and the United States as the principal competitors.<sup>139</sup> In this highly competitive race, as in others today, the Americans are finding it increasingly difficult to keep up with Russian and Chinese hypersonic developments.<sup>140</sup> Before we scrutinise the various developments in hypersonic weaponry of each competitor, it will serve our ends well to distinguish between two types of hypersonic weapons. The first type – the hypersonic glide vehicle or, as it is sometimes referred to, the boost-glide weapon – is dependent on a booster rocket that carries the glide vehicle into the outer atmosphere, a process similar to the launch of an ICBM.<sup>141</sup> Once the glide vehicle reaches an altitude of 64 to 160 kilometres above the earth's surface, the vehicle is released from the booster.<sup>142</sup> Whereas an ICBM is launched into the atmosphere and, after turning, plummets to the ground, a glide vehicle soars along the outer boundary of the atmosphere (above the range of sensors) before heading towards its target.<sup>143</sup> These vehicles boast great manoeuvrability during flight (similar to a cruise missile) combined with high speed (exceeding that of an ICBM) and precision-strike ability.<sup>144</sup> Unlike hypersonic glide vehicles, the second type of hypersonic weapon, namely the hypersonic cruise missile, is restricted to flight within the atmosphere. It can be launched from the sea, air or land.<sup>145</sup> These weapons are dependent on advanced air-breathing jet engines (for example, scramjets, also known as supersonic combustion ramjets) to reach and exceed Mach 5. However, given that these missiles carry their own fuel, their range is far less than is the case with hypersonic glide vehicles.

Both types of weapons have advantages and limitations. The dependence of hypersonic glide vehicles on rocket boosters suggests two important things: firstly, the technology related to rocket boosters is well established and proven and, secondly, rocket boosters offer both great speed and range.<sup>146</sup> The US Air Force's (USAF) Minuteman III ICBM, which was taken into service in 1970, has a range of over 9 650 kilometres and can reach Mach 23. However, as is widely known, ICBMs lack the ability to steer. After their launch, they travel along a predictable path (much like a cannonball).<sup>147</sup> What sets boost-glide weaponry apart is their replacement of a traditional warhead with that of an agile glider. Subsequent to the rocket booster burning out, the glide body separates from the booster and, as noted above, glides along the top of the atmosphere to their targets, with the attendant ability to manoeuvre while in flight.<sup>148</sup> While the advantages are impressive, notable disadvantages prevail. Jeffrey Lewis, a nuclear expert from the Monterey-based Middlebury Institute of International Studies in California, notes that the glide body, once separated from the booster, "will no longer be travelling at hypersonic speeds".<sup>149</sup> Given that the missile is gliding, it decreases in speed (thus a decrease in re-entry), making it an even greater target than traditional ICBMs for missile defences.<sup>150</sup> The manoeuvrability of glide vehicles, of course, provides the benefit of evading missile defences, but once the missile enters the range of missile defences, it will be an easier target to intercept than a traditional ICBM.<sup>151</sup>

On their part, hypersonic cruise missiles employ air-breathing engines. These engines are much smaller in size than hypersonic glide vehicles (the engine only has to carry the fuel while absorbing all the requisite oxygen from the atmosphere), implying that the entire weapon can be much smaller. The weapon's much smaller scale brings two advantages: firstly, the weapon can be fitted onto aircraft, ships or submarines without much difficulty; and, secondly, instead of merely gliding to the target, rapid acceleration becomes possible during flight; thus, increasing the manoeuvrability of the weapon.<sup>152</sup> The drawbacks of hypersonic cruise missiles are twofold. The first drawback refers to the complexity and cost of technology associated with the engines powering hypersonic cruise missiles. While the technology associated with conventional jet engines are well established, these engines do not operate at hypersonic speeds, thus pointing towards the necessity of scramjet engines, which are complex and costly to develop. The second drawback relates to the speed at which air-breathing weapons can travel. Given that air-breathing weapons are oxygen-dependent and high altitudes have less oxygen, these weapons fail to reach the extensive altitudes characteristic of boost-glide missiles. This negatively affects the speed of the weapon, with air-breathers likely to reach speeds close to Mach 7, far less than that of a boost-glide weapon.<sup>153</sup>

Russia, China and the United States have all invested substantial resources in developing either or both types of hypersonic weapons, with the United States (as noted above) lagging behind. At the time of writing, the USAF's AGM-138A air-launched rapid response weapon (ARRW), a conventionally armed boost-glide missile, is the only hypersonic weapon likely to enter into service in the near future, with the first full-systems trial scheduled for October 2021 and flight tests continuing through 2022.<sup>154</sup> Although the United States is pursuing various hypersonic weapons programmes, a recent Congressional Research Service Report notes that these programmes are in different phases of research, development, testing and evaluation, rather than in the procurement phase.<sup>155</sup> The sluggish pace of US hypersonic weapons programmes contrasts sharply with those of Russia and China.

Russia has already fielded both hypersonic glide vehicles and hypersonic cruise missiles. The Avangard hypersonic missile is a boost-glide weapon launched from an ICBM, giving the weapon virtually unlimited range. The weapon boasts on-board countermeasures, can carry a nuclear weapon with a two-megaton payload, and can reach speeds of Mach 20.<sup>156</sup> The Tsyron (also spelled Zircon) is a ship-launched hypersonic cruise missile capable of reaching speeds between Mach 6 and Mach 8.<sup>157</sup> Russia's Project 22350 frigate *Admiral Gorshkov* successfully launched the missile during January 2020, while a successful test of the missile against a naval target was conducted on 7 October 2020.<sup>158</sup> The weapon can strike both ground and naval targets, and can be launched from various platforms, including cruisers, corvettes, Project 22350 frigates, and the Project 885 Yasen-class submarines.<sup>159</sup> In addition to the Avangard and the Tsyron, Russia has developed and fielded a nuclear-capable air-launched ballistic missile, the Kh-47M2 Kinzhal hypersonic missile, capable of reaching Mach 10 and with a range above 2 000 kilometres.<sup>160</sup> The missile travels at the stratosphere boundary to reduce air resistance, and is specifically designed to evade enemy air defences.<sup>161</sup> Although the Kinzhal is neither a hypersonic glide vehicle nor a hypersonic cruise

missile, it forms part of Russia's hypersonic weapons programmes.<sup>162</sup> The speed of the weapon and its ability to perform evasive manoeuvres during every phase of its flight pose defensive challenges akin to other hypersonic weapons. Hence, it is worth including it in this discussion.<sup>163</sup>

China's hypersonic weapons programmes have likewise outpaced those of the United States (although lagging behind Russia), with Chinese programmes involving various institutes and boasting considerable investment in facilities pertinent to hypersonic flight development (e.g. wind tunnels developed to simulate flight conditions reaching Mach 25).<sup>164</sup> It is worth noting that, over the last five years, China has conducted 20 times more hypersonic tests than the United States.<sup>165</sup> Particularly noteworthy is the DF-17 conventional missile. This medium-range ballistic missile employs a sleek hypersonic glide vehicle and has a range of 1 800 to 2 500 kilometres.<sup>166</sup> It is widely argued that the weapon entered service in October 2019.<sup>167</sup> Moreover, during 2019, China also unveiled the solid-fuelled road- and rail-mobile ICBM, the DF-41, which is capable of carrying either a conventional or nuclear hypersonic glide vehicle.<sup>168</sup> The weapon can reach Mach 25, and has a range of 12 000 to 15 000 kilometres; thus, it is capable of reaching the continental United States in less than 30 minutes.<sup>169</sup> In August 2018, China conducted various successful tests of the nuclear-capable hypersonic vehicle prototype, the Xingkong-2 (Starry Sky-2). The Xingkong-2 – a hypersonic cruise missile – uses a rocket motor to launch it vertically, but then uses its own propulsion system to power the missile after separation.<sup>170</sup> The vehicle travelled at Mach 6 and is generally referred to as a 'waverider', i.e. a vehicle that uses "powered flight after launch and derives lift from its own shockwaves".<sup>171</sup> After the launch of the Xingkong-2, China's state-owned newspaper, *China Daily*, indicated that the powered flight of the missile "lasted for 400 seconds".<sup>172</sup> In June 2020, China's Institute of Mechanics reported positively on the ground test "of a scramjet engine that ran for 600 seconds", indicating China's rapid progress in developing hypersonic cruise missiles.<sup>173</sup>

Against the backdrop of these developments, nuclear experts generally contend and fret that hypersonic weapons pose insurmountable challenges to deterrence stability. Accordingly, what are the fears? Principally, the increasing agility and speed of hypersonic weapons drastically reduce the response time of nuclear states, emboldening a would-be aggressor to launch a pre-emptive strike. Two arguments inform this particular claim. Firstly, the speed and agility of hypersonic missiles would render existing and future missile defences obsolete. Secondly, the failure of missile defences coupled with the reduction in the response time of nuclear states encourages the pre-emptive use of force – in short, second-strike forces can be destroyed before they can be employed.<sup>174</sup> Besides concerns over hypersonic weapons squeezing the response time of nuclear states, nuclear observers further fret that the dual-use nature of hypersonic weapons (i.e. they can carry a nuclear or a conventional warhead) dramatically increases the risk of escalation.<sup>175</sup> In an often-feared scenario, a would-be aggressor using hypersonic weapons decides to target key enemy assets (e.g. surface ships, submarines, or nuclear command, control, communications, and intelligence [C3I] systems) at the outset of a conflict. Given the dual-use nature of hypersonic weapons, and being unable to discern the intentions of the aggressor, nuclear states are likely to launch their own

nuclear weapons in the face of a 'use it or lose it' situation. Consideration of the nature and requirements of deterrence and, concomitantly, the ease of creating invulnerable second-strike forces, will go some way in allaying fears about the destabilising effects of hypersonic weapons on deterrence stability.

### **The nature and requirements of deterrence**

Fretting about the stability of deterrence is as old as the nuclear age itself. Such fears – today *and* in the past – stem from misunderstanding the nature and requirements of deterrence. Accordingly, in this section the author discusses three aspects related to nuclear deterrence that are often prone to misunderstanding:

- the fundamental differences between international politics conducted in a conventionally armed world as against a nuclear-armed world;
- the question of *what* is required to deter; and finally
- the widely held belief that leaders must be rational for deterrence to work its effects.

The ostensible challenge of creating invulnerable second-strike forces is discussed in the next section.

### *Conventional versus nuclear deterrence*

States dissuade one another from attacking by employing one of two strategies. The first strategy, generally called the defensive ideal, is geared towards building forbiddingly strong forces and fortifications that look well-near impregnable to the attacker.<sup>176</sup> In this strategy, the emphasis is placed on reducing the capability of the enemy to inflict damage.<sup>177</sup> On the other hand, a strategy of deterrence turns on building retaliatory forces capable of inflicting unacceptable punishment on a state wishing to attack its manifestly vital interests.<sup>178</sup> 'To deter' means to dissuade someone from a certain course of action by frightening such person with unacceptable consequences. Although the two strategies work toward the common aim of dissuading a would-be aggressor from attacking, they each employ distinctive means to reach this aim. Accordingly, purely deterrent forces promise no ability to defend; conversely, purely defensive forces present no ability to punish. Each strategy conveys a different message to a would-be aggressor. The message of a strategy based on defence is this, 'although we are without ability to strike back at you, our defences are so impregnable that any attempt to overcome them would yield cost and risk far outweighing any prospective gain'.<sup>179</sup> Conversely, a strategy based on deterrence conveys the message, 'although we are without ability to defend, if you attack, we will punish you in ways that bring more pain than gain, more cost than reward'. A deterrent strategy is *not* geared to fending off an aggressor, but to destroying or damaging the manifestly vital interests of an aggressor.<sup>180</sup> Such a strategy is well served by second-strike nuclear forces. In deterring an aggressor, one thus needs nothing more than a force capable of surviving a first strike and striking back sufficiently hard to cancel any gains an aggressor might wish to obtain.<sup>181</sup>



The credibility of deterrent threats in a conventionally armed world is extraordinarily difficult to establish. Would-be aggressors might chance their luck believing that the outcome of battle is dependent on many factors (some of which are within their control), and that the consequences of their aggression might not be so severe. They may believe that the weapons, strategy and sheer determination of their armed forces will carry the day and that their suffering, should defeat come, will be limited. As history has shown, predicting the outcomes of conventional wars has proved to be inordinately difficult.<sup>182</sup> In a conventional world, uncertainty about outcomes does little to restrain states from fighting wars.<sup>183</sup> Miscalculation, a major cause of war, becomes all the more likely in a conventional world because states at once overestimate their own position and believe that their suffering might be limited in the face of defeat.

A nuclear world invokes a distinctive kind of reasoning. Calculations about nuclear war proceed along different lines than those found in a conventional world.<sup>184</sup> Two or more nuclear-armed states contemplating war do so full well knowing that their suffering, should war ensue, may be unlimited. That it might turn out not to be the case is, of course, true, but it is hardly the kind of uncertainty that encourages the use of force.<sup>185</sup> In a conventional world, given difficulties in gauging the military capabilities of competitors, uncertainty constrains one to think in terms of winning or losing. In a nuclear world, uncertainty constrains states to think in terms of survival or annihilation.<sup>186</sup> As Soviet premier, Nikita Khrushchev, famously remarked in June 1964, “[n]uclear war is stupid, stupid, stupid! If you reach for the push button you reach for suicide.”<sup>187</sup> Apart from sheer survival, nuclear war can serve no other political goal.<sup>188</sup>

The destructiveness promised by the outcome of a nuclear exchange breaks sharply from the uncertainty in predicting outcomes in a conventional world. This, as Kenneth Waltz aptly notes, makes one wonder about the oft-heard charges that deterrence depends on perceptions, and that the credibility of deterrent threats is difficult to establish.<sup>189</sup> As noted above, the uncertainty in predicting outcomes in a conventional world emboldens leaders to risk war. On the other hand, imagining the catastrophe promised by nuclear wars constrains leaders to step back from the brink of war.<sup>190</sup> Everyone – from the leaders of states to the man in the street – knows that catastrophe lies at the door should things get out of hand and nuclear weapons go off.<sup>191</sup> Making that prediction is fairly simple, given that it is not dependent on a close estimate of opposing forces. The number of cities vulnerable to the attacks by an adversary equals the number of strategic warheads it can deliver. Yet, within wide ranges, variations of number matter little. For, as Kenneth Waltz explains, “[t]he expected effect of the deterrent achieves an easy clarity because wide margins of error in estimates of the damage one may suffer do not matter.”<sup>192</sup> Will we lose one or two, two or three, or five or ten cities? When these are the questions vexing our minds, we cease thinking about running risks and start fretting about how best to avoid them.<sup>193</sup> Given that catastrophe looms in the face of the use of nuclear weapons, these weapons “create their own credibility”.<sup>194</sup> The problems and uncertainties that plague the effectiveness of deterrent threats in a conventional world – i.e. the distant, limited and problematic nature of the damage threatened – quickly disappear in a nuclear one. Nuclear weapons at once remove the vexing problem of military miscalculation and make politically pertinent prediction possible.<sup>195</sup>

The credibility of deterrent threats in a nuclear world derives from the particular qualities of nuclear weapons and the effects they produce. As the title of a book edited by Bernard Brodie fittingly suggests, nuclear weapons constitute *The absolute weapon*.<sup>196</sup> Nuclear weapons can work their deterrent effects irrespective of what other countries do. If a nuclear state were able to wipe out *all* of the strategic warheads of an adversary, or to defend against ‘the bomb’ such that only a few warheads slip through, Brodie’s title would be seriously misleading.<sup>197</sup> However, nuclear weapons *are* absolute in nature, with four interrelated qualities accounting for this feat:

- nuclear weapons are terribly destructive yet small in size;
- not only are they more destructive than anything produced before, but the *speed* at which destruction occurs is unprecedented. As Thomas Schelling aptly noted, “[t]o compress a catastrophic war within the span of time a man can stay awake drastically changes the politics of war”;<sup>198</sup>
- rendering a sufficient number of warheads invulnerable to attack is a fairly easy endeavour; and
- there exists no adequate defence against the bomb (today and for the foreseeable future), such that delivering a sufficiently large number of warheads is impossible to thwart.<sup>199</sup>

The last point above implies that a state subjected to a retaliatory strike is defenceless, with the amount of damage inflicted upon it dependent on the attacker’s restraint and little on any efforts it can muster.<sup>200</sup>

### *What is required to deter?*

Is deterrence difficult to contrive? The short answer is ‘no’. Deterring an adversary requires the ability to inflict unacceptable damage on an aggressor. During an interview with Anna Cornelia Beyer, Kenneth Waltz aptly noted that ‘unacceptable damage’ is often mistakenly defined as the ability to destroy much, if not most, of an adversary’s country.<sup>201</sup> For former US Secretary of Defence, Robert McNamara, this meant that the United States needed to destroy nearly 20–25% of the population of the Soviet Union and, concerning its industrial capacity, about 50–66%. Estimations of what is required to deter are often inordinately high. To deter an adversary, one needs not appear to have the ability to destroy 50% or even 25% of another country. Would South Korea attempt to destroy North Korea’s nuclear weapons at the risk of one 100-kiloton nuclear weapon exploding above Busan, a South Korean port city? According to estimations from the modelling tool NUKEMAP, such a detonation would kill 440 000 people in seconds, a figure referring only to fatalities from the immediate blast.<sup>202</sup>

The belief that deterrence depends on destroying cities and, concurrently, that a strategy of deterrence must be wedded to the threat of *massive* retaliation, is a false one. Destroying a country is not necessary for deterrence to work. States are deterred not because of the expectation that they will suffer a certain amount of damage, but because they have no way of knowing how much damage they will suffer.<sup>203</sup> Deterrence is based on what one country *can* do to another country, not on what it *will* do. What is required

to deter is the ability or, importantly, the *appearance* of the ability that an attack by an aggressor will be met with a retaliatory blow incurring a high degree of damage. It matters little whether or not you *can* retaliate, as long as the aggressor state *believes* that you have the ability to do so.<sup>204</sup> As Bernard Brodie puts it, “[t]he threat of retaliation does not have to be 100 percent certain; it is sufficient if there is a good chance for it [...] The prediction is more important than the fact.”<sup>205</sup> To put it differently, states in a conventional world could initiate war if they believed the possibility of success to be high; in a nuclear world, aggression is stymied where the aggressor believes retaliation is possible. What is required to deter is not certainty but *uncertainty* of response because, if retaliation occurs, an aggressor stands to lose so much.<sup>206</sup> In a conventional world, uncertainty tempts states to initiate war; in a nuclear world, it produces hesitation, because the consequences of action are too dangerous to bear.<sup>207</sup>

### *Leaders, rationality and deterrence*

Nuclear weapons deter aggression against the manifestly vital interests of their possessors, irrespective of the identity of rulers or the characteristics of their states.<sup>208</sup> However, we are often told that the cognitive abilities of leaders (especially those of new and prospective nuclear states) are a cause for concern. These leaders, so the argument goes, might be slow to learn and appreciate the constraining effects of nuclear weapons.<sup>209</sup> Internally, such leaders might prove to be ruthless and radical, espousing revolution at home and abroad. Observers of nuclear affairs then fret that the external behaviour of these states might match their internal aggression. Yet, the history of international politics illustrates that international political outcomes are not uniquely determined by the internal characteristics of states and the particular qualities of their leaders.<sup>210</sup> External pressures constrain the behaviour of states, with the force of the pressure varying with conditions.<sup>211</sup> Of all the external forces impinging upon states, what could exert a greater effect on state behaviour than nuclear weapons? The cognitive abilities of leaders matter little when everyone but an idiot can appreciate their destructive force.<sup>212</sup> When confronted with such clear and present danger, what more do leaders need to learn, and how is it conceivable that they can miscalculate? To launch a first strike in the absence of a guarantee of success and, simultaneously, the presence of the promise of retaliation, implies that all those who wield control over nuclear decision-making would have to become insane at once. Accordingly, Joseph Nye notes that nuclear weapons produce the “crystal ball” effect, i.e. it is evident to everyone around that catastrophe lies around the corner if force gets out of hand. In a conventionally armed world, the crystal ball’s outlook is cloudy; in a nuclear-armed world, the outlook is “perfectly clear”.<sup>213</sup> The reality of a nuclear world trumps political rhetoric.<sup>214</sup> Nuclear weapons constrain their possessors – *all* of them – to act with caution.<sup>215</sup>

One of the hackneyed criticisms levelled against nuclear deterrence is the charge that it assumes leaders to be rational.<sup>216</sup> The efficacy of deterrence, according to this view, rests on rationality.<sup>217</sup> As Tom Sauer and Ramesh Thakur (amongst a host of others) recently reiterated, “deterrence stability depends on *rational decision-makers* being always in office in every single nuclear-armed country. The leaders of the nine countries with the bomb today [...] do not universally reassure on this score” [my emphasis].<sup>218</sup>

Critics correctly note that individuals are not “necessarily utility-maximizing machines that rationally pursue material gain and expect others to do the same”.<sup>219</sup> However, as Kenneth Waltz notes, “deterrence does *not* rest on rationality, whatever that term might mean” [my emphasis].<sup>220</sup> Defined simply, a person is rational if he or she is able to reason. It does not take much reasoning to conclude that fighting nuclear wars is impossible, and to launch a path of aggression in the face of retaliation “is obvious folly”.<sup>221</sup> In drawing those conclusions, one does not need to engage in complicated calculations, but only needs to apply a little common sense.<sup>222</sup>

Robert Jervis agrees and notes, “even an emotional, short-sighted, and dim-witted opponent” would be able to see clearly that aggression against a nuclear opponent would be the “worst alternative”.<sup>223</sup> Moreover, as Jervis further argues, rationality is neither a necessary nor a sufficient condition for deterrence, and for two good reasons.<sup>224</sup> Firstly, critics usually associate irrationality with a leader marked by emotional impulsiveness bent on launching an attack or someone prone to risk-taking. Yet, *irrationality* could have the opposite effect, leading a state to acquiesce passively, while a rational take on the situation could embolden a state to act with aggression. Secondly, a would-be aggressor is less likely to launch a first strike if it fears its adversary will retaliate without properly assessing the risks.<sup>225</sup> Deterrence is not dependent on rationality, but on fear – and nuclear weapons provide the best of all possible means to create fear.<sup>226</sup>

A related criticism is that the efficacy of deterrence rests on all parties accepting the ‘doctrine’ of deterrence. During the Cold War (1947–1991), nuclear observers were concerned that deterrence would fail if the Soviet Union did not accept the doctrine.<sup>227</sup> Thus, Henry Kissinger lamented that the ‘theory’ of mutual assured destruction (MAD) was weakened because the Soviets did not believe it.<sup>228</sup> However, as Waltz notes, the “efficacy of deterrence” is not dependent on “anyone accepting it”.<sup>229</sup> Today, as before, nuclear observers worry that the values, perceptions and calculations of nuclear adversaries may diverge and, where they do, nuclear disasters loom. When he was Secretary of Defence, Harold Brown warned that the only way to quell the Soviet Union’s drive for and use of “war-winning capabilities” was to ensure that “the Soviets will clearly understand that we will never allow them to use their nuclear forces to achieve any aggressive aim at an acceptable cost”.<sup>230</sup> Now, faced with the rambunctious North Korean leader, Kim Jong Un, nuclear observers emphasise that Washington must understand not only North Korea’s objectives, but also “how North Korean officials understand U.S. objectives and whether they consider U.S. statements credible”.<sup>231</sup> One wonders, however, what more the Soviets then, and North Korean officials now, need to understand when the dangers are so clear and the consequences so easily imagined. Today, as before, not much need to be understood or accepted by leaders to appreciate the destruction a few nuclear weapons can bring.

### **Creating invulnerable second-strike forces**

Creating credible second-strike forces is less daunting than most observers believe. Nuclear weapons are light, easy to move and to hide, and their means of delivery are easily devised and procured. In fact, their means of delivery are as wide-ranging as

the ingenuity of their possessors. Beyond the traditional delivery vehicles (consisting of ICBMs, ballistic missile submarines, and strategic aircraft), nuclear weapons can be delivered by trucks driven in from neighbouring states or by small boats firing torpedoes while lying offshore. They can also be placed in small packages in cargo ships and detonated upon receiving a signal, and, yes, they can also be delivered by oxcart. Nuclear states, moreover, may deploy real weapons alongside dummies, while leading other states to believe that the arsenal of such nuclear state is much larger than it actually is.<sup>232</sup>

Moreover, and again, contrary to popular belief, the idea that a credible second-strike force requires large numbers is a false one. A few strategic warheads – deliverable and of uncertain location – are sufficient for creating a second-strike force.<sup>233</sup> Yet, we often wonder whether the credibility of retaliatory threats would hold if the strategic forces of the aggressor outnumber those of the attacked. In a conventional war between two nuclear-armed states, will an unsuccessful defender have the resolve to use its retaliatory force first against an aggressor with superior strategic forces? This question is entirely misplaced, for a would-be aggressor would concern itself less with the strategic balance of nuclear forces and more with whether its aggression would cause nuclear weapons to rain down on it.<sup>234</sup> Two or more nuclear states encroaching on each other's manifestly vital interests are constrained to act with moderation because the immoderate behaviour of each state increases the credibility of the other's nuclear threats. In considering deterrent forces, what matters is not the numerical superiority of one state vis-à-vis the rest, but whether a state is capable of striking back and causing unacceptable damage. The numerical superiority or inferiority of states' strategic forces has no effect on how each state calculates danger or on the question of whose resolve is the greatest.<sup>235</sup> With this in mind, retaliatory forces are best seen in absolute instead of relative terms.<sup>236</sup>

Small nuclear forces can deter larger ones, as the history of the nuclear age illustrates. Justin Galen (pseudonym), writing in 1979, wondered whether the Chinese 60–80 medium-range and 60–80 intermediate-range missiles (both of which were of doubtful accuracy and reliability) and their obsolete bombers were sufficient to deter the Soviet Union.<sup>237</sup> The missiles, even if fired at cities, were likely to miss their targets, and the bombers were likely to be overwhelmed by Soviet Union defences. The Soviets, moreover, were likely able to launch a pre-emptive attack, having “almost certainly located virtually every Chinese missile, aircraft, weapons storage area and production facility”.<sup>238</sup> The Soviet leaders, however, surely saw things in a different light. Locating well-near all missiles and aircraft is insufficient. The point – for them *and* now for us – is that *some* Chinese missiles and *some* bombers might have slipped through.<sup>239</sup> The Cuban Missile Crisis of 1962 further illustrates the point. Reflecting on the crisis years later, Henry Kissinger noted that the Soviet Union had only about “60–70 truly strategic weapons” compared to roughly 2 000 American missiles and bombs.<sup>240</sup> Yet, as he concluded, “with some proportion of Soviet delivery vehicles surviving, the Soviet Union could do horrendous damage to the United States”.<sup>241</sup> In assessing their strike capabilities during the crisis, the US Tactical Air Command claimed that it could destroy 90% of the Soviet missiles placed in Cuba. The damage promised by the remaining

10% – some six to seven missiles – was deemed unacceptable to the United States.<sup>242</sup> In essence, the United States could not be confident that its 2 000 strategic warheads would destroy the Soviet Union’s 60 or 70.<sup>243</sup> Absent the guarantee that the United States could destroy *all* of the Soviet Union’s strategic warheads (or, for that matter, Soviet bombers, launchers or submarines), who would run the risk?<sup>244</sup>

The above illustrations powerfully underline two basic truths about nuclear weapons, both of which are pertinent to the purported destabilising effects of hypersonics on deterrence stability. Firstly, not much is needed to deter. A small force may indeed be more vulnerable than a bigger one, but it is only worse than a bigger one if an “attacker believes he can destroy *all* of the force before *any* of it can be launched” [emphasis in original].<sup>245</sup> Lacking this belief, a small second-strike force becomes equivalent to a large second-strike force.<sup>246</sup> Secondly, if any part of a nuclear force is invulnerable, the entire force is rendered invulnerable.<sup>247</sup> It does no good if a major part of a nuclear force can be destroyed when a small number of surviving warheads could cause such great damage. With conventional weapons, a premium is placed on the ability to launch a debilitating first strike, thereby getting the upper hand and setting the course of the war. In essence, the first phase of war becomes of overriding importance in a conventionally armed world. With nuclear weapons, striking first scarcely matters if it risks the destruction of a number of cities. What matters most is not the first stage of war but what happens at the end of the war.<sup>248</sup> “Uncertainty about controlling escalation”, Kenneth Waltz reminds us, “lies at the heart of deterrence.”<sup>249</sup> This reality was aptly conveyed by President Kennedy during the Cuban Missile Crisis of 1962, “[i]t isn’t the first step that concerns me, but both sides escalating to the fourth and fifth step – and we don’t go the sixth because there is no one around to do so.”<sup>250</sup>

### **Hypersonic weapons and deterrence *instability*?**

Nuclear deterrence remains deeply stable, notwithstanding the impressive and rapid development of hypersonic weapons. As the reader will recall, nuclear experts are concerned that the increased agility and speed of hypersonic missiles reduces the response time of nuclear states; thus, encouraging the pre-emptive use of nuclear weapons. This fear is supported by two arguments. Firstly, the speed and agility of hypersonic missiles would render missile defences obsolete. Secondly, the failure of missile defences coupled with the reduction of the response time of nuclear states encourages the pre-emptive use of force. In short, second-strike forces can be destroyed before they can be employed. Besides this, the dual-use nature of hypersonic weapons ostensibly provides unique escalatory dangers for nuclear war. The conclusion reached by nuclear experts and policymakers is that hypersonic weapons are likely to upend strategic stability.

I first consider the challenge raised by hypersonic weapons to missile defences, then consider the possibility of the pre-emptive use of nuclear weapons and, finally, reflect on how the dual-use nature of hypersonic weapons ostensibly poses insurmountable challenges to nuclear deterrence.

Fretting about the invulnerability of hypersonic weapons to missile defences is senseless. We have always known, yet very few have apparently appreciated, that the big problem with missile defences is that they do not and will not work.<sup>251</sup> Most experts agree that a leak-proof defence is impossible, and even if it were possible, there is every reason to doubt that it would not last.<sup>252</sup> The problem with missile defences was well captured by US President Donald Trump's Secretary of State, Mike Pompeo. When asked why US-deployed Patriot air defence missiles in Saudi Arabia failed to shoot down a barrage of missiles (or perhaps drones) that struck the Abqaiq oil processing centre on 14 September 2019, he replied, "[e]ven the best air defence systems sometimes fail."<sup>253</sup>

Confidence in missile defence systems is and has always been misplaced. In October 1964, Soviet leader Nikita Khrushchev lauded Soviet defences by boasting that it had a new missile capable of hitting "a fly in the sky".<sup>254</sup> However, hitting a fly in the sky solves nothing. The difficulty, Kenneth Waltz presciently notes, lies in hitting many flies in the sky after first "separating the flies from the fleas".<sup>255</sup> Both the would-be aggressor and the attacked will understand and believe that some warheads would slip through the defences. For missile defences to work they would have to be the most intricate systems ever deployed and they need to work with near perfection when confronted with the only test that matters, i.e. that of enemy fire.<sup>256</sup>

The efficacy of missile defences is further upended by the ease by which they can be thwarted. One way to achieve this is simply to multiply warheads; thus, overwhelming a system with more delivery vehicles than it can handle.<sup>257</sup> During November 2020, the US Navy destroyer, *USN John Finn*, conducted a successful intercept test of an ICBM target using the Aegis Ballistic Missile Defense (BMD) system.<sup>258</sup> Although the successful test was met with much fanfare, the harsh reality is that not much was achieved. As expected, critics have correctly warned that the increase in US reliance on BMD "could spur Russia and China to enhance the size and capability of their nuclear arsenal".<sup>259</sup> In fact, both Russia (through its hypersonic weapons programme and the development of an undersea torpedo) and China (through diversifying its nuclear strike capabilities) have already responded to US missile defence by ramping up their nuclear delivery options.<sup>260</sup> Today, as before, multiplying warheads in the face of increasing reliance on missile defences is sufficient to ensure that a few warheads could slip through. The conclusion reached by Daryl G. Kimball is instructive:

Nuclear strategists have long understood that the development and deployment of strategic missile interceptors are ineffective against determined nuclear-armed adversaries but could lead them nonetheless to build more numerous and sophisticated offensive missile systems to overwhelm and evade missile defences.<sup>261</sup>

Besides increasing the number of warheads, other ways to thwart missile defences abound, namely:

- mounting decoys on missiles to spread chaff, thereby confusing the defence;
- launching missiles on depressed trajectories;

- using inflatable balloon decoys to swamp missile defence systems, rendering them useless; or, if all else fails
- the possibility of carrying bombs in suitcases or launching nuclear warheads from cargo ships lying off-shore remains.<sup>262</sup>

Additionally, we know that cruise missiles have proved to be particularly bothersome for missile defence systems.<sup>263</sup> Today, as before, multiple ways exist to thwart missile defences and to place warheads on targets. This is not likely to change in the future. The more states build and field missile defence systems, the more others will be emboldened to thwart them.

In fact, US missile defence plans have antagonised Moscow for decades, forcing it to consider ways to offset Washington's apparent strategic advantage.<sup>264</sup> One of these ways was to invest heavily in the development of hypersonic weapons. Putin's response upon unveiling six new weapons systems during 2018, all of which reportedly renders US missile defences ineffective, is instructive, "[t]hey kept ignoring us."<sup>265</sup> The United States, nonetheless, continues to invest heavily in missile defence systems, ranging from attempts to offset US weaknesses against supersonic cruise missiles to intercepting ballistic missiles outside the atmosphere.<sup>266</sup> Any gains resulting from such investments are bound to be fraught with the same limitations as previous missile systems and all the more so following the emergence of hypersonic weapons. That hypersonic weapons are invulnerable to missile defences is, accordingly, unproblematic, since missile defences have never been worth their weight in gold to begin with. Today there is still no adequate defence against 'the bomb'.

The second argument informing this claim, to wit, that the failure of missile defences coupled with the reduction of the response time of nuclear states encourage the pre-emptive use of force, is equally misplaced. While it is true that hypersonic missiles will lessen the response time of nuclear states, the militarily important question to ask is whether this will matter. In a conventional world, changes in military technology affect the calculations by states of the relative strength of their adversaries.<sup>267</sup> With the speed of technological innovation changing rapidly from the late nineteenth century onwards, difficulties in gauging the relative strength of adversaries and in predicting the outcomes of military campaigns multiplied. In the post-1945 world, the speed of technological innovation has become increasingly faster. However, save a breakthrough in missile defence, this scarcely matters.<sup>268</sup> As JR Wilson aptly points out, it is "hard to do something efficiently with a hypersonic [weapon], where nukes can be delivered by oxcart".<sup>269</sup>

During the Cold War, rapid technological innovation did little to alter the US–Soviet military balance, given that improvements in missiles on one side did not imply the obsolescence of missiles on the other side. Whereas the British *Dreadnought* left other competitors behind in 1906 owing to qualitative improvements in the range and firepower of its guns, this is not the case with missiles. Bernard Brodie famously remarked, "[w]eapons that do not have to fight their like do not become useless because of the advent of newer and superior types."<sup>270</sup> These weapons do have to survive, but this is a far less



intractable problem.<sup>271</sup> Given that a leak-proof defence is impossible to construct, a would-be aggressor contemplating the use of hypersonic missiles (or, for that matter, any other missile) would have to believe that it can destroy all of an adversary's nuclear force before any can be launched. As the reader will recall, during the Cuban Missile Crisis, the US Tactical Air Command claimed that it could destroy 90% of the Soviet missiles placed in Cuba, an impressively high number. Yet, the damage promised by the remaining 10% (effectively, some six to seven missiles) was deemed unacceptable to the United States. Accordingly, if any part of a nuclear force is invulnerable, the entire force is rendered invulnerable. With a small number of nuclear warheads able to do such great damage, who would run the risk? In a nuclear world, where uncertainty of response reigns, all parties are similarly constrained to act cautiously. As is often the case, the overwhelming emphasis is placed on the retaliator's difficulties in constructing credible second-strike forces (a problem, as argued above, not overly difficult to solve), while downplaying the aggressor's obvious risks.

Worrying about the effects of hypersonic weapons on the response time of nuclear states is closely related to the (old) question of whether deterrence depends on distance. As Waltz correctly notes, proximity does indeed lessen warning and response time.<sup>272</sup> Today, such concerns are voiced in the context of India and Pakistan, two contiguous nuclear states, where the missiles of either side could reach the capital of the other in less than five minutes.<sup>273</sup> More than anywhere else, the possibility of pre-emption apparently looms large here. Where early warning and response times are short, one would presume that decisions about the use of nuclear weapons need to be made quickly. The danger, of course, is that early warning systems could yield false alarms, thereby increasing the prospect of accidental war or, more importantly here, a would-be aggressor might chance its arm, believing it could destroy the nuclear forces of its adversary before the latter can retaliate. Today, as during the Cold War, the idea that deterrence requires the threat of swift retaliation remains deeply engrained in, especially, American and Russian nuclear thinking. However, what deters a would-be aggressor is not the belief that retaliation would be swift, but that in due course retaliation may occur. Retaliation, as K Subrahmanyam reminds us, "need not be highly time-critical".<sup>274</sup> Where some part of a nuclear force remains invulnerable, questions over the importance of the response time of nuclear states become insignificant. Nuclear states can respond at their leisure, and both the attacker and the attacked will know this. Thus, the spectre of pre-emption owing to the development of hypersonic weapons (and, concurrently, the poverty of missile defence) holds little water where some part of a nuclear force remains invulnerable.

However, what about the oft-cited fear that the dual-use nature of hypersonic weapons provides a dangerous pathway for nuclear escalation? Nuclear experts fear that a would-be aggressor's strike on key enemy assets using conventionally armed hypersonic weapons could be mistaken for a nuclear strike; hence, inclining the leaders of a nuclear state to unleash their own nuclear arsenal in a 'use it or lose it' situation. This, however, surely puts the problem the wrong way around, emphasising the difficulties the deterrer has in gauging the intentions of a would-be aggressor while downplaying the obvious risks run by the deterred. A would-be aggressor who contemplates launching

a debilitating first-strike on the key enemy assets of an adversary, whether through conventional or nuclear means, cannot otherwise know that such bold action is fraught with dangers. In such a situation, an aggressor has no way of knowing how the attacked would respond. As variously argued, what is required to deter in a nuclear as against a conventional world is not certainty but uncertainty of response because, if retaliation occurs, an aggressor stands to lose so much. Two or more nuclear states encroaching on the manifestly vital interests of the other are constrained to act with moderation because the immoderate behaviour of either state increases the credibility of the nuclear threats made by the other. Nuclear weapons, accordingly, bring moderation and caution all around.

## **Conclusion**

It is widely argued (and feared) today that the development of hypersonic weapons poses insurmountable challenges to nuclear deterrence. The gist of the concern over hypersonic weapons on deterrence stability is that these weapons are bound to squeeze nuclear states' response time, encouraging the pre-emptive use of force. This claim stems from two arguments: firstly, the speed and agility of hypersonic missiles would render existing and future missile defences obsolete; and secondly, the failure of missile defences coupled with the reduction of the response time of nuclear states encourages the pre-emptive use of force – in short, second-strike forces can be destroyed before they can be employed. Against this bleak assessment, a thoroughgoing appreciation of the strategic effects of nuclear weapons leads to optimism that nuclear weapons can continue to work their deterrent effects in the face of the development and employment of hypersonic weapons.

The first argument undergirding the claim that hypersonic weapons pose insurmountable challenges to deterrence stability, to wit, the vulnerability of missile defences to hypersonic weapons, is baseless. Worrying about the invulnerability of hypersonic weapons to missile defences is senseless. We have always known, yet very few have apparently appreciated, that the big problem with missile defences is that they are highly inefficacious. Hypersonic weapons merely amplify a debilitating problem that existed ever since the development of missile defence systems, namely that constructing a leak-proof defence is impossible. The second argument informing this claim – that the failure of missile defences coupled with the reduction of the response time of nuclear states encourages the pre-emptive use of force – appears to be a more serious one. This latter claim is, however, equally misplaced. While it is, of course, true that hypersonic missiles will lessen the response time of nuclear states, the militarily important question to ask is whether this will matter. The short yet resounding answer is 'no'. Given the difficulties of constructing a leak-proof defence and the ease of creating invulnerable second-strike forces, a would-be aggressor contemplating the use of hypersonic missiles (or, for that matter, any other missile) would have to believe that it can destroy all of an adversary's nuclear force before any can be launched. The threat of retaliation, as Bernard Brodie has noted, need not be 100% certain. If some chance remains that a nuclear state might retaliate, deterrence will work. What matters most is what one nuclear state appears to be able to do to another (and not what it will

do), with the prediction of retaliation being more important than the fact. In a nuclear world, uncertainty of response strengthens deterrence. The poverty of missile defence systems and, concomitantly, the reduction in the response time of nuclear states, provide no grounds for believing that nuclear deterrence could not continue to work its effects.

While hypersonic weapons hardly pose insurmountable challenges for nuclear states and, by implication, nuclear deterrence, which challenges, if any, do these weapons pose for the militaries of technologically less-advanced states, those relying primarily on conventional (non-nuclear) means to fend off aggressors? Here a word on the possibly deleterious effects of hypersonic weapons on the future African battlespace might be of value. The increased speed, agility and range of hypersonic weapons, coupled with their invulnerability to missile defence, do not pose unprecedented challenges to African militaries. Why not? For one thing, all states have historically experienced that it is almost impossible to construct a leak-proof defence, a problem that is only compounded by the development of hypersonic weapons. Moreover, the increased speed, agility and range of hypersonic weapons do not provide additional military capability to those states wielding them. Advanced militaries can easily strike sensitive or time-critical targets within African states with weapons other than hypersonic weapons. In more ways than one, the hype of the deleterious effects of hypersonic weapons is overblown.

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## ENDNOTES

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- <sup>130</sup> Dr Eben Coetzee lectures in the Department of Political Studies and Governance, University of the Free State. His research interests include nuclear deterrence, nuclear weapons, nuclear proliferation, nuclear terrorism and issues of war and peace. The author would like to thank his wife for her unwavering support as well as the *Scientia Militaria* referees for their invaluable insights.
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# The German Attack on the Witboois at Hornkranz, Namibia, April 1893

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## Abstract

For many, when the Namibian struggle for liberation is mentioned, the struggle for liberation by the South West Africa People's Organization (SWAPO) comes to mind. For others to the south of Namibia, it recalls images of a border war and incursions into Angola to 'stop SWAPO', the latter seen as a communist pawn directed and armed by the Soviet Union and Cuba. More than that is seldom asked about or seen in terms of the bigger historical collage. The brutal era of German colonisation is habitually overlooked. The Namibians' struggle for liberation lasted nearly a century. It started through, for example, the massacre or battle, depending on your view, in April 1893. This previously poorly researched story about which little is written is told in this article.

**Keywords:** Namibia (liberation struggle), German colonisation, Hendrik Witbooi, Hornkranz (the battle of), German West Africa, Witboois, arms traders (in Namibia/German West Africa, 1880s).

## Introduction

The Khomas Hochland (Khomas Highland) of Namibia offers a unique geological substratum of rocky hills and dense savanna-type thorn bush. The land surface lies strewn with quartzite rocks and mica schist.<sup>276</sup> In the valleys between the rocky outcrops run perennial rivers, the banks of which are thickly overgrown with riverine trees. Here and there, fountains erupt from the sand, releasing rainwater to the surface where people and animals gathered and still gather to drink and live. Before the sinking of boreholes by drilling machines started in the early 1900s, these fountains were the only sources of water for much of the year. One such water source was Hornkranz (also spelled Hornkrantz or Hoorankrans) where early San inhabitants of Namibia made their temporary hunting camps and where Hendrik Witbooi, the Orlam/Nama leader settled in the latter half of the 1800s. It is here that this narrative starts.

Near the cattle enclosure on the southern side of the main farmhouse and right next to the farmhouse, two separate memorial stones were erected by the Nama nation to commemorate the legendary Witbooi warrior, Captain Hendrik Witbooi, the man whose face still appears on Namibian dollar (ND) notes today. Witbooi was a sworn enemy of the German occupying forces in Namibia in the late 1800s. He had his home base at Hornkranz, where there was sufficient water in the Gaub River to sustain his people and his livestock, and from where he could raid his neighbours in Namaland to the south and Hereroland to the north.<sup>277</sup>

In retaliation for his reluctance to subjugate himself to German domination, German troops under the command of Captain Curt von Francois attacked Hendrik Witbooi's settlement in the early hours of 12 April 1893 at Hornkranz. Although the numbers of soldiers taking part in the attack are not mentioned in any of the sources, the total number of Schutztruppe in the German garrison in Windhoek consisted of 250 soldiers.<sup>278</sup>

The first shots were fired at first light. Eventually, 88 Witboois were killed by Schutztruppe fire. The deceased were mostly old men, women and children. Witbooi and the vast majority of his warriors came away unharmed. As indicated by the four gravestones at the site, one German soldier, 23-year-old corporal W Sakolowski, died in the attack. Another three soldiers died in later months from circumstances unrelated to the battle, while stationed at the site.<sup>279</sup>

## Methodology

The methodological approach for this study comprised the following elements: descriptive, exploratory and qualitative. In terms of the *descriptive approach*, the use of documentation from local and other archives was crucial, especially on German colonialism and the life and times of Hendrik Witbooi and the Orlam people. In addition, several secondary sources, including chapters from books, edited books, articles and monographs, were used. Additional materials were sourced from relevant publications applicable to the topic.

The *exploratory element* was appropriate, as no prior in-depth study had been undertaken about the 1893 raid on Hornkranz. As an event, the Hornkranz attack is of such historical importance that it deserves investigation. The study discussed here attempted to open the way for more systematic research in the future. The life and death of Witbooi – and especially the raid on Hornkranz – stand central in understanding the Namibian (armed) struggle for independence. The author trusts that the current study about the events at Hornkranz on that morning will spur further studies regarding the issue on a systematic basis.

In a qualitative research approach, 'on-the-ground' data gathered by the researcher are crucial. In order to gain more data, the physical exploration of the area where the raid took place, was of great value and had to be part of the research plan. Several trips were made to the immediate area at Hornkranz as well as the surrounding areas where the Witbooi people built small fortified defence positions and lookouts (ramparts). A thorough combing of the area, mapping of the area, and acquainting oneself with the research setting in order to try and understand the angles of attack and the immediate developments there, played a crucial role in data collection and added much detail. The gathering of materials, such as spent ammunition cases and identifying these played a pivotal role in such an approach. The area was visited and re-visited, and objects like food cans, drinking vessels, and spent cartridge cases were physically searched for and retrieved after more than a hundred years, in order to make an analysis of the cultural background and the weaponry used by the conflicting parties.

It was imperative that the author had to be conversant with arms and ammunition of the time as well as with the historical setting. Historical background knowledge about colonialism, especially German colonialism, was necessary. So was the need to have some insight in the larger European politics of the time (*Grosse Politik*), i.e. the Berlin Conference, colonialisation politics and knowledge of the socio-historical elements of people that populated the area before the advent of German colonialism. In this sense, knowledge of South West Africa (previously German South West Africa, today Namibia) was a requirement.

### **Reasons for the attack at Hornkranz**

Two main factors lie at the origin of the attack: the growing German interest in South West Africa (now Namibia); and the regular raids on other indigenous groups, bolstered by horses and modern rifles, by the Orlam Nama, of which the Witboois were part.

The Orlam Nama originated from the British-ruled Cape Colony, where they gained experience in horse breeding and the use of horses and rifles in hunting and in commando-type campaigns and raids on 'hostile' neighbours. Rifles and ammunition were made available by travelling traders in exchange for cattle, ivory and ostrich feathers. These weapons the Orlam (a term derived from the Malay word 'orang lama', meaning a wise man) quickly learned to use with deadly effect against their more traditionally armed ethnic compatriots in Southern Africa. The commando system of raids (mostly for cattle and small stock) eventually drove the Orlam Nama deeper and deeper into the interior of Southern Africa, from where some groups, including the Afrikaanders and the Witboois, in the early 1800s, eventually crossed the Orange (Gariep) River into what is now Namibia. Here they attacked the indigenous people in a relentless series of hit-and-run raids.<sup>280</sup>

An Orlam Nama commando usually consisted of ten to fifty armed men on horseback, although sometimes many more riders took part in a foray. Jonker Afrikaner's commando to the then Ovamboland in 1852 comprised of at least 200 men.<sup>281</sup>

The objectives of the commando were at once political and economic. The objectives originated in both the indigenous and colonial systems, using indigenous alliances in corroboration with colonially gained military experience, horses and weaponry. Raids on weaker neighbouring groups took place regularly. The missionary Joseph Tindall recorded at least one raid per year by the Orlam group led by Amraal Lamberts, stationed at Naosanabis, on the Nossob River, near the current Leonardville, between 1848 and 1851. The Bethanie Orlam executed several raids a year on neighbouring groups. Qellen reports 15 raids a year executed by the Kai//Khaun in 1851.<sup>282</sup>

A keen knowledge of the local terrain, together with the instinct of primitive hunters and a ruthless attitude towards enemies made them a highly feared and efficient military or renegade force in the mid-1800s in Southern Africa. The depletion of targeted cattle herds and the dispersion of targeted local inhabitants led to the migration of these commando groups deeper into the interior of Southern Africa. Jonker Afrikaner and his

people were the first of these semi-westernised *commando* groups to cross the border into Southwest Africa (now Namibia), soon followed by others, including the Witboois under Kido Witbooi, Hendrik Witbooi's grandfather.<sup>283</sup>

It was the time of “the scramble for Africa”, and Germany, like other European nations, such as Great Britain, Belgium, France and Spain, played a role. Germany made more and more inroads into South West Africa, firstly through traders and prospectors, and then by means of a military contingent of protection troops, the so-called *Schutztruppe*. These soldiers were first mobilised in order to protect German interests in South West Africa, but concomitant with these interests, and as a contingent measure with the same objective, to “protect” (*schutz*) other indigenous inhabitants from the raids by the Orlam and other hostile groups, it was argued.<sup>284</sup>

The German military command in German South West Africa generally therefore perceived their military actions against the raider groups as justified, whatever the means. The Witboois at Hornkranz were viewed through the same lens.

### **Colonial background**

As part of the rush for colonial expansion, many major European powers annexed large areas of Africa and other parts of the underdeveloped (non-industrialised) world in the 1880s. Germany, who had no overseas possessions at that stage, decided to do the same. The intricacies of the political economy of a country under the influence of rapid industrialisation and a concomitant rise in unemployment, made the German government consider colonisation as a project to unify the nation and to distract attention from the difficulties of the national economy. Colonisation would raise the international status of Germany, find markets for manufactured goods, and provide employment to young German citizens as colonial officials, police officers and soldiers.

At the conference held by the major European states in Berlin from 1884 to 1885, the European powers agreed on the legal basis of their occupation and partition of Africa. By the end of that decade, Germany had established colonies in the Cameroons, Togoland, East Africa and South West Africa. By that time, traders, such as Adolf Lüderitz, had already bought vast tracts of land from the native chiefs in South West Africa, which gave the German government the basis on which to install and expand German authority in the country. The indigenous leaders soon used the German influence to bolster their own interest in the existing power struggles between the raiders and the raided.

Taking advantage of the internal struggles, agents of the German government negotiated protection treaties with the local inhabitants, thereby gaining a foothold for further German occupation. Generally speaking, these agreements guaranteed the security of the German traders and their families and prevented indigenous groups from seeking alliances with other European powers. In this way, between 1884 and 1885, most of the people of central and southern Namibia had been drawn into formal relations with the German government by means of these protection treaties.<sup>285</sup>

Some of the Nama/Orlam groups, including the Witboois, however, refused to sign these 'protection treaties', because this would have restricted their freedom to proceed with the usual commando activities against their neighbours.

Although the German government sent warships to the South West African coast as early as 1884 in order to protect the interests of German traders dependent on shipping for their trade, official German presence in the interior of the country remained marginal. With the Imperial Commissioner, Hermann Göring, there were only his secretary and a police superintendent as government officials. With the escalation of inter-ethnic violence, the German government decided to send a military presence to the colony. In 1888, the first German soldiers arrived in South West Africa.<sup>286</sup>

While Germany was increasing its sphere of influence in the country, Hendrik Witbooi and his soldiers were gaining increasing dominance in southern and central South West Africa. Through a series of well-executed military campaigns, Hendrik Witbooi established dominance over rival Orlam/Nama groups like the Rooinasie, the Grootdoden, the Veldschoendragers and the Afrikaanders. He and his mounted soldiers won decisive battles against the Herero. Many of these groups were already under the legal protection of Germany.<sup>287</sup>

The details of the establishment and consolidation of Hendrik Witbooi's military and – to an extent – political successes have not been fully analysed in previous studies. It is clear that he was able to amass wealth and a following through the successful raiding of cattle and small stock. The raided cattle were exchanged for rifles and ammunition from traders, not only within the territory of South West Africa, but as far away as Walvis Bay and Cape Town.

### **Hendrik Witbooi as military leader**

Witbooi had remarkable personal charisma, which impressed itself not only on his followers, but also on his enemies. The Herero called him Otjikorta ('the short one') and perceived him with fear and awe. After a revelation in the Auas Mountains, during which he saw a light and heard a voice, which told him to lead his people to greatness, Witbooi became not only a shrewd military leader, but also a religious leader and a prophet, which gave his military activities a sense of (pre)destination. In 1889, he established a base at Hornkranz, a hundred kilometres west of Rehoboth (120 kilometres southwest of Windhoek). He had with him several of his Witbooi followers from the Gibeon days but also many vagrants ('leaderless people') from other Nama and Orlam groups, such as the former followers of Jan Jonker Afrikaander, Arisemab and Paul Visser.

At Hornkranz, Witbooi established a tightly-knit Christian community, based on the economics of stock raiding, hunting and animal husbandry. Under his auspices, an effective military force was created, for which the breeding, trading and raiding of horses was a prerequisite. Rifles and ammunition were traded from the British traders, until such trade was banned by the resident German government.

Witbooi's military power vis-à-vis that of the German contingent, was demonstrated at this time, when in September 1890, returning from a raiding expedition from Herero and Damara settlements, he demanded to water his horses and cattle at the German military base of Tsaobis, without the German commander having the troops to resist him.<sup>288</sup>



Figure 1: German Schutztruppe with 88 Mauser rifles in Windhoek.<sup>289</sup>

In his later report on the Hornkranz attack, Captain Curt von Francois, the German military commander in German South West Africa, describes his peace-making visit to Captain Witbooi at Hornkranz. Von Francois puts the blame for the killings on the reluctance of Witbooi to lay down arms and accept the German Protection Treaty, as other groups in the country had done.<sup>290</sup>

After the attack, Witbooi wrote a letter to the Baster captain, Hermanus van Wyk, in which he described the attack in the following manner:<sup>291</sup>

Captain von Francois attacked us early in the morning while we were sleeping unsuspectingly, and while I was trying to protect my people, we were unable to drive them back. The captain invaded the camp and ruined it in such a brutal way as I could never imagine a member of a civilized White nation capable of – a nation that knows the rules and ways of warfare. But this man robbed me, killing little children on their mothers' breasts, and older children and women and men. The bodies of the people killed were burned inside the

grass huts, their bodies burnt to ashes. With pertinence and terribly harsh action Captain von Francois did his work, in a shameless operation.

As far as I am concerned, the Germans set fire to this whole country in order to crush the whole of Hereroland and Namaqualand, so as to possess our entire land, and to make us their subjects and their slaves. So, dear brother, get up, let us oppose the Germans for the cause of our country and our nations. It's an attack on us all. Come to my aid, dear brother, with weapons, such as guns, a keg of gunpowder, and Martini Henry shells and lead. As you know, the Germans stopped my arms supply, and now that I am unarmed, they attack me. Please let me hear from you soon.

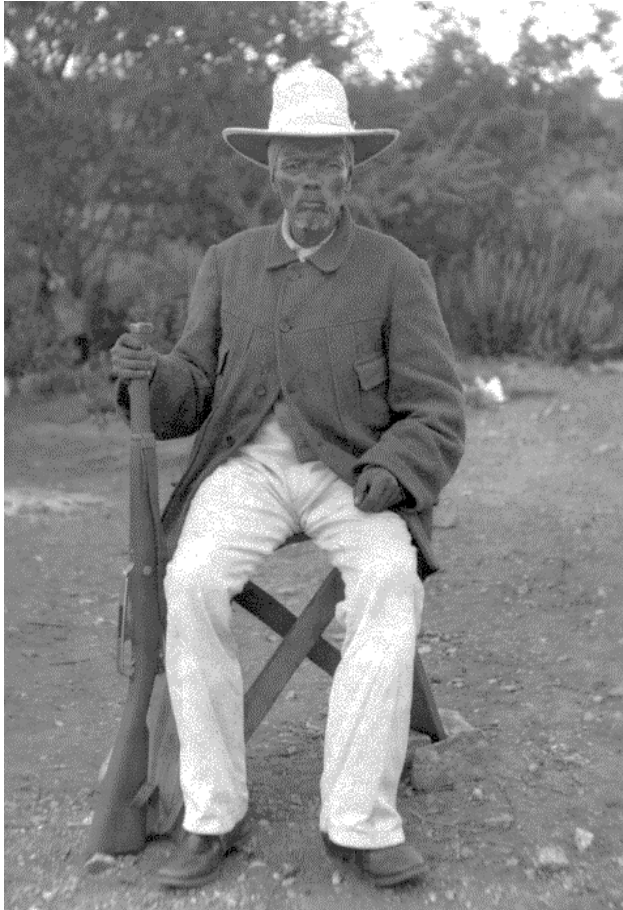


Figure 2: Hendrik Witbooi.<sup>292</sup>



## **An early appeal for international intervention**

Witbooi's approach went further. In an appeal for help, Witbooi wrote to the English magistrate in Walvis Bay describing the attack in the following terms:<sup>293</sup>

Dear Lord,

I've already told you of my conflict with the Germans. Now I have to tell you about the big blow that the Germans inflicted on me. Captain von Francois launched a surprise attack on me on April 12, without a word, and without any mistake on my side. He did not even warn me beforehand.

Two of my elders went to Windhoek and came back with a note from the captain that he would soon be sending me a letter for a treaty. While I was still waiting for this letter, the captain moved in with his troops, without anyone knowing it, and he attacked early in the morning, before sunrise, while we were still sleeping. When we awoke, the troops were already inside our camp, and started firing all over the place. I had no proper ammunition with me, because I was not involved in a war, and because I was not expecting that kind of thing from the Germans. They always boasted about their great power of people and weapons, so I didn't expect such a powerful man – in addition to the ruling representative of the emperor of a civilized nation – to carry out such a cowardly raid against a small and unimportant person like me, as if he wanted to rob me – because they were actually sneaking in while we were still sleeping.

He destroyed my settlement and killed my people without distinction: small children, women, and men. He burned the dead bodies of some of the people he shot. He took some of the women away. That is how brutally the captain dealt with my camp, as I would never expect from any White man.

He killed ten men, and 75 women and children, while I could not fight back, but had to flee with my people. Because, as you know, you have unanimously decided to stop my ammunition supply. That way, the Germans shed the blood of innocent women and children. And he said he wouldn't stop until he destroyed me.

So again, I report to you, dear Magistrate, as a friend, please tell the Cape Government urgently of these things. Let the Cape government call the German government accountable, to see if they are aware of this attack, and whether it has been done at their command. And if they do, and approve of it, then I plead with you, dear Magistrate, to allow Britain to open my arms supply, that I can defend myself. Because I can't think that such actions as the Germans have ever done can be seen as justified or proper or honest by any civilized power. First, the Germans stop my ammunition supply, and as soon as I can't defend myself, like a bull without horns, they attack me. According to me, it's murder, because I am as helpless as a woman.



That's why I ask your mighty gentleman if you can't say anything to reject or stop this illegal and deliberate act of violence. Also, help me with weapons and ammunition in my desperate condition. Help me with Martini Henry ammunition. Open up the provision of firearms, because the Germans say they will play havoc with me and with all the captains in Namaqualand, as well as with the Herero.

The Germans set fire to the world without a cause. Please announce these terrible and sad events to all the leaders of Britain and Germany, and make it quick. Let them hear about this.

So much for the moment. I greet you courteously.

Your friend,

Hendrik Witbooi.



Figure 3: The Nama graves at the site of the attack.<sup>294</sup>

In writing this letter to the British authorities, Witbooi can be accredited for engaging in diplomacy with Britain and attempting to influence a great power. Hendrik Witbooi, astute as he was, was clearly aware of the tensions between Britain and the rising Germany and attempted to make full use of this in his interaction with the British authorities.

Witbooi, apart from the losses inflicted on him and his people also suffered a grave personal loss. Among the casualties, Witbooi's own young son was also killed in the shooting. Petrus Jefta, one of Witbooi's senior officers, states in an annexure to the English magistrate:<sup>295</sup>

I am one of Hendrik Witbooi's people. I was on Hornkranz on the 12th of April. The captain was there with his people: men, women and children. A while before sunrise, the German soldiers started shooting at us and stormed into the place. There were three groups. When we heard the shooting, we ran out of the houses. We had no chance to resist, but fled. The men came out, but the women had no chance, they got confused with the soldiers. The captain's son, his cousin and three men were shot near the church, when they came out of the captain's house.

The captain's son was first only wounded and ran down to the river, but the soldiers chased him and shot him through the head.

The captain's sister-in-law and his daughter-in-law were shot dead at the same time. Around the captain's house and the church I counted 33 dead women. They were all shot. I saw how some of these women were shot dead by the soldiers.

The German officers were outside while the men inside the village shot the people. They shouted orders and the shooting stopped. They then arrested one of the elders of the church and tied him to the ox wagon.

Two other men and I climbed on a hill and saw the women hiding away. We called them to run away, but they stayed there until the Germans came by. One of the Germans shot one of these women. The others pleaded for their lives and asked the Germans to rather make slaves of them (rather) than to kill them. The soldiers then took them away by pushing them in front of them.

### **Arms as a means for survival**

Arms and ammunition were a double-edged sword for the Witboois. These arms would be used not only as weapons in case of an attack against them, but were also indispensable not only as a hunting community, but also as warriors and raiders of the cattle and small stock of neighbouring native tribes.

Windhoek was the headquarters of the gun and ammunition traders and the liquor sellers. There were gunpowder and lead and rifles enough: 'skietgoed' was the common name. To allow the gun trade to flourish, there had to be war, and more than one of the traders could have deliberately started hostilities. However, 'skietgoed' was scarce and expensive and could only be paid for with stolen livestock, which further increased the demand for weapons. The later ban by the German Schutztruppe government on arms trade and ammunition with the 'natives' led to great frustration for the Witboois, and possibly many others.

Hendrik Witbooi himself wrote in his diary about this:<sup>296</sup>

Because of the ban on weapons and ammunition, this war continues. I can never get enough ammunition to tackle a proper battle, as I would. I think differently about weapons than your White people, who have the skill and knowledge to make the necessary and useful things for a comfortable life. But I look at the issue of weapons as follows: guns and ammunition should be free articles for everyone's use. You cannot keep it to yourself and regulate its sales with sanctions. Let weapons be freely available to anyone in the country. We live by the gun, we are hunters, and we need to protect ourselves against our enemies and against wild animals. A man who is alone in the field needs a gun; on every farm, settlement or holding; if only one person is living there, he needs a gun.

Also, God gave the people the skill and knowledge to make weapons as part of his great plan. He made war to punish the sins and injustices of the nations. The sins and injustice of a nation cannot be driven out with a whip, God is perplexing one nation with the help of the neighbor, and firearms are his rod. It is therefore wrong for you to ban firearms. I think firearms should be as freely available as the rain that falls where it wants to fall today, on any ground and on any person, and that cannot be stopped. You are wrong to think stopping firearms will bring peace. It is not a healing plan, not good or right. Someone who wants to ban firearms is like one who withholds another from water.

Witbooi, well versed in the Bible, developed a unique way to interpret war and the accessibility and rules to use rifles and guns – a view perhaps not so far removed from those who still argue for conflict and inflicting harm on others as observed within the Christian, Judaic and Muslim tradition. In short, he advocated both a just war and a just rebellion approach in the political and military lives of people.

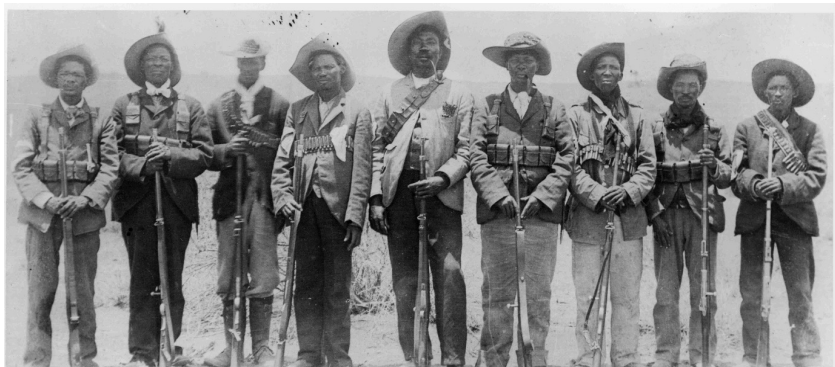


Figure 4: Well-armed Nama warriors photographed at the turn of the century.<sup>297</sup>

Horses and guns gave the Witboois a great advantage over the more traditional and conservative native tribes of Namibia, which predominantly used bows and arrows for hunting and for war. Especially the Hereros and the 'Red Nation' (Namas) were Witbooi's biggest target. For example, on one occasion, the dealer, Robert Duncan, and Hendrik Witbooi agreed that Duncan would provide Witbooi with the following ammunition:<sup>298</sup>

- 4 boxes of Martini Henry cartridges
- 4 boxes for the 'rifled guns'
- 4 boxes Westley Richards cartridges
- 1 box paper for Westley Richards cartridges
- 2 boxes of cartridges for Sniders rifles
- 1 box cartridges for the Winchesters
- 100 bags of gunpowder
- 1 500 bars of lead

### **The battlefield at Hornkranz**

During the research done for this article, the researcher, with the help of some farm labourers at the farm Hornkranz, collected as many of the spent cartridge cases he could find on the farmyard. Over a period of two weeks, the researcher and his team collected around 200 cartridge cases of various sorts in total.

The spent cartridge cases were mostly found in the vicinity of the old ruined foundations of an old stone building, which was probably the church building referred to in the declarations. A series of small flat stones, in the shape of gravestones, dot the area around the church. There are no names or markers on this stones.

Identification of the spent cases indicated examples of the following calibres:

Witbooi firearms:

'English' calibres

- Martini-Henry .577 or .450 (41 cases)
- Westley Richards (musket number 1 carbine) .500 or .450 (16 cases)
- Westley Richards (musket number 2) .500 or .450 (45 cases)
- .577 Snider (12 caps)
- .45-75 Winchester, WRA Co centre fire (4 cases)
- .45-90 Winchester Eley (2 cases)
- Westley Richards Express number 2 577/500 (2 cases)

German firearms:

'German' calibres (German firearms)

- 11mm Mauser () (13 cases)
- 9mm Luger Parabola (DWM)
- 10.6x25mm R, M1879 or M1883 Straightener (1 case)

Several of the cartridges bore evidence of exploding. Others have flattened ends, probably because of damage by farm livestock over the years.

There is a whole system of old Witbooi battle ramparts in the hills around the farmyard and above the main water source at the Hornkranz fountain. Here, however, we did not find any cartridge cases. It is clear that the final battle took place directly around the yard and that the Witboois did not occupy the shelters and ramparts to fire or return fire at the German Schutztruppe from high ground, but fired the shots in the settlement and vicinity itself during their flight.

It is evident from the low death rate of German soldiers that the Witboois did not have a chance to utilise their legendary shooting skills properly.

### **A reconstruction of the battle**

German military records of the battle are scarce. The Schutztruppe Archives at Potsdam were destroyed in an air attack by Allied forces in April 1945 during the Second World War. Most of the records and important historical information were irretrievably lost.<sup>299</sup>

More than a year after the incident (in October 1894), Von Francois reported on the Hornkranz attack in the official German government files regarding military activities of the Colonial Department (*Reichskolonialamt*). His report refers to his earlier interviews with Witbooi, and gives a generalised motivation for the attack, as well as an indication of the successful outcome of the attack, but the report does not describe the attack in detail.<sup>300</sup>

Captain Schwabe of the German Army, who was a senior lieutenant of the forces under Von Francois, published his memoirs of his time as Schutztruppe officer in Namibia in a 1904 publication where he describes the battle in his perception.<sup>301</sup> He admits the killing of women and children, but ascribes this to the confusion stemming from the short distances from which they were firing in the semi-darkness. He puts the total number of Witbooi losses at about 150 people, of whom 60, according to him, were men. He describes the burning huts, human bodies and the remains of animals and discarded rifles. He also mentions the sound of exploding cartridges from the burning huts.

It is difficult to make a convincing reconstruction of the battle from the available archival sources. The most valid contemporary source for this stems from the reports of the Witboois themselves, as indicated above, where it was established that the German soldiers:

- attacked just before first light;
- went right into the sleeping village before opening fire;
- attacked from three sides simultaneously;
- killed indiscriminately;
- fired into the huts; and

- from Schwabe's report can be added that most of the firing took place at very short distances.

The records do not indicate how many German soldiers were involved in the battle, who their officers were, and by which route or routes they approached the Witbooi encampment, and where they had their temporary base the night before the attack was launched.

Some cartridges were found between the rocks on the fringes of the adjacent sandy and flat small floodplain right next to the Gaub River. This area was then most probably the main area of battle and the place where Captain Hendrik Witbooi and his people had their houses. Several of the cartridge cases had burst open, which correlates with Schwabe's account of exploding cartridges.

From an examination of the battleground and the evidence of spent cartridge cases, it is clear that the Witbooi warriors did not fire from any of the previously prepared battle ramparts, but had to fire on the run, with whatever calibre cartridges they had available. The small number of German calibre cartridges (only 15 cartridges for 88 people killed by German fire) indicates that a sweep was probably undertaken by German soldiers for cartridges after the attack and that they were mostly recovered.

Taking the lay of the terrain and the evidence of cartridge cases into account, the "three sides" from which the German soldiers attacked were, then, probably from the cover of the thickly wooded river bank (mostly sweet-thorn *Vachellia karoo* and hook-thorn or buffalo thorn *Ziziphus mucronata* trees), in a sweep upriver as well as downriver. A third contingent must have approached the sleeping Witboois from the cover of the rocks on the riverbanks, making use of the flat, level ground on the eastern side of the river

### **Aftermath of the attack**

The surviving women and children were taken to a makeshift concentration camp near the old fort (Alte Feste) in Windhoek. The Witbooi warriors fled to the Naukluft Mountains, south of Hornkranz. Here, Hendrik Witbooi, after a long campaign, was forced by Governor Leutwein, Von Francois' successor, to surrender, after which he and his men acted as a commando for the Germans against the Hereros and other rebellious indigenous tribes. It was during this period that he received the Mauser Gewehr 88 carbine, which he is holding in the German archive photographs of the early 1900s.





Figure 5: Hendrik Witbooi and his warriors photographed in 1896 after his capitulation.<sup>302</sup>

### **This is not (yet) the end ...**

Witbooi later, as an old man of almost eighty, took to arms again, after disillusionment with the policies and actions of the German government. A wandering prophet, Baal Stuurman, at the time predicted his eventual victory over the German forces. On 29 October 1905, he and his men attacked an ammunition wagon from the Third Battery under Oberleutnant Stange at Fahlgras. Witbooi was hit in the thigh during the fight by a piece of shrapnel from a mortar bomb and died from blood loss.<sup>303</sup>

His men hastily buried him in a shallow grave and drove back and forth with the horses over the area in order to hide the place of his death to the Germans. Oral tradition reports that it rained immediately after they buried him, obliterating all signs left by the Witbooi soldiers.<sup>304</sup>

His grave was never found.<sup>305</sup>

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## ENDNOTES

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- <sup>275</sup> Piet van Rooyen is Professor (emeritus) at the School of Military Science of the University of Namibia. The author would like to thank Prof (emeritus) Andre du Pisani for archival assistance and obtaining the necessary permission to reproduce photographic material from the National Archives of Namibia.
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- <sup>285</sup> *Ibid.*, p. 118.
- <sup>286</sup> *Ibid.*, p. 120.
- <sup>287</sup> *Ibid.*
- <sup>288</sup> *Ibid.*, p. 124.
- <sup>289</sup> National Archives of Namibia. Image Number 02009 – German Schutztruppe with “88” Mauser rifles in Windhoek. Photo reproduced with permission of the National Archives of Namibia.
- <sup>290</sup> Records, *Auswärtiges Amt, Kolonial-Abteilung*, R 1001/1486 Bundesarchiv Berlin.
- <sup>291</sup> Paraphrased from Lau, *The Hendrik Witbooi Papers op. cit.*, pp. 126–127.
- <sup>292</sup> National Archives of Namibia. Image Number 0041, Series 4 – Hendrik Witbooi seated, with gun. Photo reproduced with permission of the National Archives of Namibia.
- <sup>293</sup> Lau, *The Hendrik Witbooi Papers op. cit.*, pp. 128–130.
- <sup>294</sup> Author’s private photo collection.
- <sup>295</sup> Lau, *The Hendrik Witbooi Papers op. cit.*, pp. 209–210.
- <sup>296</sup> Witbooi *op. cit.*, p. 135.
- <sup>297</sup> National Archives of Namibia. Image Number 27041 – Jacob Marengo and eight of his followers, standing with guns. Photo reproduced with permission of the National Archives of Namibia.
- <sup>298</sup> Lau, *The Hendrik Witbooi Papers op. cit.*, p. 44.
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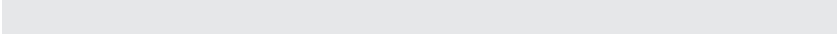
<sup>302</sup> National Archives of Namibia. Image Number 27187 – Hendrik Witbooi and his soldiers.

Photo reproduced with permission of the National Archives of Namibia.

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# **The South African National War College military history staff ride as a deep learning experience**

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## **Abstract**

In this article, based on a study rooted in interpretivism, the South African National War College military history staff ride, as an education and training method related to the curriculum of the senior staff programmes since 2002, is discussed. The education and training process, with specific reference to the staff ride to military battle sites and the associated application of the theory of operational art, were researched according to the tenets of the theory of deep learning. While using the historical-comparative method during the staff ride enabled the majority of the students to determine which viable options were available to the commander, not all students were necessarily able to relate deep learning to critical thinking. Consequently, in certain instances, surface learning tended to dominate simply because that was the educational world into which the students had been socialised. Furthermore, the facilitation process did not always fully serve the students by completely weaning them off learning habits associated with surface learning. Consequently, while being able to claim some deep learning successes using the staff ride, continuous reflection and educational interventions are needed to maintain the successes achieved and to use these as a building platform for deep learning during future staff rides.

**Keywords:** staff ride, deep learning, military history, South African National War College

## **Introduction**

Over time, armed forces and their commanders constantly had to contemplate how best to prepare for military operations. One of the ways to do so was to turn to military history. More specifically, this was done by conducting a historical study, which became known as a ‘staff ride’ to fill the gap in operational preparation. A staff ride is a historical study of a military campaign or battle, which includes the following:

- a prior detailed study of related historical evidence;
- a field visit to the campaign or battle site to put the historical evidence studied into a geo-spatial context; and
- application of the lessons learnt about the military campaign or battle in a practical manner.

As such, it can be argued that the military history staff ride is a learning activity in which students analyse the actions of military commanders and their forces and use

current military doctrine as a benchmark to understand and evaluate the aforementioned commanders as wartime leaders.<sup>307</sup>

In light of the above, this article deals with the military history staff ride as a deep learning experience. Universities in their role as institutions that conduct adult education, generally encourage students to think for themselves, to develop their own understanding of complex issues, and to make it a habit to think critically. In order to achieve personal understanding and to develop critical thinking abilities, deep learning is used as an approach at tertiary institutions accredited by to universities, such as staff colleges. Deep learning as an approach to the learning process relies on the intention for students to develop a critical mindset with the approach that the educator's knowledge is but an expression of current scientific research results, something that can change. This involves relating ideas and using evidence in ways determined by the tenets of a specific subject discipline. **Deep** learning stands in contrast to **surface** learning, with the latter generally involving actions aimed at reproducing learning material by means of rote learning.<sup>308</sup>

More specifically, this article focuses on the experiential value of the military history staff ride to the education and training of senior officers on the Joint Senior Command and Staff Programme (JSCSP) at the South African National War College (SANWC) of the South African National Defence Force (SANDF). Conducted since 2002, these staff rides, with their unique and persuasive nature of drawing on the past to learn in the present, focus on the operational level of war. They also serve to evaluate commanders of campaigns and major battles and stand in contrast to tactical staff rides, which focus mainly on the conduct of battles.<sup>309</sup> The research aim of the study on which this article is based was therefore to understand, in an interpretivist manner, the JSCSP military history staff ride as a deep learning experience. In pursuing the stated research aim, our point of departure was that deep learning is the appropriate learning theory to understand how staff rides can contribute to critical thinking and the ability to solve work-based problems. The research question pursued was therefore: To what extent does the military history staff ride promote deep learning?

## **Background and context**

The first recorded use of staff rides in military education and training was in the Prussian General Staff system of the nineteenth century. A select group of officers would annually accompany the Chief of Staff of the Prussian Army on a military exercise. During this exercise, they used fictitious military problems or examples from military history to develop the problem-solving abilities of the selected officers. Although military history was used in the discussions, the focus was on the use of terrain in border areas where they thought future wars might occur. In the process, the Prussian borders were divided into possible theatres of operations and discussions centred on possible military scenarios in these theatres and on solutions to possible military problems. On one level, the staff rides was therefore more like a tactical exercise without troops than the contemporary historical staff ride. On another level, the similarity of the Prussian Army exercises to the modern historical staff ride is that the Department of Military

History of the Prussian General Staff provided lessons from past wars in the respective potential theatres of operations on the Prussian borders. It is also worth noting that the contemporary concept of a staff ride was derived from the fact that the Prussian officers who participated in the exercises, used horses to ride across potential battlefields.<sup>310</sup>

The British Army had a similar approach circa 1912. The British Army opted to use historical case studies on terrain that was similar to where wars had occurred. They did not travel to the actual campaign or battle sites as such. Case studies were selected where the military forces deployed were similar to those required for the contemporary staff ride. The actual positioning of the forces was then transferred to the locality where it was proposed that the exercise would be conducted. For example, campaigns and battles of the American Civil War of 1861–1865 were used to exercise officers in campaign and battle planning on terrain in Britain that was similar to that in the United States of America (USA), where the historic events actually occurred.<sup>311</sup>

After the First World War of 1914–1918, British officers visited European battlefields related to the conflict and American battlefields from the Civil War where the focus was on the study of tactical aspects of the campaigns and battles. This was, however, still very much a tactical exercise without troops. In the aftermath of the Second World War of 1939–1945, Allied wartime generals like Field Marshal BL Montgomery took British officers to Europe on battlefield tours to study tactics and teach them about the nature of war. In 1979, Montgomery's old age put an end to these tours, and staff colleges took over the duty of conducting staff rides. From 1997 onwards, the newly established Joint Services Command and Staff College in Britain continued with this practice. According to Hall, the battlefield tours became more rigorous and integrated with the Staff College curriculum.<sup>312</sup> The study material, which included historical evidence, focused on strategic and operational aspects and demanded a high level of critical thinking and, in doing so, leant more towards the concept of a staff ride than towards a battlefield tour.

The staff ride in its present format had its origin in the United States (US) army when, in 1906, the Assistant Commandant of the Army General Command and Staff College at Fort Leavenworth in Kansas took 12 student officers to the Civil War battlefields of Georgia. Until the 1930s, these staff rides played an important role in the curriculum of this college but due to a lack of personnel, this practice was abandoned during the Second World War and was forgotten for nearly two decades. In the late 1960s, Fort Leavenworth reintroduced the practice, and both the US Army War College in Carlisle, Pennsylvania and the US Army Military Academy at West Point followed suit.<sup>313</sup>

In the US armed forces, the practice of staff rides has been developed into a fine art, and several historical works, as companions to specific staff rides, have been published. Additionally, manuals on how to plan and conduct staff rides were published by the US Army Center of Military History. These could be adapted for other countries.<sup>314</sup> Currently, US army officers go on staff rides wherever they are stationed in the world. In 1987, for example, they participated in over 300 staff rides, a number equal to those participated in annually by the British armed forces. This demonstrates the value of this practice as an educational and teaching activity.<sup>315</sup>

In other parts of the Global North, the Dutch and Irish armed forces also use historical staff rides in the education of their officers' formative training courses. In the cadet courses of both these countries, historical staff rides are used to enhance the classroom experience and allow cadets and officers to gain first-hand experience of specific battlefield conditions.<sup>316</sup>

Having considered the evolution and use of staff rides in the Global North, the focus now turns to South Africa as part of the Global South. With the reintroduction of military history as a subject in the curriculum of the Senior Command and Staff Duties Course at the South African Army College in 1998, the author developed a staff ride in the KwaZulu-Natal region. This education and training activity served the said course and the Military Health Service Staff Course until 2001. Subsequently, the arms of service courses were no longer presented as they fused into the JSCSP at the SANWC, from where the staff rides have since been conducted. Currently, the military history staff ride is part of the subject Military History. However, the staff ride also comprises the use of the theory of operational art, which refers to current SANDF doctrine on warfighting. The staff ride can therefore be seen as a combined interdisciplinary, practical application of two subjects on the JSCSP, namely Military History and Operational Art.

Until 2018, the JSCSP was an accredited qualification with the Safety and Security Sector Training Authority (SASSETA), and the subjects in the curriculum of the JSCSP were converted into unit standards to bring it in line with SASSETA requirements. The unit standard used for military history was US 119923, with the expected outcome being to equip officers to function at the operational level of war by developing their skills in evaluating the impact of the evolution of war on current military issues. A further outcome was to broaden their understanding of military single service, joint and multinational (combined) operations, the management of defence, and the wider aspects of conflict.<sup>317</sup>

By 2018, four different staff rides utilising the history of warfare in Southern Africa had been developed. To optimise the existing education and training opportunities, the same staff rides are not repeated year after year. In the process, the following staff rides were developed. In KwaZulu-Natal, the rise of the Zulu kingdom under King Shaka and his contribution to the evolution of war, 1818–1828, were studied. This was followed by a study of the Anglo-Zulu War of 1879, and the Anglo-Transvaal or First Anglo-Boer War of 1880–1881 in the Natal theatre of operations. Also studied was the Anglo-Boer War or South African War of 1899–1902. Related to this conflict, the operations of the invasion of Natal in 1899 by the Boer commandos and the British efforts to relieve the Siege of Ladysmith were studied.

A staff ride focusing on the Northern Cape, the eastern part of the Free State and Lesotho was also organised. In this staff ride, the rise of the Basuto under King Moshoeshoe and its contribution to the evolution of war was studied. A study of the Free State–Basuto Wars of 1858–1868 was followed by a study of the conduct of military operations in the Northern Cape during the South African War ending with the British occupation of Bloemfontein on 13 March 1900.

Mpumalanga and Limpopo, two South African provinces, were also the focus of a staff ride. For this staff ride, the study emphasis was the role played by Paramount Chief Sekhukune II in the war of 1867–1877 against the South African Republic, also known as the Transvaal. This staff ride also engaged with military operations during the Anglo-Transvaal War of 1880–1881 in the Transvaal theatre of operations. The last campaign that was studied by the students on the JSCSP in this region was the Boer Commando retrograde operations from Pretoria to Komatipoort between July and August 1900 during the South African War.

The Eastern Cape and the region south of the Gariep or Orange River were also visited by a staff ride. The first campaigns studied on this staff ride considered the conduct of military operations during the Eighth War of Land Dispossession or Border War of 1850–1853 between the British colonial forces and the Xhosa forces.<sup>318</sup> The operations and battles of the South African War during 1899–1900 in the area south of the Gariep River were also studied during this staff ride.

For logistical and historical reasons, the above-mentioned staff rides centred on selected regions. As can be gleaned from the above, a range of different conflicts between about 1820 and 1902 were included. This was done to expose the JSCSP to different military battle terrains, which called for different operations and different military history and historiographies and to ensure that the historical experiences and contributions of a wide spectrum of the South African population were represented. These staff rides also considered the manner in which modern armed forces use theatre space (opposing forces, terrain, infrastructure, weather, climate and population) in four different ways to develop the problem-solving abilities of their officers, namely

- tactical exercises, traditionally called manoeuvres, with troops;
- tactical exercises without troops, which utilise hypothetical war scenarios without forces, on maps and terrain;
- battlefield tours under the specialist guidance of a military historian to the terrain on which actual campaigns and battles are conducted; and
- historical staff rides, which is the focus of this article.

In the military staff rides outlined above, the students conducted a thorough pre-study of selected campaigns and operations to be visited that year by means of historical publications. They undertook extensive visits to the different operational and battle sites with the aim of integrating lessons learnt from the staff ride with current military problems; and. They further evaluated the actions of historic personalities in order to learn lessons for future warfare.<sup>319</sup> This student-centred involvement was paramount and critical to ensure deep learning.

## **Literature review and theoretical framing**

Deep learning, as opposed to surface learning, developed as an educational theory in the twentieth century. The intention of surface or rote learning is mainly to cope with course requirements in an uncritical manner. It is focused on reproducing knowledge on the premise that the educator conveys universal truths in class, which must be

regurgitated as accurately as possible in tests and examinations. Therefore, the emphasis in this type of learning is routinely on memorising facts or carrying out set procedures. Such learning also adds little value or meaning to the course of study, especially for application in the workplace.<sup>320</sup>

Deep learning, on the other hand, aims to understand ideas. The student seeks to relate ideas to previous knowledge and experience, and looks for patterns and underlying principles when studying. In the context of deep learning, students further check evidence and relate it to conclusions, examining the logic of academic treaties and arguments cautiously and critically in order to become aware of their own understanding as it develops. With deep learning, students are expected to be actively involved and interested in course content, and they work towards applying their knowledge of such content in the workplace.<sup>321</sup>

In 1987, Entwistle, a leading deep-learning theorist, developed a heuristic model to demonstrate factors that would determine whether a student would adopt a deep or surface approach to learning. This model was adapted over time, and by 2009, a more elaborate model emerged. According to the 2009 model, the main factors determining whether deep learning takes place are student characteristics and the features of the teaching-learning environment.<sup>322</sup> Student characteristics, such as intelligence, motivation and motives, are important, but other factors, such as subject-specific knowledge and conceptions of knowledge and learning, are equally important in determining whether a deep learning approach is adopted.

The most decisive factor influencing the learning process is, however, how educational institutions approach the learning process. This starts with the beliefs about teaching and learning and the role of the the facilitator, which are then followed by the specific approach adopted in terms of facilitating a specific subject discipline. The end state of the learning process must also be clear. This, in turn, will determine the selection and organisation of course content.<sup>323</sup> In theory, the aforementioned should be followed by the specific approach adopted for the facilitation of learning. Facilitators should provide an overview of the subject discipline, monitor its delivery and, at the same time, arouse the interest of the students, especially when linking the application of knowledge to the workplace. The facilitators should also facilitate learning in a way that encourages thinking and understanding and exemplify ways of thinking by emphasising the critical features of a specific subject area. In the context of deep learning, it is also important to focus on the specific ways of thinking and practising in a specific subject, such as Military History.<sup>324</sup>

For deep learning, the choice of facilitation methods is vital for the achievement of the above. In this regard, for example, lecturers cannot promote rote learning, as students are mere passive receivers of information. However, lecturing can be fruitfully used if combined with, for example, small group discussions, debates or simulations. Maximum participation of the student in the learning process is vital, and in this context, group discussions, problem-based learning and, most importantly, doing research, promote deep learning.<sup>325</sup> To achieve the above, facilitators should support



students mentally when they encounter complicated concepts in a subject discipline by moving from simple to more complex concepts by means of a spiral curriculum called scaffolded learning, which is also utilised in the assessment process to determine progress under formative assessment and summative assessment. The process of deep learning, however, is only completed when the facilitator has guided students to question the one-dimensional truthfulness of factual information.<sup>326</sup>

In the case of the staff rides, students not only have to analyse how historical commanders utilised contemporary military doctrine; they also have to determine the validity of such doctrine, based on historical case studies. From the point of view of historical science, the approach to a staff ride is based on Garraghan's argument that, although history never repeats itself in exactly the same format, a contemporary situation may resemble a situation in the past closely enough to be able to use past experience as a guide to the future handling of a similar situation.<sup>327</sup> Staff rides also emphasise historical-comparative research with the focus on historical contingencies, a unique combination of particular factors or circumstances that may not be repeated when searching for a critical juncture to explain how several viable options may exist at a specific point in time. The researcher or student must also determine why a historical personality chose a specific course of action.<sup>328</sup>

In line with the educational practice of the US army in the twentieth century, the military history staff ride is regarded as an ideal education and training undertaking in exercising students to solve wartime problems by placing them in the positions of historic personalities and to analyse the different options available to these men as well as their final courses of action. It is also necessary to determine which influence this had on the ability of the historical commanders to reach the end state envisioned for wars, campaigns, major operations and battles.<sup>329</sup> It is vital that the emphasis should not only be on training, but also on education, as the former is defined as a response to a predictable situation, while the latter focuses on critical thinking in the face of the unknown; thus, emphasising the unpredictability of war.<sup>330</sup>

According to Robertson, the ability to apply current military doctrine to a historic setting and enhance students' grasp of this through an evaluation of the practice of operational art by historic personalities, should be acquired by means of the staff ride.<sup>331</sup> At the SANWC, this means that application of the theory of operational art is based on current SANDF doctrine on warfighting with specific reference to planning and conducting military campaigns and major operations. This also means the exposure of students to the dynamics of war as they manifested in historical campaigns, major operations and battles, and leadership styles. Lastly, it needs to ensure that students are exposed to the impact of technology and terrain on the planning of campaigns, operations and battles.

## **Research design and methodology**

This article was written with the research tradition of interpretivism in mind. Interpretivism holds that researchers should study and describe people's meaningful

social actions. These actions, invariably subjective in nature, should be understood and not predicted.<sup>332</sup> Within the epistemological position of interpretivism, the argument is that common sense guides people's daily lives. This is in stark contrast to the positivist tradition, which regards scientific knowledge as the only valid form of knowledge. Thus, interpretivists believe that, to understand human behaviour, one needs to comprehend what people regard as common sense. This is vital. Interpretivism also challenges the idea of objective knowledge and truth. Interpretivist researchers see facts as unsolidified and embedded in the meaning system. Facts are not objective and neutral; they depend on the context and people's interpretation. Therefore, interpretivists are not interested in generalising the results of their research. Consequently, the research methodologies used are sensitive to a specific context and cannot be generalised beyond that being studied.<sup>333</sup> The current findings thus relate mainly to the use of academic studies in a specific staff programme (for example, the JSCSP) and are not necessarily applicable in other higher education study environments.

Ontologically speaking, it was realised that in this study, the reality was based on the existing approaches to the education of senior officers that should be changed if the need arose. This was in line with the interpretivist approach because, depending on circumstances, culture and experiences, people may not experience reality in a similar way.<sup>334</sup>

Methodologically speaking, this research adopted a qualitative case study design, which searched for meaning and understanding and in which the researcher was the primary instrument of data collection and analysis. In a qualitative case study, an inductive investigative strategy is employed and the end product is richly descriptive.<sup>335</sup> The research approach in this article was consequently based on qualitative methods with the related assumption that human beings construct associations as they engage with the phenomena they are interpreting. As a result, qualitative researchers, such as the authors of this article, tend to use open-ended questions so that the participants can share their views and experiences in an authentic manner. Qualitative researchers therefore strive to comprehend the background of the participants by visiting this context and gathering information personally. They also interpret what they discover, an understanding shaped by the researcher's own involvements and background. The basic generation of meaning is always social, residing in and arising from interaction with a human community – in the case of this study, those who went on the historical staff rides as part of the JSCSP. Furthermore, the process of qualitative research is largely inductive and the inquirer generates meaning from the data collected in the field.<sup>336</sup>

Within the above research design, the research methodology of this study involved examining a specific, bounded case study, namely to understand the extent to which deep learning was utilised in the staff ride as part of war studies subjects in the JSCSP, such as Military History and Operational Art.<sup>337</sup> The purpose was thus to understand, by means of a qualitative case study, the students' approach to the staff ride since its inception at the SANWC in 2002, with specific reference to the programme of 2018. Consequently, the facilitation and assessment approach to the staff ride was analysed. To determine the ability to apply critical thinking in deep learning terms during the staff

ride, a sample of 20 academic essays of 120 students on the programme of 2018 were analysed. This was done according to an assessment rubric that determined the extent to which each student used the theory of operational art to conduct a value judgement of a historical commander.

From an ethical point of view, during 2017, permission was gained from the Director: Counterintelligence of the SANDF for a study on the programme during 2018. The ethics committee of the Faculty of Education of the University of Pretoria subsequently approved a PhD study with the core focus on the programme of 2018 (clearance number HU 18/10/04). Consequently, the practical application of the above research aspects have been considered.

### **Mapping the staff ride on the JSCSP**

Robertson emphasises the importance of a preliminary study to be conducted by students on the historical background of the area to be visited by the staff ride.<sup>338</sup> If this is not done properly, the staff ride degenerates into a mere battlefield visit, where the facilitator does all the work and student involvement is virtually non-existent. Before the staff ride, the first author therefore presented lectures on the background to the different wars to the students. This served to orientate the students and help them in their preliminary literature study. Students received reading material on their respective topics related to the staff ride three weeks prior to the learning event and they were also tasked with conducting their own research on topics allocated to them for the staff ride.

During the staff ride itself, the corresponding author lectured the students on the sequence of events during each historical campaign or battle and they had the opportunity to ask critical questions. Two student syndicates were allocated per campaign, and they were given the duty of evaluating the application of operational art by the two opposing commanders, respectively. For example, one syndicate would evaluate a British commander while the other syndicate would evaluate the opposing Boer commander during, for example, the Transvaal operations during the Anglo-Transvaal War of 1800–1881. During the staff ride, every day started with a lecture providing an overview of the campaign to be studied. This was done in adherence to the first step in Entwistle's model of deep learning by providing an overview and monitoring educational delivery.<sup>339</sup>

The next step was the visit to sites, such as the location of headquarters and logistic bases, as well as to the different battlefields. The author or guest speakers briefly illustrated the sequence of events to the JSCSP students. Thereafter students had the opportunity to walk the battlefield and, where possible, visit museums. In terms of deep learning, the process was designed to arouse student interest in real-life historical contexts and to explain the components of the campaign under study.<sup>340</sup> Although lectures – supported by PowerPoint presentations – were conducted every morning before the students visited the actual terrain, the facilitation was aimed at encouraging thinking and understanding by means of the debriefing at the end of each day. One could ask the question, why not let the students do the presentations? The reason for the facilitation was twofold. This was the first time that most of the JSCSP students

had seen the actual terrain in the theatre of operations or set foot on the battlefields. It would thus be unfair to expect them to arrive and immediately conduct a presentation. The second reason was that their focus had to be on the application of the theory of operational art and not on the reconstruction of the chronology of events.

At the end of each day after arriving at their accommodation, the two student syndicates had to analyse the two opposing commanders for that specific campaign. Each syndicate then conducted a concise presentation on the sequence of events during the campaign to the student body as a whole. They also had to indicate how these events influenced the commanders' original campaign conceptualisations. The focus throughout was on the application of operational art. After working hours, the students had the opportunity to continue with their own research and the reading of the literature.

The last three staff ride steps, namely briefing, visits and presentations represent what Robertson classifies as a field study.<sup>341</sup> After their return to the SANWC in Pretoria, the students carried out two steps. First, student presentations for formative assessment in each syndicate took place. The syndicates presented their evaluation of the respective historic personalities as campaign commanders to all the members of the directing staff and other students. The corresponding author facilitated the process and provided feedback on possible improvements. The second step was the submission of the research papers by individual students in the form of academic essays for summative assessment. As explained earlier, these essays were the units of analysis for this article.

Both the syndicate presentations and academic essays were assessed with the same assessment rubric. This was done to ensure continuity as related to deep learning. The rubric was also designed to provide students with a framework to analyse the application of operational art during a specific campaign. The point of departure of the rubric was the strategic situation and the aims of the belligerents, which led to the analysis of the formulation of the military strategic problem facing the commander. The focus was on guiding the student on 'how' to think and not 'what' to think in terms of their approach to the analysis of the campaign. However, it was important that the student had to determine whether the plans and actions of the campaign commander contributed to the solution of the problem on the strategic level. There were no right or wrong answers and it was the student's choice which part of the theory of operational art would be used to evaluate the actions of the historic military commander under discussion. The focus was on group discussions, debates and presentations as the first step to exchanging ideas. In the summative academic essay, students could further develop their own ideas on how to evaluate the campaign commander as a practitioner of operational art. This relates to Entwistle's guidelines of exemplifying ways of thinking, emphasising critical features and encouraging discussion.<sup>342</sup> The process was finalised when the students received their assignments back and the directing staff provided feedback. The marks were then recorded. With that, the staff ride was completed.

### **Analysing the academic essays for evidence of deep learning during the staff ride**

Until 2014 when he retired, the corresponding author assessed all the academic essays related to the staff ride of the JSCSP. In 2018, working as a consultant facilitator,

he assessed an essay per syndicate, eight in total. In a work session with the directing staff, he discussed each product with them in order to guide them in the assessment process. As a result, this aspect of the assessment process promoted deep learning, as the process was a means to ensure consistency in grading the essay assignments. This was part of a system used at the SANWC called 'proof marking' where the assessors discussed how marks would be allocated to one product so that all the assessors applied the rubrics consistently during marking within a common framework. Proof marking – and the variation applied since 2018 – cannot be measured in absolute terms of consistency; rather, it promotes a relative common approach to assessment.

For the academic essay, i.e. the summative assessment of the staff ride, the students were assessed individually, and the assessment rubric was used to measure their level of ability to use the theory of operational art to evaluate the contribution of a historical commander to the evolution of war. The practical application of official doctrine in this manner is also related to training, but the development of critical thinking was situated within the ambit of education. The underpinning idea was that doctrine should never become dogma. Therefore, the final step that the student had to achieve was to use the case study to validate the doctrine.

With his experience in having assessed the group presentations and individual academic essays since 2002, the corresponding author concluded that, initially, only a small group of students succeeded in using the academic knowledge they had gained during the facilitation of the academic subjects, such as Military History, to understand military planning in the historical scenario in a deep learning manner. At first, the majority of students tended to provide merely a chronology of events without measuring the planning and management of the campaign by the historical commander according to the theory of operational art. This gradually improved due to the approach in facilitating the staff ride and guiding students, so that by 2018, the majority did apply the theory.<sup>343</sup> This constituted a major breakthrough. However, before 2018 and also thereafter, only one student did more than just apply the theory to the case study. The student also critically analysed the validity of the theory of operational art based on the assigned case study.<sup>344</sup>

A problem that has persisted since 2002, and which appeared again during 2018, was the inability of certain students to conduct an argument in their academic essays through to its logical conclusion.<sup>345</sup> For example, one of the concepts of the theory of operational art is the scope of the theatre of operations. This relates to opposing forces relating to each other in terms of time, space, resources and purpose. The terms 'deep', 'close' and 'rear' are used to describe how the operations of the opposing forces relate to each other. The 'close area' is where the combatants meet in battle. The enemy's 'rear area' (logistic installations, headquarters and communication centres) refers to the own forces' 'deep area' (where own forces conduct operations behind enemy lines). The idea is to analyse how the opposing commanders utilised this in planning and conducting the campaign strategy.<sup>346</sup> Some students identified the close, deep and rear areas with illustrated maps, but did not explain how the opposing commanders utilised these concepts in the operation about which they were writing.<sup>347</sup> In reality, the lack of

depth of analysis should not be the problem as the staff ride is a good example of the integration of cognitive and social constructivist views as these relate to deep learning. The premise of constructivism is that knowledge is gained and expanded through active construction and reconstruction of theory and practice as per deep learning.<sup>348</sup>

With reference to the above, the staff ride is designed to contribute to the ability of students to apply insight they have gained into the nature of command in war during campaign planning. This is done according to an inductive reasoning process of using historical evidence and arriving at deductions and conclusions in order to design and manage a campaign plan. It is also an effort to demonstrate practically the complex nature of war. Furthermore, the staff ride provides the opportunity to apply critical thinking in a deep learning sense to a historical case study. Some students remarked that the process of evaluating the planning and conduct of campaigns by historical commanders assisted them during the campaign planning process, that is, their final assessment during the JSCSP in which they were provided with a fictitious scenario and had to design a campaign plan. It seems that, for these students, the analysis of how a historic campaign commander utilised the theory of operational art provided a useful framework of critical thinking when they had to design their own plans in a fictitious scenario. However, this was not necessarily true for all students.

The staff ride, as explained previously, was an ideal opportunity to augment the more theoretical learning process by allowing students to participate in an exercise simulating a real-life situation by studying an actual historical campaign. It was also a scenario that provided them with a problem to solve. The exercise therefore promoted deep learning in that the corresponding author (as facilitator), kept in mind the unique concepts on which the academic subject is built, and guided the students in understanding concepts leading to a better comprehension of the nature of war.<sup>349</sup>

The next question in terms of deep learning that needed to be considered was whether the assessment focused only on the range of knowledge, skills and understanding of subject content or whether it also considered that variations and creativity could lead to different solutions to problems as studied during the staff ride. The use of case studies focused on the analysis of the options available to commanders in history and an evaluation of the choices made. That in itself takes into consideration that there is more than one solution to a problem. Understanding why a military commander preferred a specific option for his plan develops critical thinking by developing the mind of a senior officer in finding solutions to military problems.<sup>350</sup>

## **Conclusion**

Jessup and Coakley claim that the study of military history contributes to the development of officers to sharpen judgement, improve perception and broaden perspectives.<sup>351</sup> In assessing how the staff ride differed from conducting the learning activity in a classroom situation, we found that lectures were still used, but were augmented with group discussions and debates, and therefore promoted deep learning.

The staff ride described above contributed to the critical analysis of the conduct of historical commanders, using the theory on operational art as its measurement. In that way, critical thinking in a deep learning context was promoted, and laid the foundation for the student to find unique solutions to real-life problems in a war situation. The process of somatic learning enhanced the contribution of the staff ride to the adult education process on the JSCSP, as seeing the actual terrain and other artefacts of war provided a good opportunity to visualise the reality of past wars.

The staff ride as learning process represents a major leap in learning in contrast to the traditional method of learning by sitting in classrooms and listening for hours to endless lectures. Nazareth claims that insight into the nature of war can only come about by developing the imaginative powers of students.<sup>352</sup> To that end, the staff ride contributed substantially. The extra funding needed to conduct this learning activity is therefore worth its while. The staff ride also has the advantage of demonstrating the validity of current SANDF doctrine in the theory of operational art as explained in the examples. One should, however, remember that doctrine is not dogma and that the validity of doctrine in a specific case study must be understood within the context of the events as they unfolded. The main advantage of the staff rides in testing the validity of doctrine is that it demonstrates that staff rides can work, not only in specific circumstances, but also when a commander must use his or her judgement to determine when to deviate from it.

Using the historical-comparative method enabled the student to determine which viable options were available to the commander, why he or she had chosen a specific course of action and whether this strengthened the validity of doctrine. One should keep in mind that doctrine is based on historical-comparative research. It is also a first step in the development of option formulation, a key aspect of the theory of the campaign-planning process later in the programme where commanders have to develop a campaign concept for their planning staff, outlining different options for the conduct of the campaign.<sup>353</sup>

It is clear that, by 2018, the majority of students succeeded in analysing the actions of historical military commanders according to the theory of operational art. However, not all students were necessarily equal to the task of how it related to deep learning with reference to critical thinking and the ability to solve work-based problems. The result was that, in certain instances, surface learning tended to dominate, simply because that was the educational world into which the students had been socialised and which had shaped their views on education. At the same time, the facilitation process did not fully serve to wean them completely off their rote-learning habits associated with surface learning. Consequently, the development of critical thinking in a deep learning manner on the staff ride needs more emphasis. The essence of deep learning is to question continuously the truthfulness of existing knowledge. Theories are based on existing knowledge and their validity should constantly be questioned, otherwise the staff ride only strengthens the belief in current military doctrine and does not lead to the final step in critical analysis, namely the questioning of current knowledge by means of a specific theory.

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## ENDNOTES

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- <sup>306</sup> Col (Dr) Rtd CJ Jacobs, the corresponding author, served as the senior researcher and resident military historian at the South African National War College from 2005 to 2014, after which he retired from the South African National Defence Force (SANDF). Prof JM Wassermann is the head of the Department of Humanities Education in the Faculty of Education of the University of Pretoria. His research work focuses on both history and history education. This article is based on a PhD thesis, “Deep learning during the South African National Defence Force’s Joint Senior Command and Staff Programme”, which Dr Jacobs completed under the supervision of Prof Wassermann.
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- <sup>309</sup> Curriculum Joint Senior Command and Staff Programme (JSCSP). Pretoria: SANDF, 2001.
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- <sup>313</sup> WA Stofft. “The staff ride and civil war battlefields”. 2004. <[File://A/Reader's Companion-The/Staff/Ride/and/Civil](#)>, 1, Accessed on 15.3.2021.
- <sup>314</sup> Combat Studies Institute. “The staff ride: A guide to planning and conducting unit-level staff rides”. 2013. <<https://www.armyupress.army.mil/Portals/7/educational-services/staff-rides/the-staff-ride-overview-2-august-2013.pdf>> Accessed on 15.3.2021.
- <sup>315</sup> Stofft op. cit.
- <sup>316</sup> T Brinkel, D Murphy & J Noll. “The staff ride as reflective practicum: Impressions and experiences of the Faculty of Military Sciences and Maynooth University”. In W Klinkert et al. (eds), *NL ARMS Netherlands annual review of military studies*. The Hague: TMC Asser Press, 2019, 247–260.
- <sup>317</sup> DJ van Oudtshoorn. *JSCSP, Joint Warfare Assessment Plan*. Pretoria: SANDF, 2018.
- <sup>318</sup> Wars in South Africa go by different names, depending on, among other things, perspective and the changing historiographical positions adopted. The names used in this article refer to the names currently in use.
- <sup>319</sup> Robertson op. cit., p. 5.
- <sup>320</sup> Entwistle op. cit., p. 36.
- <sup>321</sup> *Ibid.*
- <sup>322</sup> *ibid.*, p. 115.
- <sup>323</sup> *Ibid.*
- <sup>324</sup> *Ibid.*
- <sup>325</sup> *Ibid.*
- <sup>326</sup> S Ohlsson. *Deep learning: How the mind overrides experience*. Cambridge: Cambridge University Press, 2011, 1.
- <sup>327</sup> GJ Garraghan. *A guide to historical method*. New York, NY: Fordham University Press, 1957, 14.
- <sup>328</sup> WL Neuman. *Social research methods: Qualitative and quantitative approaches*. Essex: Allyn & Bacon, 2000, 498.
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- <sup>330</sup> Haycock op. cit., pp. 5–14.



- <sup>331</sup> Robertson *op. cit.*, pp. 5–6.
- <sup>332</sup> F du Plooy-Cilliers, C Davis & R Bezuidenhout (eds.). *Research matters*. Cape Town: Juta, 2014, 28.
- <sup>333</sup> *Ibid.*, p. 29.
- <sup>334</sup> *Ibid.*
- <sup>335</sup> SB Merriam & EJ Tisdell. *Qualitative research: A guide to design and implementation*. New York, NY: Jossey-Bass, 2015, 37.
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- <sup>338</sup> Robertson *op. cit.*, pp. 11–12.
- <sup>339</sup> Entwistle *op. cit.*, p. 115.
- <sup>340</sup> *Ibid.*
- <sup>341</sup> Robertson *op. cit.*, pp. 11–12.
- <sup>342</sup> Entwistle *op. cit.*, p. 115.
- <sup>343</sup> Student identity protected, academic essay 1, 2018.
- <sup>344</sup> Student identity protected, academic essay 4, 2018.
- <sup>345</sup> Student identity protected, academic essay 1, 2018.
- <sup>346</sup> L Olivier. *JWP 101: Operational Art*. Pretoria, 2006, Chapter 5, p. 3.
- <sup>347</sup> Student identity protected, academic essays 3 & 4, 2018.
- <sup>348</sup> R Killen. *Teaching strategies for outcomes-based education*. Lansdowne: Juta, 2000, xvii.
- <sup>349</sup> Entwistle 115.
- <sup>350</sup> DJ van Oudtshoorn. *JSCSP, Joint Warfare Assessment Plan*. Pretoria: SANDF, 2018, 6.
- <sup>351</sup> JE Jessup & RW Coakley. *A guide to the study and use of military history*. Washington, DC: Center of Military History, 2004, 31.
- <sup>352</sup> J Nazareth. *Dynamic thinking for effective military command*. New Delhi: Tata McGraw-Hill, 1976, 83.
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# **A reassessment of the tank battle between 4th Armoured Brigade and Panzerregiment 5 during Operation Crusader in North Africa on 19 November 1941**

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## **Abstract**

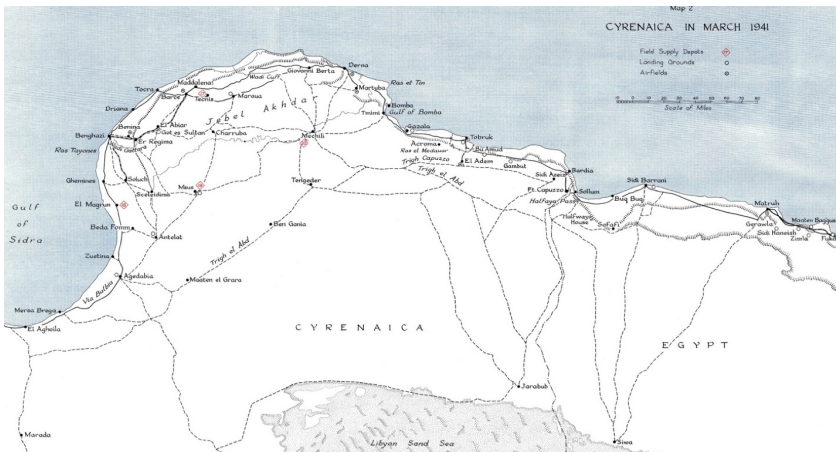
Operation Crusader took place in the wide context of an integrated, multi-service theatre-level offensive operation in the Western Desert and the Mediterranean from October 1941 through to January 1942. Seen through this lens, Operation Crusader was simply the Army and the Royal Air Force component of a multi-service theatre-level offensive conducted by Allied forces. The operation ended with an almost complete defeat of the Axis troops, the lifting of the seven-month siege of Tobruk and the retreat of the surviving Axis forces to a position on the border of the colonial provinces of Tripolitania and Cyrenaica, in central Libya.

Operation Crusader was the first army-level offensive undertaken by the Allied forces in World War II, lasting from 17 November 1941 to 15 January 1942.<sup>355</sup> The aim of Operation Crusader was to trigger a large-scale tank battle with Axis tank forces outside the besieged desert port of Tobruk in Libya, to destroy the Axis armoured forces, and to pave the way to lift the siege of Tobruk, which had been conducted by the Axis forces since April 1941. Operation Crusader was the first step in a set of three operations expected to lead to the clearing of the North African coast from Axis forces and subsequently allow an invasion of Sicily in 1942. The battle was the largest tank offensive conducted by Allied forces in either World War I or World War II until the Second Battle of El Alamein in late October 1942. It was characterised by a number of tank battles between the Axis forces under the command of General der Panzertruppen Erwin Rommel and Allied infantry and armoured forces under Lieutenant-General Alan Cunningham and then Lieutenant-General Neil Ritchie, who fought under the overall direction of General Claude Auchinleck, the Commander-in-Chief Middle East.<sup>356 357</sup>

The conduct of the battle showed weaknesses in the doctrine of British armoured forces, but it ultimately ended in a victory for the Allied forces. This article analyses the first clash of British and German tanks during Operation Crusader and provides a new perspective on the performance of an experienced British cruiser tank regiment, which calls into question the overall assessment of how British armour performed during the battle. The re-assessment provided in this article is in particular related to the performance of both sides in the battle and the performance of both sides against their tactical objectives on the day, as well as the comparative losses in tanks.

The article covers the first engagement of British 4<sup>th</sup> Armoured Brigade with German armour during the opening stage of Operation Crusader between 17 and 20 November in which it managed to thwart a German counterattack. Utilising primary documents, such as war diaries, messages and reports, this article provides a new perspective on the established view of the battle that also affects our view of the performance of British armoured units at regimental level during this period of the Desert War. The article presents a reassessment of comparative tank combat performance in the early phase of Operation Crusader by analysing the first engagement between Allied and German armour with a view to correcting misconceptions that have until now clouded the historical record, such as the one expressed in General Auchinleck's despatch on the period, "But our tanks and anti-tank guns were no match for the German, although they were fought with great gallantry."<sup>358</sup> It also considers hitherto unused primary evidence to shed new light on the losses in tanks suffered by both sides during the battle, and considers how the opposing forces performed in the context of their operational objectives.

**Keywords:** World War II, Desert War, North Africa, Libya, 8<sup>th</sup> Army, tank warfare, Tobruk, Afrika-Korps, Rommel, 7<sup>th</sup> Armoured Division, Desert Rats, Lend-Lease Act, 1941.

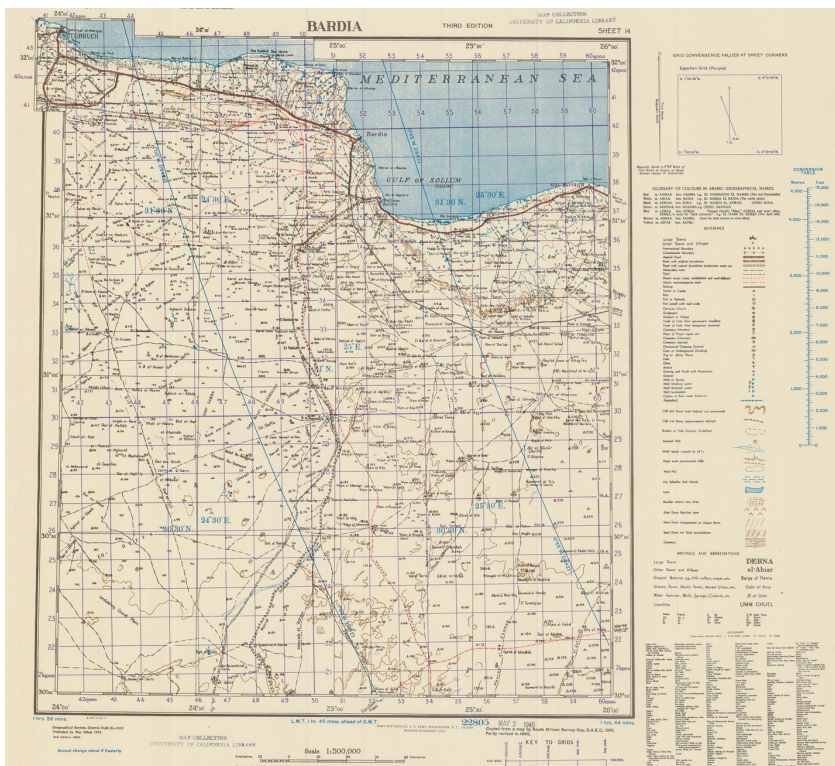


Map 1: Western Egypt, Eastern and Central Libya, March 1941.<sup>359</sup>

## Introduction

The War in the Desert, 1940–1943, remains an interesting subject of study for military history. The earlier controversies and debates on comparative military performance have been replaced by more nuanced scholarships concerning the occupation of North Africa, Nazi and Italian crimes and British imperialism. These old debates about the comparative performance of Allied and Axis armed forces in

the ground battle nevertheless still simmer among scholars and the general public. This is particularly the case for the period 1941–1942, prior to General Bernard Law Montgomery’s assuming command of the British 8<sup>th</sup> Army and the replacement of Field Marshal Claude Auchinleck by Field Marshal Harold Alexander as commander of the Middle East theatre of war. This phase, lasting from December 1940 to July 1941, has been epitomised by Corelli Barnett as “[t]he cumulative and accelerating effects of twenty years of military decadence” suddenly being presented to the British generals. It was characterised by sweeping advances, covering hundreds of kilometres across the desert at rapid speeds, large-scale encirclement battles, and the siege of Tobruk, the longest siege endured by forces of the British Empire.<sup>360,361</sup>

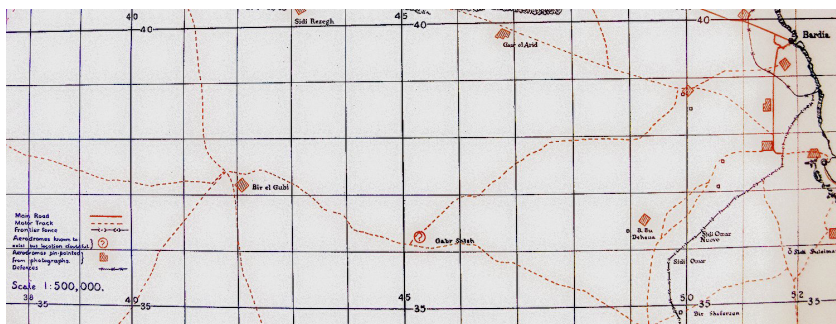


Map 2: The Operation Crusader battlefield.<sup>362</sup>

To break the siege of Tobruk through an offensive operation code-named Operation Crusader, a new army was created in September 1941, the 8<sup>th</sup> Army under the command of Lt General Sir Alan Cunningham, who had been in charge of operations against the Italian forces in East Africa. The 8<sup>th</sup> Army consisted of the former Western Desert Force, which was now named 13 Corps, the newly created 30 Armoured Corps and the Tobruk

Fortress garrison, named TobFort. The 8<sup>th</sup> Army was built around the largest tank force fielded by the British Empire until the time and it would ultimately see over 900 British and United States (US) tanks committed to battle in six brigades, the 2<sup>nd</sup>, 4<sup>th</sup>, 7<sup>th</sup> and 22<sup>nd</sup> Armoured Brigades and the 1<sup>st</sup> and 32<sup>nd</sup> Army Tank Brigades.<sup>363</sup>

The immediate objective of Operation Crusader was to destroy the Axis forces in North Africa, in particular the German armour, thereby relieving the siege of Tobruk, occupying the eastern Libyan province of Marmarica and the central Libyan province of Cyrenaica, and setting the stage for the elimination of the Axis forces on the North African mainland. The invasion of Tripolitania was to follow victory in Operation Crusader as a separate operation with an indicative code-name of Operation Acrobat. In 1942, this was to be followed by an invasion of Sicily, tentatively code-named Operation Gymnast, and the return of Allied forces to the mainland of Europe. Planning for both of the successive operations proceeded in the autumn 1941 in parallel with military operations in Libya.<sup>364,365</sup>



Map 3: British forces, theatre grid overlay, November 1941.<sup>366</sup>

## Operational plans

The operational plan for Crusader was for the 8<sup>th</sup> Army's two Corps, 13 Corps on the right, and 30 Corps on the left, to bring to battle and destroy the armoured element of the Axis forces besieging Tobruk in a major tank battle south-east of Tobruk. One of the major concerns of the Allied commanders was the ratio of Allied to Axis, in particular German, tanks. For Operation Crusader, considering the overall tank strength of the 8<sup>th</sup> Army, including TobFort and infantry tanks, this ratio amounted to 2.1 to 1. Nevertheless, for the cruiser tanks in 30 Corps, which were considered crucial to victory, this superiority only amounted to 1.5:1, as shown in Table 2 below.

Specifically, 30 Corps with the main armoured force of over 450 cruiser tanks in three brigades was to push on the left wing of the 8<sup>th</sup> Army into the rear of the Axis position on the Libyan–Egyptian border. This was expected to trigger the tank battle in which the higher number of British tanks would enable the 8<sup>th</sup> Army to prevail and destroy the Axis tank forces. The advance by 30 Corps on the left flank of the 8<sup>th</sup> Army

was covered by a shorter, northbound right hook of 13 Corps on the left flank. This was expected to envelop the rear of the Axis border position of Bardia–Sollum–Halfaya–Sidi Omar, approximately grid references 519398–525375–515370–498358 on Map 3 above. The operational objective of 13 Corps was the reduction of these positions along the Libyan–Egyptian border, thereby severing the supply routes from Bardia on the border to the forces besieging Tobruk to the west and protecting the rear of the 30 Corps advance.<sup>367</sup>

The 4<sup>th</sup> Armoured Brigade was to be the hinge between the two corps in order to be able to support either, as needed. While assigned to 30 Corps logistically, the 4<sup>th</sup> Armoured Brigade remained under operational control of the 8<sup>th</sup> Army in the initial stage of the battle. Similarly, TobFort remained under command of the 8<sup>th</sup> Army in the initial phase of the operation, with command to be transferred to 30 Corps once the situation warranted the issuing of the breakout order. In the event, the transfer happened on 20 November with the breakout order given for the following day.

Type	30 Armoured Corps	13 Corps	Tobruk Fortress	Reserves
Armour	7 <sup>th</sup> Armoured Division (two armoured brigades and one support group)	1 <sup>st</sup> Army Tank Brigade (minus one squadron)	32 <sup>nd</sup> Army Tank Brigade (two regiments)	None in formations but reserve tanks held to replace losses.
	4 <sup>th</sup> Armoured Brigade			
Infantry	1 <sup>st</sup> South African Infantry Division (minus one brigade)	2 <sup>nd</sup> New Zealand Division	70 <sup>th</sup> Infantry Division	2 <sup>nd</sup> South African Infantry Division (plus one brigade)
	22 <sup>nd</sup> Guards Brigade (two battalions)	4 <sup>th</sup> Indian Infantry Division (minus two brigades)	Polish Carpathian Brigade	5 <sup>th</sup> and 11 <sup>th</sup> Indian Infantry Brigade

Table 1: Composition of the 8<sup>th</sup> Army at the start of Operation Crusader, major formations only, 17 November 1941.<sup>368</sup>

Type	8 <sup>th</sup> Army		<i>Panzergruppe</i> <sup>369</sup>		<i>XX C.A.M.</i> <sup>370</sup>		Total	Ratio 8 <sup>th</sup> Army to Axis
Medium <sup>1</sup>	315 <sup>2</sup>	Cruiser British	144	Panzer III	136	M13/40	799	1.5:1 <sup>3</sup>
	166	M3 Stuart	38	Panzer IV				
Infantry <sup>4</sup>	152 <sup>3</sup>	Matilda II	5	Matilda II	n/a	209	41:1	
	52	Valentine						
Total	685 <sup>6</sup>		187		136		1 008	2.1:1
			323					

Table 2: Tank strength, medium and infantry tanks, 8<sup>th</sup> Army, *Panzergruppe Afrika* and *XX Corpo Armata di Manovra*, 17 November 1941.<sup>371</sup>

<sup>1</sup> TNA WO169/952 Tank statistics Eighth Army 11 November 1941; WO201/520 7<sup>th</sup> Armoured Division Account on Operations in Libya, 18 November to 27 December 1941, p. 8

<sup>2</sup> Includes 28 cruiser tanks in TobFort

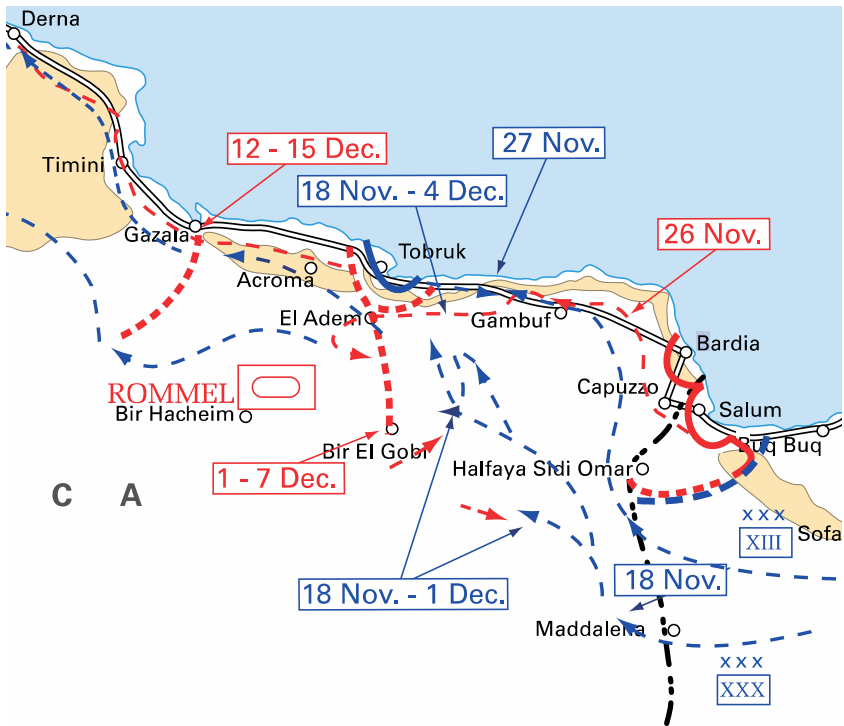


<sup>3</sup> The superiority of 30 Corps was only 1.4:1.

<sup>4</sup> TNA WO169/1418 8 RTR November 1941; TNA WO169/1413 war diary 4 RTR November 1941, Appendix I; TNA WO169/1421 war diary 42 RTR entry 14 November 1941.

<sup>5</sup> Includes 67 Matilda II infantry tanks in TobFort.

<sup>6</sup> Excluding reserves and excluding C Squadron 42 RTR, which only joined battle on 25 November.



Map 4: Operation Crusader movements, 18 Nov. to 17 Dec. 1941.<sup>372</sup>

Concurrent with the Allied planning for Operation Crusader, the Axis forces in North Africa were planning their assault on the fortress of Tobruk, an operation scheduled for 23 November 1941, following considerable delays occasioned by a struggle to build up sufficient forces and supplies. Throughout the summer and early autumn of 1941, the effective blockading efforts by the Royal Air Force and Royal Navy, interdicting Axis supplies and troops moving into North Africa, as well as supply difficulties caused by the nature and distances of the theatre, negatively affected the build-up of Axis forces in preparation for the assault.<sup>373</sup>

Preparing for the assault on Tobruk while simultaneously ensuring the defence of the border and rear of the assault force was complicated further by the structure of the Axis forces, who fought a coalition war with convoluted command arrangements. As a consequence, the Axis operational command structure was more complex than that of



the 8<sup>th</sup> Army, reflecting the coalition nature of the forces. All German and most Italian forces were under the command of Panzergruppe Afrika, a command structure between the level of Army and Corps under General der Panzertruppen Erwin Rommel.

Rommel nominally reported to the Comando Superiore Forze Armate Africa Settentrionale under Field Marshal Ettore Bastico but also maintained a direct line of communication to the German headquarters (HQ) in Berlin, through the German Army attaché in Rome, General von Rintelen. The remaining Italian forces in the operational zone in eastern Libya's Marmarica province were concentrated in the Corpo Armata di Manovra under General Gastone Gambara, who simultaneously was General Bastico's Chief of Staff, and reported directly to this command.<sup>374, 375, 376, 377, 378</sup>

Nationality	Comando Superiore Forze Armate Africa Settentrionale		
	Panzergruppe Afrika		XX Corpo Armata di Manovra (CAM)
German	Deutsches Afrika-Korps	15 <sup>th</sup> Panzerdivision	
		21 <sup>st</sup> Panzerdivision	
		Division z.b.V. Afrika <sup>379</sup>	
		Reconnaissance Group Wechmar	
	Artillery Command 104		
	Sektor West <sup>1</sup>	Bardia Garrison	
Italian	Sektor Ost – Halfaya Pass	Savona infantry division	Ariete armoured division
	XXI Corpo Armata (Tobruk siege lines)	Brescia infantry division	Trieste motorised infantry division
		Trento motorised infantry division	Recam – reconnaissance detachment of the Mobile Corps
		Pavia infantry division	
		Bologna infantry division	
		Corps Artillery	

Table 3: Composition of Axis forces in Marmarica at the start of Operation Crusader, 17 November 1941.<sup>380</sup>

<sup>1</sup> Sektor West and Sektor Ost (west and east) both consisted of mixed German and Italian garrison and static combat forces.

The German plan to guard the rear of the forces assaulting the fortress of Tobruk included, first, the creation of a reinforced armoured reconnaissance group to conduct patrols south of Gasr el Arid and east of Sidi Omar, to provide early warning in case of an offensive from the south. Second, it foresaw the placing of 21<sup>st</sup> Panzerdivision on the Trigh Capuzzo at Gasr el Abid (map location 469399 on Map 3 above).

The reinforced armoured reconnaissance group was named Aufklärungsgruppe Wechmar after its commander, referred to as Gruppe Wechmar. It consisted of the two German armoured reconnaissance battalions, Aufklärungsabteilung (AA) 3 of 21<sup>st</sup> Panzerdivision and AA 33 of 15<sup>th</sup> Panzer, reinforced by the HQ and third company of Anti-Tank Battalion 39 of 21<sup>st</sup> Panzer. Around 15 November, Gruppe Wechmar was placed west of Sidi Omar with AA 3 and the mass of the anti-tank (AT) guns immediately west and AA 33 with one 5cm AT-gun platoon further west.<sup>381, 382, 383</sup>

On 15 November, the German Afrika-Korps' 21<sup>st</sup> Panzerdivision was ordered to take up its covering position, from where it could easily move south to counter a British spoiling attack. During the move, the division ran low on fuel and required replenishment, but this did not happen in time for battle on 19 November, and the infantry elements of the division remained immobilised.<sup>384</sup>

### **The opposing forces**

The orders of battle of both armies were finely balanced in terms of numbers of men, while the advantage in tank numbers lay clearly on the Allied side, and in artillery, in both numbers of guns and calibre on the Axis side.

The Allied tank forces used a wide variety of types, including both British-built cruiser and infantry tanks, and US-built cruiser tanks. The 4<sup>th</sup> Armoured Brigade was the only tank brigade in 8<sup>th</sup> Army to be equipped with US-built M3 tanks, which it had received during the summer of 1941. Its three tank regiments, 3<sup>rd</sup> and 5<sup>th</sup> Royal Tank Regiment (RTR) and 8<sup>th</sup> King's Royal Irish Hussars (8<sup>th</sup> Hussars) had extensive combat experience, having been in action since 1940. The Brigade's Commanding Officer, Brigadier Alexander Gatehouse, MC, had led 4<sup>th</sup> Armoured Brigade during Operation Battleaxe in June 1941, skilfully commanding the defence at Fort Capuzzo that allowed British infantry forces to escape east. Bob Crisp, then a captain and troop commander and second-in-command of C Squadron 3 RTR, described Gatehouse as "a tank officer as distinct from a cavalry officer, and who was probably the best handler of armor in the desert at the time".<sup>385</sup>

The Brigade was equipped with 166 M3 Stuart (M3) tanks, and a further 22 M3 tanks held forward in first-line reserve. The three tank regiments were each equipped with 52 tanks in three squadrons and an HQ section, accounting for 156 M3 tanks in total. A further 10 M3 tanks were held at Brigade HQ, to mount the HQ and an unknown number of artillery observer parties.<sup>386</sup> While the 8<sup>th</sup> Hussars was an old cavalry regiment, they had been mechanised in 1935, and by 1941 had served in the Middle East for a considerable period of time, seeing combat in Operation Compass against Italian forces.

The main weapon of the regiment was the new M3 Stuart tank, received under lend-lease from US factories. This was a reliable vehicle, demonstrated by the fact that only one tank in the Brigade fell out during the approach march.<sup>387</sup> The Stuart had a relatively high fuel consumption, limiting range in the desert to about 60 miles (approximately

96.5 kilometres). This was to affect the conduct of the battle on 19 November, with dispersed tank units of 4<sup>th</sup> Armoured Brigade having to refuel prior to being able to join combat, or indeed remaining stranded in the middle of the desert, unable to intervene.

The Brigade had attached to it considerable all-arms support. This included the 2<sup>nd</sup> Royal Horse Artillery (RHA), a 25-pdr (25-pounder) regiment with two eight-gun batteries, and 102<sup>nd</sup> (Northumberland Hussars) AT Regiment Royal Artillery (RA) minus one battery, equipped with 24 2-pdr portée AT guns.<sup>388</sup> These were complemented by 2<sup>nd</sup> Scots Guards, who provided motorised infantry and 112<sup>th</sup> Light Anti-Aircraft (LAA) Battery, 13<sup>th</sup> LAA Regiment for air defence with 12 40mm Bofors anti-aircraft guns. Reconnaissance was provided by A and B squadrons of the King's Dragoon Guards (KDG) who were equipped with South African-built Marmon Herrington Mk III armoured cars.

On the Axis side, the protection of the rear of the assault on Tobruk was allocated to 21<sup>st</sup> Panzerdivision, an under-strength division that had only been formed in North Africa in August 1941 from 5<sup>th</sup> Light Division and other independent army troops that had been sent to North Africa during the spring and summer of 1941. The division's main striking force was its armoured regiment, Panzerregiment 5, under Lieutenant-Colonel Stephan.<sup>389</sup> The regiment had extensive desert combat experience.

Panzerregiment 5 was equipped with three different types of combat tanks: 35 light tanks Panzer II, 68 medium tanks Panzer III, and 17 of the (by 1941 standards) heavy tanks Panzer IV. While the Panzer III had a superior gun, deferring a range advantage on it, neither the Panzer II with its automatic 20mm gun, nor the Panzer IV with its 75mm howitzer could claim to outgun the Stuart tank. In terms of armour, all three types of tanks were vulnerable to the 37mm gun of the Stuart and indeed the 2-pdr of British tanks over standard combat ranges, as they had not been up-armoured at that stage of the war. Furthermore, it was not fully appreciated by Allied commanders at the time that the Panzer III carried a 50mm gun, with at least some commanders considering that it continued to carry a 37mm gun as had been the case with earlier models in France.<sup>390</sup> Contrary to the general belief that emerged after Operation Crusader, the Panzer IIIG was more lightly armoured than the Allied tanks it opposed.

Despite the claim in the 5<sup>th</sup> RTR war diary that “[t]he enemy had superiority in numbers, his tanks were more heavily armoured, they had larger calibre guns with nearly twice the effective range of ours, and their telescopes were superior” the tanks were actually relatively evenly matched.<sup>391</sup> While the Panzer III was considered a more capable tank overall – and, in particular, the Stuart was considered to be comparatively lightly armoured – the two tanks had comparable combat capabilities. The Stuart's frontal armour was in fact superior to that of the German Panzer IIIG, which made up the bulk of the tank force of Panzerregiment 5 during Operation Crusader. Furthermore, the M3 Stuart's 37mm M5 gun performed similarly to the German 50mm KWK 38 tank gun equipping the Panzer III models in the desert in 1941. This meant that, on the battlefield, both sides were relatively evenly matched.

Armour	Panzer IIIIG	M3 Stuart	Gun performance	Panzer IIIIG 50L42	M3 Stuart M5 37mm
<i>Location</i>	<i>Armour in mm</i>		<i>Distance yards/m<sup>1</sup></i>	<i>Penetration in mm<sup>2</sup></i>	
Lower front hull	25	44	500	47	46
Upper front hull	30	38	1 000	37	40
Gun mantlet	30	38	1 500	28	38
Turret front	30	38	2 000	n/a	33
Turret sides	30	25			
<i>Hull sides</i>	<i>30</i>	<i>25</i>			

Table 4: Comparative armour strength in mm of the Panzer IIIIG and the M3 Stuart.<sup>392</sup>

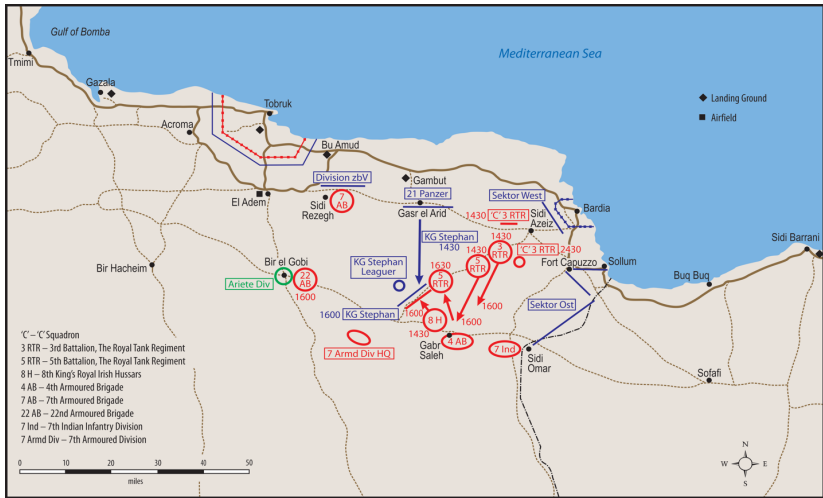
<sup>1</sup> US tank gun performance distance was measured over distances in yards, while German tank gun performance was measured over distances in meters. The penetration figures refer to the respective distances as reported by the two armies. Thus, the 50L42 penetrated 47mm at 500 meters and the M5 37mm gun penetrated 46mm at 500 yards.

<sup>2</sup> Panzer III penetration against homogenous rolled steel at vertical angle, 50% success, distance in metres; M3 Stuart against face-hardened steel at 30 degrees off the vertical angle, distance in yards.

### Approach to contact

On the morning of 19 November, 21<sup>st</sup> Panzerdivision was at Gasr el Arid, facing south, with a combined armoured reconnaissance formation named Group Wechmar in front of it. In response to the growing Allied pressure on Group Wechmar from 18 November onwards, the division formed a combat group around its armoured regiment, Battle Group Stephan, to attack and eliminate the Allied tank forces to the south.<sup>393</sup>

Battle Group Stephan was formed around mid-day on 19 November 1941 by 21<sup>st</sup> Panzerdivision to back up Group Wechmar by flanking the enemy force west of Sidi Omar.<sup>394</sup> The size and composition of Group Stephan were restricted by petrol shortages and it therefore consisted of Panzerregiment 5, II/AR155, a light field howitzer artillery battalion and 3/Flak 18, a mixed anti-aircraft gun battery.<sup>395</sup> The units of Group Stephan were experienced, having fought Allied forces since April 1941 and its commander, Colonel Stephan, had led the regiment since July 1941.



Map 5: Positions of 7<sup>th</sup> Armoured Division and 21 Panzerdivision, 18 November, and direction of moves of 4<sup>th</sup> Armoured Brigade and Group Stephan, 19 November 1941, 14:30 to 24:00.<sup>396</sup>

Allied movements commenced on 17 November 1941 when the first of 8<sup>th</sup> Army's forces crossed the 'wire' marking the border between Egypt and Libya. The objective for 4<sup>th</sup> Armoured Brigade was Gasr Taieb el Essem (location 470357 on Map 3 above), on the Trigh el Abd just short of the corps pivot point Gabr Saleh (location 452362 on Map 3 above). The brigade moved across the wire during the morning of 18 November and arrived at its destination with no noteworthy events. For the next day, **19 November**, 7<sup>th</sup> and 22<sup>nd</sup> Armoured Brigades were ordered to continue the advance west and north, 4<sup>th</sup> Armoured Brigade was ordered to remain at Gabr Saleh, pushing reconnaissance to the 450 grid line to cover the rear of 7<sup>th</sup> Indian Brigade, which began their operations by investing the desert locations of Libyan Omar and Sidi Omar that day.<sup>397</sup>

The first indication of the Allied advance arrived at German commands on the morning of 18 November, when Group Wechmar reported being engaged by superior forces, the reconnaissance screen of 7<sup>th</sup> Armoured Division. Messages became more urgent during the day and 21st Panzerdivision requested permission from Generalleutnant Ludwig Crüwell, the commander of the Africa Corps, to back up Group Wechmar by moving its Panzerregiment south to Gabr Saleh.<sup>398, 399</sup> This request was denied under instruction from Rommel who considered the advance to be a raid. This view is reflected in the Panzergruppe intelligence summary for 18 November.<sup>400</sup>

Nevertheless, a single light tank company, 1st Company Panzerregiment 5, was sent to back up Group Wechmar on this day. Furthermore, at 22:00, 15th Panzerdivision was ordered to prepare for movement and the preparatory code-word 'Ebbtide' was issued to it.

On the Allied side, given the continued uncertainty about the actions by the Axis command in reaction to the Allied advance, Brigadier Gatehouse was ordered to remain at Taieb el Essem. Consequently, 4th Armoured Brigade issued orders at 16:05 to its armoured regiments to take a position shielding the Trigh el Abd towards the north and east and blocking it at Point (Pt.) 190 at the south-eastern end of the brigade line. The line ran from the west at Pt. 186 (location 460363 on Map 2) to Bir el Barrani and then turning south to Pt. 190 (location 472357 on Map 2), with Bir el Barrani as its pivot point. Aligned north–south and facing east from Pt. 190 to Bir el Barrani inclusive were 5th RTR and aligned west–east facing north from Bir el Barrani exclusive to Pt. 186, was 8th Hussars. The line took advantage of a ridge line, which would have provided good observation to the north, and faced a slightly rising plateau to the east. The Brigade reserve was 3rd RTR at Pt. 185 (464356 on Map 2), just a few kilometres to the south and equidistant from the other two regiments, while the brigade HQ and support were in the centre of the position. At the end of the day, Brigadier Gatehouse had created a strong position that enabled rapid deployment of the fully concentrated brigade in any direction.<sup>401</sup>

### **First clash – 19 November 1941**

For operations on 19 November, Panzergruppe ordered its attached short-range reconnaissance unit, 2 (H)/14 to undertake a morning aerial reconnaissance. The area to be covered was a rectangle of Bir el Gobi–El Mfaues–Maddalena–Gasr el Arid (418378–446278–505299–4740 on Map 2) to ascertain the strength of the Allied forces in this area and whether they were accompanied by tanks. The reconnaissance was, however, cut short due to radio failure, and the results were reported at 09:00, noting the presence of hundreds of trucks and 40 armoured cars.<sup>402</sup> A late morning reconnaissance flight again reported only trucks and guns. Finally, a reconnaissance flown on the line Bir el Gubi–Sidi Omar reported large numbers of tanks at 12:15.<sup>403</sup>

On the ground, the eastern element of Group Wechmar spent the morning of 19 November in a running fight with KDG armoured cars, and throughout the day continued to engage these, as well as 3<sup>rd</sup> and 5<sup>th</sup> RTR. They rapidly pushed Group Wechmar north-west. At 10:00, another company of Panzerregiment 5, 2<sup>nd</sup> Company, was dispatched east from Gasr el Arid to try and destroy enemy armoured cars stuck in a swamp. At 11:30, Panzerregiment 5 was verbally ordered by 21<sup>st</sup> Panzerdivision's commander, Generalmajor Johann von Ravenstein, to assemble as Group Stephan with assigned units at Gasr el Arid. Group Stephan was to move south to Gabr Saleh, then turn east towards Sidi Omar to flank and destroy the 200 enemy tanks that *Group Wechmar* had reported there. *At this time, the two detached tank companies were recalled, although the 1st Company would not re-join until the march south was underway.*<sup>404</sup> At 11:45, the order to Group Stephan was confirmed and the code words 'Flood' and 'High Water' were issued by the Afrika-Korps command to all units of 15 Panzerdivision, triggering its departure into the forward areas. Communication was disrupted due to the flooding during the night of 17–18 November, which had destroyed many wire communications in the divisional area.<sup>405</sup>

At 08:00, Crüwell, commander of the Afrika-Korps, visited 21<sup>st</sup> Panzer's command post and was informed of von Ravenstein's intent and that, due to petrol and ammunition shortages, the mass of the division had to form a hedgehog defence. Following further discussion with Rommel, who visited 21<sup>st</sup> Panzerdivision's command post at 13:30, Panzergruppe issued confirming orders for Group Stephan at 14:40, which had already commenced its advance south at 13:20. It took slightly over 2,5 hours to assemble, prepare to move and cover the distance of about 30 km.

On 19 November – despite his orders to remain at Taieb el Essem – Gatehouse **commenced a set of piecemeal operations at regimental level**, and 4<sup>th</sup> Armoured Brigade therefore could not fight a brigade battle. **He ordered** 3<sup>rd</sup> RTR and 5<sup>th</sup> RTR, supported by H/I battery of 2<sup>nd</sup> RHA, to work with the KDG patrols in order to strengthen them and continue the clearance of the sector just west of the border. **By** early afternoon, the tank force of the brigade was thus disposed on a 40-kilometre line from Taieb el Essem north-east to the Trigh Capuzzo. Only 8<sup>th</sup> Hussars and B Squadron 5<sup>th</sup> RTR remained near Taieb el Essem, together with some support units and brigade HQ and reserve.<sup>406</sup>

This was the situation when at 15:30, 7<sup>th</sup> Armoured Brigade reported to 7<sup>th</sup> Armoured Division that 100 tanks were moving south-east, and that 4<sup>th</sup> Armoured Brigade had been alerted and had acknowledged the receipt of the message.<sup>407</sup> The 4<sup>th</sup> Armoured Brigade war diary notes the disposition of the brigade and the intent to concentrate its forces in reaction to the attack by Group Stephan, in particular, that 5<sup>th</sup> RTR was recalled. At this point, only 8<sup>th</sup> Hussars and the brigade reserve, B Squadron 5<sup>th</sup> RTR, were available to stop the German advance. Almost immediately, 8<sup>th</sup> Hussars was moved north-east into a blocking position to face the German attack on the track Gabr Saleh–Sidi Azeiz. A troop of 2<sup>nd</sup> RHA's L/N Battery and a battery of anti-tank guns were also ready to support. By 16:00, 8<sup>th</sup> Hussars had advanced to the assigned line and was ready to receive the German tanks. No warning of the attack by Group Stephan was received by 8<sup>th</sup> Hussars other than an alert by the regiment's own reconnaissance troop.<sup>408</sup>

Force element	Group Stephan	4 <sup>th</sup> Armoured Brigade
Tanks	85 Medium (68 Panzer III and 17 IV) 35 Light (Panzer II) 4 Command	52 M3 (16:00 – 8 <sup>th</sup> Hussars) 104 M3 (from 16:30 – 8 <sup>th</sup> Hussars and 5 <sup>th</sup> RTR)
Artillery	12 105mm howitzer IFH18	4 25-pdr guns (16:00 – H Troop) 8 25-pdr guns (from 16:30 – H Troop and I Troop, the latter supporting 5 <sup>th</sup> RTR)
Anti-tank/anti-air	4 88mm guns 2 20mm guns	12 2-pdr portée guns

Table 5: Estimated strength of opposing forces at Gabr Saleh, 19 November 1941, 16:00–18:00.<sup>409</sup>

## The battle

At 16:02, 4<sup>th</sup> Armoured Brigade reported to 7<sup>th</sup> Armoured Division that it was heavily engaged, while on the German side, Panzerregiment 5 noted that, at 16:00, Group Stephan met 130 enemy tanks; a number which later increased to 180.<sup>410, 411</sup>

Based on the war diary of 8<sup>th</sup> Hussars, following an air attack that struck both Brigade HQ and 8<sup>th</sup> Hussars, Group Stephan advanced to within 1 500 yards from 8<sup>th</sup> Hussars before opening into battle formation. Group Stephan then closed to 700 yards, which was sufficient for the 37mm guns of the M3 tanks to be able to penetrate German armour. German shooting was reported as accurate by 8<sup>th</sup> Hussars, with tanks being hit while the M3 tanks were still outranged.

There is no evidence in the primary record of the battle being fought at closer range than 700 yards. An entry in the 8<sup>th</sup> Hussars war diary of 20 November noted, “the enemy [...], in many cases, came in closer than the previous day”, indicating that there was a range gap between the two opposing forces, rather than the point-blank melee indicated by Alan Moorehead.<sup>412</sup> Considered in tactical terms, the engagement seems to have been a short-range firefight, rather than a manoeuvre battle. No attempt to flank 8<sup>th</sup> Hussars was made by Group Stephan until late in the battle. Colonel Stephan had by then however missed his chance and this flanking attempt was held off by 5<sup>th</sup> RTR who had appeared on the right flank of 8<sup>th</sup> Hussars.

German reports, confirming eye-witness reports, note that 8<sup>th</sup> Hussars fought a mobile battle, using the speed of the M3. Over time, the superiority in enemy numbers increased until about 180 tanks were presumed to be in action on the Allied side, a considerable over-estimate.<sup>413</sup> The German reports also note that enemy pressure was highest on the left (eastern) flank of Group Stephan, in line with a supposition that, rather than frontally, Group Stephan had hit the line of 8<sup>th</sup> Hussars at an angle. It is also on this flank that 5<sup>th</sup> RTR appeared late in the battle.

At 16:24, 4<sup>th</sup> Armoured Brigade reported to 7<sup>th</sup> Armoured Division that the enemy advance had been halted at Pt. 189 (464363 on Map 2), and at 17:00 and 17:28 that the battle was continuing.<sup>414</sup> The brigade reserve was not committed until all of 5<sup>th</sup> RTR had arrived at Taieb el Essem, around 16:30, when its war diary reported the regiment to be in action.<sup>415</sup> As 5<sup>th</sup> RTR did not report tank casualties other than two mechanical failures, it does not appear that 5<sup>th</sup> RTR closed the range with the enemy, rather, it is reported to have fought at a distance.<sup>416</sup> At 18:58, 4<sup>th</sup> Armoured Brigade reports that the battle ended at last light with a German withdrawal. For unknown reasons, official histories and some war diaries claim that 8<sup>th</sup> Hussars left the battlefield to Group Stephan, even though both sides in fact withdrew from the site of the battle, leaving disabled tanks in no-man’s land. Both sides undertook recovery actions during the night. One of the disabled German tanks could not be recovered due to enemy presence, further showing that the German overnight leaguer was not on the site of the battle.<sup>417</sup>

During the engagement, it is likely that heavy dust reduced visibility, and this made effective use of the artillery difficult for the Germans. For example, the 12 105mm



howitzers of Group Stephan only fired 54 rounds in total, while the four 88mm guns fired only 166 rounds. The 88mm guns also claimed only two of the total 24 M3 Stuarts reported as destroyed by Group Stephan. The medium tanks, on the other hand, fired 2 382 rounds and the light tanks, 410 rounds. By contrast, 2<sup>nd</sup> RHA reported firing 300 rounds from its eight 25-pdrs during the course of the engagement. Dust would also have made control difficult, and the records indicate that Gatehouse did not exert close control, maybe also due to repeatedly coming under fire by the German artillery and having to displace three times.<sup>418</sup>

## Assessment

The tactical situation at the end of the engagement was that both sides claimed victory. The 4<sup>th</sup> Armoured Brigade reported that it had given the Germans a “good knock”, estimating 19 to 26 enemy tanks destroyed as well as nine troop carriers, some of which by artillery and AT guns. In addition, 8<sup>th</sup> Hussars estimated they had destroyed 20 tanks, noting, “this was a good performance”.<sup>419</sup> In terms of their own losses, 20 tanks were reported lost, but no breakdown by type of casualty was provided.<sup>420</sup>

On the German side, Panzerregiment 5’s evening report overestimated British tank numbers in the engagement by conflating 8<sup>th</sup> Hussars and 5<sup>th</sup> RTR as if they had faced them throughout, and claimed that the attacking British tanks were driven back from their position. This was repeated by Panzergruppe to Berlin, ignoring the objectives that were given to Group Stephan, instead focusing on terrain occupied and enemy tanks destroyed.<sup>421</sup>

In operational terms, it is worth considering that the view by 8<sup>th</sup> Hussars was justified. With only minimal support, the regiment had held off a superior force, held the line and prevented the German tanks from moving east. Nevertheless, while Brigadier Gatehouse had prevented the Germans from achieving their operational objectives of destroying his brigade and of advancing to Sidi Omar, he had also failed to deal the German tank force a major blow. By not keeping his tanks concentrated at the allocated position, he had missed an opportunity. It is difficult to see why this was allowed to slip by, considering that Gatehouse was an experienced commander, who should have understood that the aim of Operation Crusader was to bring the German tanks to battle and to destroy them, and that Gabr Saleh was a critical position in this regard.

Most importantly, despite an order to stay in place and reconnoitre west, he had allowed his tank regiments and supporting artillery to spread out between Taieb el Essem and Sidi Azeiz to the north to deal with numerous enemy reports, none of them critically important. Arguably, if he had followed orders, he could have met *Group Stephan* with the whole of his brigade, fielding a superior tank force. As it was, 5<sup>th</sup> RTR arrived at the battle too late to make an impact and, by the end of 19 November, 3<sup>rd</sup> RTR, having only received the order to recall at 16:00, remained widely dispersed, far away from the main body of 4<sup>th</sup> Armoured Brigade (4 AB). The regiment was running out of petrol and did not manage to assemble until after midnight. The expectation of the 7<sup>th</sup> Armoured Division command is summarised in its war diary entry at 15:30, which states, “4 AB

moves to intercept” rather than that a single regiment was ordered to hold off an attack by approximately 100 tanks.<sup>422</sup>

### Tank losses

The basis for the criticism of the British performance by Agar-Hamilton and Turner is the perceived lopsided nature of tank losses in this battle.<sup>423</sup> The criticism is based on the loss or damage reports by both sides, which reported eight German tanks lost to 23 British, and is combined with the accusation of overclaiming, with the British reporting 20 to 26 enemy tanks and nine troop carriers destroyed.<sup>424, 425</sup> It must be noted that the loss reporting for the Germans and British tank forces did not allow direct comparisons.

It is important, in this regard, to take into account the detailed loss report of 21 Panzerdivision, which listed every tank lost by Panzerregiment 5 during the period 18 November to 15 December 1941 by turret number, with a detailed explanation for the loss. On 19 November, eight tanks were reported lost to enemy action and technical issues, turret numbers I11, I02, 121, 122, 125, 131, 221 and 531.<sup>426</sup> It is noteworthy that all eight tanks reported were labelled as either destroyed outright (121 and 125) or requiring recovery either for battle damage (I11, I02, 122, 131, 221) or technical faults (531).<sup>427</sup> This compares to 11 permanent losses suffered by 8<sup>th</sup> Hussars and amounts to a fairly even exchange rate, given the initial strength ratios.

Date of evening report	Tanks reported operational	Tanks reported lost or detached	Implied operational tanks	Difference (daily)	Difference (cumulative)
17 November	120	n/a	120	0	0
18 November <sup>1</sup>	120	3(d)	117	0	0
19 November <sup>2,3</sup>	83	8(l)	109	-34	-26
20 November	82	4(l)	105	+3	-23
21 November	67	4(l)	101	-11	-34
22 November	57	10(l)	91	0	-34
23 November	45	17(l)	74	+5	-29

Table 6: Tank reporting discrepancies Panzerregiment 5, 17 to 23 November 1941.<sup>428</sup>

<sup>1</sup> One company detached to support Group Wechmar

<sup>2</sup> One company detached to engage Allied armoured cars

<sup>3</sup> Both detached companies returned to regiment

It is, however, likely that 8<sup>th</sup> Hussars did considerably better than an even exchange, since the reported German losses raise serious questions. The report of eight tanks lost does not explain the steep drop in available tanks of Panzerregiment 5 between the evenings of 18 and 19 November as set out below. While some attempts have been made to explain the discrepancy, e.g. by presuming lower availability due to the impact

of Operation Sommernachtstraum in September, these ignore the fact that the reporting was not aligned over several days.<sup>429</sup>

A more likely explanation is based on a consideration of the loss classification. The labels assigned to the lost tanks indicate that damaged tanks that did not require recovery were not listed as losses in the divisional records, presumably because they were expected to be repaired by their crews or regimental workshops overnight. While it is not clear what happened to the missing tanks, the number of tanks missing from the accounting aligns well with the claims made by 8<sup>th</sup> Hussars and 4<sup>th</sup> Armoured Brigade, especially if some of the nine troop carriers claimed by 4<sup>th</sup> Armoured Brigade were also tanks.

### **Tactical and operational outcomes**

The established view of the battle is that the German tanks of Group Stephan prevailed over 4th Armoured Brigade on 19 November with minimal losses. In the established view is furthermore accepted that the Germans owned the battlefield at the end of the engagement and managed to recover their lost tanks.<sup>430</sup> Finally, part of this view is that the British side severely overclaimed German tank losses, claiming at least 20 destroyed tanks, and that the British tank regiments suffered from tactical weaknesses compared to the Germans, and these weaknesses are seen as the reason for the lopsided tank losses being inflicted on the British tank forces.<sup>431</sup>

Based on a review and analysis of the primary evidence, a different picture emerges, namely that while the battle could best be described as a tactical draw, operationally it was a clear British victory. The established views on the battle are based on a misinterpretation or lack of knowledge of the primary evidence on both sides, both regarding the development of the battle and the operational context within which it was fought.

The available evidence from primary sources furthermore suggests that misinterpretation of the battle has also led to an almost complete failure to appreciate the impact of the successful defence battle at operational level. It is normally not considered that Group Stephan did not have one, but two objectives:

- to destroy the estimated 200 tanks of 4<sup>th</sup> Armoured Brigade; and
- to advance east to the Libyan–Egyptian frontier, into the rear of 7 Indian Brigade at Libyan Omar, to relieve pressure on the Axis frontier garrisons.<sup>432</sup>

First and foremost, at tactical level, the established view takes German loss reports at face value, while comparing them directly to the loss reports of 8th Hussars, even though this is not possible due to different categorisations. The established view also usually assumes that the German tanks leaguered on the battlefield for the night, thereby controlling recovery efforts of damaged tanks. Considering the available evidence, from both the German and the Allied side, it is highly likely that the German tank losses on 19 November were understated, challenging this traditional view of the battle. Thus, the charge that the British were overly optimistic when counting German tanks destroyed

has to be examined closely in the light of the available tank loss and readiness data of Panzerregiment 5, in particular the discrepancy of 26 tanks missing from the roster on the evening of 19 November.

Furthermore, it is clear from the German message log that Group Stephan leaguered off the battlefield, and the disabled tanks ended up in no-man's land, with both sides engaging in recovery efforts. Given Group Stephan's failure to achieve its first mission, the conclusion that presents itself is that, rather than being beaten with heavy losses, the performance of 8<sup>th</sup> Hussars meant that they managed to hold the line they were assigned against a superior German force while inflicting substantial damage on the advancing force, compelling it to abandon its mission.

At the operational level, Group Stephan had the mission to remove the threat to Libyan Omar and Sidi Omar, the two locations which constituted the western anchor of the fortification line running from Halfaya Pass to Libyan Omar. The plan seems to have been to catch any Allied forces in the area by using the tanks of Group Stephan to push the Allied forces against the fortifications of the garrison of Libyan Omar and Sidi Omar.<sup>433</sup> On 19 November, 7<sup>th</sup> Indian Brigade was arranged in a considerable line east of the border wire, running from west of Bir Sherferzen to Bir Bu Deheua, north-west of Libyan Omar.<sup>434</sup> Given the nature and strength of Group Stephan, it would have been in a good position to inflict at least serious damage on 7<sup>th</sup> Indian Brigade.

The successful defence of the track at Gabr Saleh by 8<sup>th</sup> Hussars therefore prevented Group Stephan from achieving both the operational objectives given to it. Rather than destroying the whole of 4<sup>th</sup> Armoured Brigade, Group Stephan managed to destroy just one tenth of the estimated enemy tanks and rather than being able to relieve the pressure on the frontier garrisons by attacking 7<sup>th</sup> Indian Brigade, Group Stephan failed to advance east at all after being driven back at Gabr Saleh.

Nevertheless, while tactically successful, the Allied forces missed an operational opportunity. The opportunity that presented itself on 19 November was to deal the German tank force a severe blow early in Operation Crusader by defeating it in detail, after it had been split. Not realised at the time, and not considered in the literature, are two important facts relating to the battle:

- Rommel did split his armoured force, rather than concentrating it; and
- Rommel attacked in force at Gabr Saleh, something that Lieutenant-General Norrie did not believe he would do, and which he claimed in his report after the operation Rommel did not do.

Had 4<sup>th</sup> Armoured Brigade been in a position to concentrate in time to meet Group Stephan, then it is at least possible that substantial damage could have been inflicted on Panzerregiment 5 at an early stage of Operation Crusader. That this did not happen was due to Brigadier Gatehouse failing to concentrate his brigade on 19 November. The dispersal of five of his nine tank squadrons and half of his artillery meant that he was not in a position to engage Group Stephan forcefully, since he was not able to achieve superiority at the point of contact in the short time between the battle commencing and

dusk falling. Thus, command failures present in 4<sup>th</sup> Armoured Brigade prevented the destruction of the attacking German tank force, which would have been achievable for the Allied side, had it been handled better. This was an early indication of a weakness noted by General Auchinleck in a message to Field Marshal Alanbrooke on 7 January 1942, following the disastrous battles by 22<sup>nd</sup> Armoured Brigade at the Uadi el Faregh south of Agedabia.<sup>435</sup>

## Conclusion

This article has revealed the complexities surrounding Operation Crusader. This was not a simple battle. The outcomes of tactical engagements were not clear at the time and even today present a challenge for scholars due to the loss of records in a battle where headquarters were often overrun. Weaknesses in command and assessment of tactical and operational opportunities were often obscured in the write-up, making the inquiry into the events more difficult.

The tank forces of the 8<sup>th</sup> Army consisted of a wide range of regiments and experiences, such as the territorial army tank soldiers in the three infantry tank regiments of 1<sup>st</sup> Army Tank Brigade and regular tank men in 4<sup>th</sup>, 7<sup>th</sup> Armoured and 32<sup>nd</sup> Army Tank Brigades. Even the two cavalry regiments in the 4<sup>th</sup> and 7<sup>th</sup> Armoured Brigades and the 7<sup>th</sup> and 8<sup>th</sup> Hussars, had extensive tank experience gained in the desert for over half a decade. The only green ex-cavalry troops were the three more recently converted armoured regiments in 22 Armoured Brigade, which had not seen fighting at all, but had trained extensively in England throughout 1941.

It is clear from the evidence presented in this article that the dismissive attitude taken towards the quality of British cavalry regiments that had been converted to armour, implied, for example, in Crisp's description of Brigadier Gatehouse cited above and indeed in Moorhouse's description of the battle as a 'reckless' charge, did not apply universally. The claim by Barnett, that "the officers and men of the British armoured brigades were as generally untouched by these warnings [on enemy tactics, contained in a training memorandum issued in September 1941] as road-hogs by road safety propaganda" cannot be confirmed based on the performance of 8<sup>th</sup> Hussars on 19 November 1941. Instead, as in any army, the performance of units varied based on their experience and training, and it is not appropriate to attribute a universal qualification to an arm of service, and on the afternoon of 19 November 1941, 8<sup>th</sup> Hussars delivered a performance that ensured that German operational intent was thwarted.

This article thus represents another step in a new and more comprehensive interpretation of the performance of British and Empire formations in the early phase of the desert war, addressing many of the myths and misconceptions that have coloured our perception for too long.<sup>436</sup>

## ENDNOTES

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- <sup>354</sup> Author contact: [683942@soas.ac.uk](mailto:683942@soas.ac.uk); Andreas is an independent historian based in London, UK. He specialises in the desert war, 1941/42, focusing on Operation Crusader, and shares his research through his blog <http://rommelsriposte.com> and on Academia.edu at <https://independent.academia.edu/AndreasBiermann>. The author is indebted to the reviewers; in particular, this article has greatly benefited from the review and comments by Profs Alan Allport and Marcus Faulkner and Drs Philip W Blood and Ben Wheatley and the insights of the *Scientia Militaria* referees.
- <sup>355</sup> While at the time of Operation Crusader the usual term would have been ‘Empire’, the more usual ‘Allied’ is used throughout this note as more accurate than the alternative ‘Commonwealth’, considering the composition of Eighth Army as well as the Allied naval and air forces at the time of Operation Crusader.
- <sup>356</sup> General Cunningham, GOC Eighth Army from its creation, relieved of his duties on 26 November 1941.
- <sup>357</sup> General Richie, GOC Eighth Army from 27 October 1941 to the end of the operation.
- <sup>358</sup> C Auchinleck. “Operations in the Middle East from 1 November 1941 to 15 August 1942”. Supplement to the *London Gazette* 38177. 15 January 1948. 312.
- <sup>359</sup> Map II from “The Mediterranean and the Middle East”, Vol. II. Undated. <<https://www.ibiblio.org/hyperwar/UN/UK/UK-Med-II/maps/UK-Med-II-2.jpg>> Accessed on 15 February 2021.
- <sup>360</sup> C Barnett. *The desert generals*. London: William Kimber, 1960, 106.
- <sup>361</sup> R Lyman. *Tobruk: The longest siege*. Basingstoke: PanMacmillan, 2010.
- <sup>362</sup> Sheet 14 Bardia. *Eighth Army Mapping Services*, 1942, Author’s collection.
- <sup>363</sup> 30<sup>th</sup> Armoured Corps will be referred to as 30 Corps. While modern references to corps are in Roman numerals, this article uses Arabic numerals to facilitate distinction between Allied and Italian army corps. Under the field regulations in force in 1941–42, British corps were numbered with Arabic numerals.
- <sup>364</sup> ‘Marmarica’ refers to the eastern part of Libya, named after the Roman Empire province of antiquity, with Tobruk as its administrative capital. It ranged from the border with Egypt to a north–south line approximately at the Gulf of Gazala, approximately 60 km west of Tobruk. Cyrenaica is the province west of this line to a north–south line approximately at the Ras Lanuf, approximately 200 km west of Agedabia, at the ancient border of Roman and Carthaginian lands in modern Libya, with Benghazi as its capital. West of this line to the border with Tunisia was the province of Tripolitania, with Tripoli as its capital. The border between the provinces at Ras Lanuf was marked by the Arco dei Fileni, a triumphal arch through which the Via Balbia coastal road passed. It was known as ‘Marble Arch’ to British soldiers. In British history, the term ‘Cyrenaica’ is often used to cover both Cyrenaica and Marmarica.
- <sup>365</sup> UK National Archives (TNA), WO201/2693 – 8 Army report by the GOC, September–December 1941, par. 7, p. 3.
- <sup>366</sup> TNA, WO169/1175, appendices – while the grid references in this map differ slightly from those on Map 2, they are used, as this was the map utilised by the 7<sup>th</sup> Armoured Division units during the battle, and it was therefore the basis for any location references in their war diaries.
- <sup>367</sup> All references refer to the grid of Map 1.
- <sup>368</sup> TNA, WO201/2693.
- <sup>369</sup> National Archives and Records Administration (NARA), T-315 R66415. Panzerdivision, KTB No. 2 and IWM Duxford EDS (EDS) AL966 Panzerregiment 5 battle report, entry 17 November.

- <sup>370</sup> M Montanari. *Le Operazioni in Africa Settentrionale – Vol. II Tobruk*. Rome: Ufficio Storico dello Stato Maggiore dell'Esercito, 1993.
- <sup>371</sup> The table is based on a mix of information, including OOB and actual data.
- <sup>372</sup> Excerpt of Map 35a from the US Army West Point Military Academy map collection, titled “North Africa 1940: Auchinleck’s offensive 10 November 1941 – 31 December 1941”. Undated. <[https://www.westpoint.edu/sites/default/files/inline-images/academics/academic\\_departments/history/WWII%20Europe/WWIIEurope35Combined.pdf](https://www.westpoint.edu/sites/default/files/inline-images/academics/academic_departments/history/WWII%20Europe/WWIIEurope35Combined.pdf)> Accessed on 16 March 2021.
- <sup>373</sup> R Hammond. *Strangling the Axis: The fight for control of the Mediterranean during the Second World War*. Cambridge Military Histories. Cambridge: Cambridge University Press, 2020.
- <sup>374</sup> The Italian High Command of the Armed Forces in North Africa.
- <sup>375</sup> General Enno von Rintelen, 1891 to 1971, military attaché and from Italy’s entry into the war German general at the Italian High Command, from 1936 to 1943.
- <sup>376</sup> While not normally used in English-language histories, the term ‘Cyrenaica’ denotes the eastern half of what is commonly referred to as ‘Cyrenaica’, a separate province with Tobruk as its capital. The border to the east is Sollum, while to the west it is situated at modern Derna. See [doi: 10.1093/acrefore/9780199381135.013.3974](https://doi.org/10.1093/acrefore/9780199381135.013.3974)
- <sup>377</sup> Africa Special Purpose Division – German: Division z.b.V. Afrika was a division-size formation assembled to provide the German infantry element of the assault, with 15. Panzerdivision providing the armoured element.
- <sup>378</sup> Panzergruppe Afrika, formed in August 1941 to control the German Africa-Korps and the siege operations around Tobruk. It was under the command of Rommel, with General Gause as chief of staff.
- <sup>379</sup> German special purpose division for the siege of and assault on Tobruk. Renamed 90<sup>th</sup> Light during the battle.
- <sup>380</sup> Montanari *op. cit.*
- <sup>381</sup> Reconnaissance Group = Aufklärungsgruppe.
- <sup>382</sup> Reconnaissance Battalion = Aufklärungsabteilung (AA) 3 and AA33.
- <sup>383</sup> Anti-tank Battalion 39 = Panzerjägerabteilung 39. This was equipped with three companies of anti-tank guns, each with two platoons of obsolete 37-mm and one platoon of more modern 50-mm PAK38 AT guns. Each platoon had three guns. EDS 355, Order of Battle 21<sup>st</sup> Panzer Division.
- <sup>384</sup> Bundesarchiv Militärarchiv (BAMA), RH27/21/1.
- <sup>385</sup> R Crisp. *Brazen chariots*. New York, NY: Bantam Books, 1978, 10.
- <sup>386</sup> TNA, WO169/952, sheet for 11 November 1941.
- <sup>387</sup> Hoover Institution. *Bonner-Fellers papers*, Box 39, Folder 8, Message 279, 1 December 1941.
- <sup>388</sup> TNA, WO169/949, Artillery statement Middle East 4 November 1941, CRME/3613/RA, dated 5 November 1941.
- <sup>389</sup> Friedrich Stephan, 21 February 1898 to 25 November 1941, as lieutenant participant in the second course at the German tank school in Kazan 1931/32. He had taken command of the regiment in July 1941, following the BATTLEAXE Operation. Also see HG Krampe. *Militärgeschichtliche Blätter: Wünsdorf – Geburts – und Entwicklungsstätte der deutschen Panzertruppen*. Berlin: Verlag Meißler, 2005; B Hartmann. *Panzers in the sand*. Barnsley: Pen and Sword Military, 2011. There are few descriptions of him, as he died only six days after this battle in an air attack. First-hand accounts contained in Hartmann indicate a disciplinarian, with a somewhat brusque manner.

- <sup>390</sup> TL Jentz. *Panzertruppen Vol. 1*. Atglen, PA: Schiffer Military History, 2004 notes that the majority of the Panzer III of the regiment were of the 'G' variety with 30-mm frontal armour, with only four gun tanks being 'H', which were up-armoured with an additional 30-mm plate welded onto the front and which could not be penetrated by the 2-pdr gun over their frontal arc at normal combat ranges.
- <sup>391</sup> TNA, WO169/1388, war diary 8 Kings Royal Irish Hussars, January–December 1941, entry 19 November 1941.
- <sup>392</sup> TL Jentz & HL Doyle. *Panzer tracts No. 3-2: Panzerkampfwagen III Ausf. E, F, G und H: Development and production from 1938 to 1941*. Boyds, MD: Panzer Tracts, 2007, 15; RP Hunnicutt. *Stuart: A history of the American Light tank*. Novato, CA: Presidio Press, 1992; Undated C Ankjersterne, "5 cm Kw K". <<https://panzerworld.com/5-cm-kw-k>> accessed on 24 March 2021. Jentz and Doyle note that up-armouring of Panzer III E, F and G variants with an additional face-hardened 30-mm armour slab commenced in the field, utilising factory-supplied kits, in December 1940. This addition would have rendered the Panzer III G considerably better able to resist the Stuart's gun at typical combat ranges. Nevertheless, photographic evidence shows that this additional armour had not been applied to Panzerregiment 5 tanks by April 1941, when they were in Africa. There is no photographic evidence available that would indicate that the situation had changed by November 1941. Given the supply challenges in North Africa, it is an open question whether the Panzer III G tanks of Panzerregiment 5 were up-armoured.
- <sup>393</sup> Aufklärungsgruppe Wechmar, named after the commanding officer of Aufklärungsabteilung 3.
- <sup>394</sup> Kampfgruppe Stephan, named after Lieutenant-Colonel Stephan, the commanding officer of Panzerregiment 5.
- <sup>395</sup> NARA, T315 R157 Frame 121. Panzerdivision Ia KTB No. 2, entry 19 November 1941.
- <sup>396</sup> Map prepared by Mike Bechtold, commissioned by the author: <<https://mikebechtold.com/>>.
- <sup>397</sup> *Ibid.*
- <sup>398</sup> Crüwell had arrived in North Africa in September to take command of the Africa Corps after the creation of Panzergruppe Afrika as the superior German headquarters in North Africa. He was directly subordinated to General Rommel.
- <sup>399</sup> BAMA, RH19/8/53, activity report Panzergruppe Afrika Ic, 18 November 1941 – 6 February 1942, message log Aufklärungsgruppe to 21. Panzerdivision, 18 November 1941.
- <sup>400</sup> *Ibid.*, daily summary, 18 November 1941.
- <sup>401</sup> TNA, WO169/4503, 3<sup>rd</sup> RTR war diary, 1942, unordered messages and map files.
- <sup>402</sup> It is possible that these were the 'sunshield' camouflage devices used to conceal British tanks by making them appear as trucks.
- <sup>403</sup> BAMA, RH19/8/53 *op. cit.*
- <sup>404</sup> NARA, T315 R157 Frame 121 *op. cit.*
- <sup>405</sup> NARA, T315 R664 KTB No. 2, entry 19 November 1941.
- <sup>406</sup> TNA, WO169/1281, war diary 4<sup>th</sup> Armoured Brigade, January–December 1941, entry 19 November 1941.
- <sup>407</sup> Agar Hamilton and Turner claim the message may not have been received by 4<sup>th</sup> Armoured Brigade, but this is clearly not correct.
- <sup>408</sup> TNA, WO169/1175, G branch 7<sup>th</sup> Armoured Division, December 1941 and Appendices, message log, 7<sup>th</sup> Armoured Brigade, message, 19 November 1941, 1530 hours; TNA, WO169/1281, entry 19 November; TNA, WO169/1388, war diary, 8 Kings Royal Irish Hussars, January–December 1941, entry 19 November 1941.
- <sup>409</sup> TNA, WO169/1281, entry 19 November 1941.
- <sup>410</sup> TNA, WO169/1175, 4<sup>th</sup> Armoured Brigade, message, 19 November 1941, 1602 hours.
- <sup>411</sup> BAMA, RH27/21/2a, evening report by Panzerregiment 5, 0240 hours, 20 November 1941, Frame 000214.



- <sup>412</sup> TNA, WO169/1388, war diary, 8<sup>th</sup> Hussars, entry 20 November 1941.
- <sup>413</sup> BAMA RH27/21/2b, frames 000861–000863.
- <sup>414</sup> TNA, WO169/1175, messages from 4<sup>th</sup> Armoured Brigade 1624, 1700, 1728 hours, 19 November.
- <sup>415</sup> TNA, WO169/1414, entry 19 November.
- <sup>416</sup> It is also notable that the unit history of 5<sup>th</sup> RTR does not mention the fight on 19 November at all. See M Urban. *The Tank War*. London: Hachette Digital, 2013, Kindle edition; JAI Agar Hamilton & LCF Turner. *The Sidi Rezegh battles*. Cape Town: Oxford University Press, 1957, 144.
- <sup>417</sup> See, for example, Agar Hamilton & Turner *op. cit.*, p. 144; DB Katz. *South Africans against Rommel*. Guilford, CT: Stackpole Books, 2018, Kindle edition, loc. 2345; TNA, WO169/1427, 2<sup>nd</sup> RHA, January–December 1941, entry 19 November 1941; BAMA RH/21/2b and TNA, WO169/1175 7, message from 4<sup>th</sup> Armoured Brigade, 1858 hours, 19 November. The reason for this claim cannot be ascertained at this stage, but it is clear that it is not correct.
- <sup>418</sup> BAMA RH/21/2b; TNA, WO169/1427, entry 19 November 1941; probably tank rounds rather than artillery.
- <sup>419</sup> Either prime movers or tanks, given that no infantry was present on the German side; nevertheless, this appears unlikely, given that no guns seem to have been lost by Group Stephan; TNA, WO169/1281, war diary, 4<sup>th</sup> Armoured Brigade, entry 19 November; TNA, WO169/1175, 4<sup>th</sup> Armoured Brigade, message, 1945 hours, 19 November 1941; TNA, WO169/1414, entry 19 November 1941.
- <sup>420</sup> British vehicle casualties are classed as ‘X’, ‘Y’ and ‘Z’. X casualties are minor damage, repairable by crew overnight. Y casualties require support from specialist fitters or repair by the LAD or at the Brigade workshop, while Z casualties are either completely destroyed or repairable only at a major workshop.
- <sup>421</sup> RH27/21/2b, Meldungen, November 1941; Imperial War Museum, Enemy Document Section Duxford 355 AL500/1/10 Pz. Armee Afrika Schlachtbericht, Anlage 9 Tagesmeldung, 19 November 1941.
- <sup>422</sup> TNA, WO169/1411, war diary, 3<sup>rd</sup> RTR, January–December 1941, entry 19 November; TNA, WO169/1174, war diary, 7<sup>th</sup> Armoured Division, January–December 1941, entry 19 November, 1530 hours.
- <sup>423</sup> See discussion in Agar Hamilton & Turner *op. cit.*, p. 142ff.
- <sup>424</sup> 8<sup>th</sup> Hussars only lost 11 tanks permanently, with the remainder repaired within 48 hours after the battle (Agar Hamilton & Turner *op. cit.*). This is in line with the tank numbers reported in the war diary, which states that at least six tanks were lost on 20 and 21 November, bringing the total lost to 26, and that approximately 25 tanks were remaining when going into leaguer on 21 November. On 26 November, Major Sandbach from 8<sup>th</sup> Hussars brought in 36 M3 tanks from TDS, indicating that at least 12 tanks had been repaired in the meantime, assuming all 22 reserve tanks had been issued. TNA, WO169/1281, war diary, 4<sup>th</sup> Armoured Brigade, 26 November 1941.
- <sup>425</sup> German tank losses are given as two destroyed and six damaged, one of which for technical reasons, while 8<sup>th</sup> Hussars reported 20 M3 lost, and 5<sup>th</sup> RTR reported one tank lost and two mechanical casualties; see WE Murphy. *The relief of Tobruk*. Wellington: Historical Publications Branch, 1961, 85.
- <sup>426</sup> BAMA RH27/21/2a; I11 was a Panzer II and I02 a Panzer III in the command section of *I. Abteilung*, while the remainder were Panzer III in *I., 2. and 5. Kompanie* of the regiment.
- <sup>427</sup> *Bergebedürftig*.
- <sup>428</sup> BAMA RH27/21/2a 000214-000220.

- <sup>429</sup> Imperial War Museum, Enemy Document Section, AL923 18572/4 Anlagen zum KTB No. 2, 30 January – 31 March 1942, p. 330. Report by Ic regarding divisional history, 18 February 1942; Murphy *op. cit.*, p. 85, picks up this discrepancy in a footnote. He tries to explain it by suggesting a long-term effect of Operation Sommernachtstraum on 14–15 September 1941, or an attempt to disguise the poor state of readiness of Panzerregiment 5 towards Berlin. Neither of these two explanations can be considered convincing.
- <sup>430</sup> See, for example, R Stolfi. *German battle style in ultra mobile, high intensity war: North African Desert 1941–42*. Monterey, CA: Naval Postgraduate School, 1991, 25 and Hartmann *op. cit.*
- <sup>431</sup> See, for example, B Pitt. *Auchinleck's command: The crucible of war Book 2*. Sharpe Books, 2019, Kindle edition, Stolf *op. cit.* and Montanari *op. cit.*, while other **examples of this view can be found in the South African semi-official history, the New Zealand official history and also the despatch by General Auchinleck himself**. See Agar Hamilton & Turner *op. cit.*; Murphy *op. cit.*; Auchinleck *op. cit.*
- <sup>432</sup> Location 49503600 on Map 2.
- <sup>433</sup> Location 495360 on Map 2.
- <sup>434</sup> Locations 494345 and 490364, respectively, on Map 2.
- <sup>435</sup> E McGilvray. *Field Marshal Claude Auchinleck*. Yorkshire: Pen & Sword Military, 2020, Apple iBook edition, 332.
- <sup>436</sup> Barnett *op. cit.*, p. 104. – while he does not identify the Training Memorandum, it was most likely WO201/2965 *Middle East Training Memorandum No. 1: September 1941 (general; the arms; lessons from operations; enemy methods; enemy stores, arms and equipment)*.

## *Book Review*

# **Ratels on the Lomba: The story of Charlie Squadron**

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*Jean-Pierre Scherman*<sup>437</sup>

*Stellenbosch University*

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Johannesburg and Cape Town: Jonathan Ball Publishers  
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*Ratels on the Lomba* bursts onto the page like a shot from a cannon, full of dramatic scenes of warfighting, with blood flowing and where bullets are pinging off armour plates. It is, however, far more than just another book on the Border War (1966–1989). If you are looking for a feel-good book, describing how the valiant South African Defence Force (SADF) fought and won, then look elsewhere. This book tells the story of a small sub-unit, fewer than 100 men strong, from the perspective of the soldier on the ground, where the bullet meets the meat. It reads more like a horror story than like a war story – but we will get back to that.

Based on the experiences of the men of Charlie Squadron, 61 Mechanised Infantry Battalion Group during Operation Moduler during the latter part of 1987, this book strips away the veneer of the propagandist inspired all-conquering SADF. The story is told by the men who were actual participants, not by some general in his air-conditioned office in Pretoria, nor by some historian writing for an academic audience. While Scholtz is undeniably an outstanding academic, he writes in the same way the tale was related to him, warts and all, and herein lies the gem of this tale. For many years, the men of Charlie Squadron went about their civilian lives, while deep within, their traumatic experiences bubbled and brewed, waiting for the chance to manifest themselves. This chance came, initially via a closed social media group, where the wounds of the past could be re-examined, with members slowly breaching the topic of their experiences with one another. This ultimately led to them sharing their experiences with Scholtz, who combined their testimonials with primary research of official documents housed within the South African Department of Defence Documentation Centre (the Military Archives) to produce a first-class eye-witness account of what it felt like to be a teenage conscript fighting a brutal war on the edge of the world.

This book, as already stated, reads like a horror story. In it we learn of the national servicemen of Charlie Squadron, a South African Armoured Corps Squadron, deployed in the South African-designed Ratel Infantry Fighting Vehicle (IFV). Its variant, the Ratel 90 Anti-Tank IFV, packing a powerful 90mm main gun along with two 7.62mm

machineguns, formed the armour fist of a unique all-arms unit, 61 Mechanised Infantry Battalion Group. From the outset of this tale, we learn of the disorder and poor discipline prevalent within the squadron and how a new squadron commander, Captain PJ Cloete (one of only a handful of Permanent Force members serving within the battalion) was forced to practise some ‘tough love’ in order to get the men ready for combat.

We then follow them into one of the last unmapped and remote places still left on earth at the time, south-western Angola, where a huge Angolan–Cuban force of eight brigades supported by eighty Russian-manufactured tanks, approximately 18 000 men, was bearing down on the stronghold of the Unita Rebel Group located at Mavinga and Jamba. Unita, a South African ally, was lightly armed and could not stop this force. After an appeal for assistance, the SADF decided to deploy a small force to aid Unita in its defence of Mavinga and its all-important airstrip. How the fat cats in Pretoria expected a force numbering fewer than 3 000 with no heavy armour of their own to defeat this horde was a question often asked by the members of Charlie Squadron.

That Charlie Squadron was not only expected to defeat them, but also that they had to do so without suffering any casualties or equipment losses only reinforced the notion amongst the men that they were being sacrificed on the altar of the egos of Defence Headquarters. As the only element within 61 Mech capable of destroying opposing tanks, Charlie Squadron found themselves in the vanguard of the attack. The fact that they were now being ordered to confront an enemy – far greater in size, armed with tanks – in thinly armoured Ratels, whose designers had never envisaged such madness as their vehicles being thrown into an arena wherein the opponent was better armed and better protected, played heavily on the teenagers’ minds.

After a traumatic first battle, where an understrength combat group led by Charlie Squadron attacked the 47 Brigade, the cracks within the system began to show. While remarkably only suffering one killed during the attack, this loss combined with the harrowing experience of fighting off enemy tanks in their outgunned Ratels, resulted in the squadron losing faith and hope in their top leadership. When a second man was lost during an airstrike by a MiG 21, which enjoyed complete air superiority over the battle zone, Cloete went back to his headquarters and told them, “my men didn’t get the pass they were supposed to get and they have been through one of the most traumatic experiences you can think of. These troops are going to want to get out and run away. That’s what they’re going to do. If they get another contact, there’s no way in which this squadron is going to get involved in another battle.” The deeply shocked youngsters were approaching breaking point.

Shamefully, the SADF, who micro-managed the entire operation – with both the Chief of the SADF and the Chief of the Army personally flying in to ‘discuss’ the conduct of the operation – refused to send in more forces, especially South African tanks – despite the fact that the South African President, PW Botha, who also flew into Mavinga to confer and who pointedly asked the generals why the SADF was not deploying any of its 200 tanks that had been bought and upgraded at enormous taxpayers expense. It would cost Charlie Squadron launching a second assault against another

Angolan brigade, which was to fail miserably in achieving its objectives before Pretoria would finally authorise the deployment of a single tank squadron of only 13 tanks.

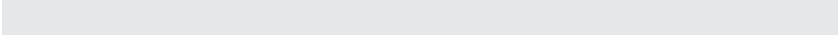
This 'soldiers' tale' is one of bravery under extreme duress, of the formation of lifelong friendships, the bonds of which can only be formed by those who have stared death in the eye together, and how South Africa was more than willing to send its armed forces into battle, under-equipped and in many circumstances poorly led. Major General Roland de Vries who was to retire as the Deputy Chief of the South African Army poignantly describes the dysfunctional top leadership of the day, "It did not matter how many plausible options we present; it always seems as if the shittiest option gets selected." This is a book that should be read by every South African, especially those who yearn for the past and who remember a time when the South Africa was supposedly more civilised and a better place to live!

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## ENDNOTES

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## *Book Review*

### **Soldaat en mens**

*Georg Meiring*

*Abel Esterhuysen<sup>438</sup>*

*Stellenbosch University*

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STN Printers: Pretoria

2020, 278 pages

In most paradigm militaries of the world, there seems to be an expectation for a general to write and publish his or her biography as soon as possible after retirement from active duty – a type of ‘first duty’ in retirement. These biographies are often critical for militaries, much like in the medical, law and clerical professions, to grow their body of knowledge and empower the next generation of soldiers. For armed forces in general, military history of this nature has always played an important role in the geographical and cultural contextualisation and shaping of their doctrine. Without a sound and comprehensive military historical foundation for the development of their doctrine, militaries remain dependent on the imported knowledge base of paradigm militaries.

One of the critical doctrinal challenges facing many African armed forces is the frequent absence of a unique and Africanised body of military knowledge. African armed forces are therefore often dependent on the military knowledge of those outside Africa, in particular the British and French militaries, for the development of their doctrine and the training of their personnel. Frequently, this translates into a tactical and strategic disconnect between African militaries and the uniqueness of the security and military challenges on the continent. This reality is quite evident in the regular use of the training manuals of paradigm militaries at staff, war and defence colleges in Africa and the training that is provided to African militaries from outside the continent. The numerous publications by soldiers of the pre-94 era in South Africa are in many ways still testimony of the professionalism and the unique African nature of the military at the time.

The publication of the autobiography of General Georg Meiring, who served as the last Chief of the South African Defence Force before 1994 and, on request of President Mandela, as the first Chief of the South African National Defence Force after 1994, is in many ways exceptional. From an historical perspective, the period 1989 to 1998 was perhaps the most challenging time in the history of South Africa. The defence force, on the one hand, had to maintain the peace and security in a country that was often on the brink of a civil war – some would even say that it was engaged in a low-intensity civil war. On the other hand, the defence force had to prepare, position, and transform itself for the future. In combination, these two challenges posed almost superhuman

demands to those in leadership positions. The integrity and cool-headed professionalism of Meiring as the Chief of the Defence Force at the time made an important contribution in stabilising the transitional process in South Africa.

Meiring's career was in many ways inimitable. Equipped with an MSc degree from the University of the Free State, he gave up an academic career to join the South African Army. By entering the military as a mature commando or reserve force officer with a sound academic foundation, definitely did not make for the archetypal, ordinary, and middle-of-the-road type officer. His academic background is recognisable in the nuanced and self-reflective style of writing in his autobiography; and in the balanced, yet often critical, reflection on his past, his relationships with his colleagues, and his frank and honest views of the soldiers and politicians who have crossed his path. His views of the individualities of people such as Dr Jonas Savimbi and Generals Malan, Viljoen and Geldenhuys are particularly informative.

His academic background set Meiring up for a career in the corps of signals. To rise as a signal officer and eventually become the Chief of the Army is an achievement in itself. In the South African Army, as in armies all over the world, operational command posts are mostly reserved for officers from the combat corps – the infantry, armour, and artillery. The various periods in which he held certain command posts were also of critical importance. In this regard, his period of command at Witwatersrand (1978–1981), South West Africa (1983–1987) and Far North (1987–1989) Commands must be singled out. It almost seems as if the military has deliberately moved him to the critical hotspots. His time as Chief of the South African Army (1990–1993) was also probably the most difficult and turbulent period in the history of the country. Finally, he had to balance the many and often contradictory challenges of the post-94 defence force as Chief of the SADF, later called the SANDF.

From a bigger and holistic perspective, two features in the book are of great value. The first is the importance of quality people and good leadership in armed forces. In general, armed forces invest much time, resources, and energy in leadership development. It is therefore particularly interesting when senior and retired officers reflect critically on their own leadership style, what they considered to be critical and what had 'worked' for them. Meiring's description of how he often had to redefine and reinvent himself every time he was appointed to a different position of command in a new or different setting is an important principle with wide application both inside and outside the military context. His exposition of his commanding principles for military leaders also makes for interesting reading: take command and use your common sense when you are appointed to a position of command; be accessible for your subordinates; know your organisation and people; do not make people wait unnecessarily; make timely decisions; and know your priorities. Throughout, he also emphasises using the principle of the eyes of the farmer make the cattle fat. In other words, military leaders must see and be seen at all times.

Much has been written about the need for decentralised command as a means for armies to achieve strategic effect. In this regard, Meiring emphasises two methods



that were of great value to him as commander. The first is the use of team building sessions where critical subordinates are placed in an island situation to work together as a unit and ensure that they share his vision as commander. The second method is an arrangement he had with his subordinates that everyone could say 'yes' to an initiative and the execution of a task, but that only he as commander had the prerogative to say 'no'. Meiring explains this by pointing out that the 'yes' must be fully accountable for and that the person who eventually gets the 'no' needs to know that it was a well-considered 'no'.

The second major contribution is the historical light that the book sheds on perhaps the two most difficult challenges he faced as Chief of the Defence Forces before 1994. The first is the role that Gen. Constand Viljoen, a person for whom he had great admiration and respect, played in the Bophuthatswana crisis in 1994 when white right-wing political elements stepped up to lend support to President Lucas Mangope. Meiring describes his relief after Gen. Viljoen eventually called him with the news that he would participate in the 1994 election. One can imagine the tension to which Meiring would have been exposed if he had to take military action against a rebel group led by Viljoen.

Another difficult situation discussed by Meiring in great detail and with great caution is the so-called Steyn report, which led to the dismissal of several military officers by President FW de Klerk. From the discussion, it is clear that several senior leaders and decision-makers had erred and blundered in many ways; and that decisions were impulsive and ill-considered. This, of course, did great damage to the legitimacy of the military. Pierre Steyn's appointment as Secretary of Defence after the 1994 election obviously laid the groundwork for tensions between the Chief of Defence and the Secretary of Defence, a situation that is still ongoing.

Even though Meiring makes it clear in the preface of the book that he does not like to write, the book is finely worded, well written, and excellently structured. He explicitly states in the preface that it is not his intention to "write down a piece of dead history" (p. 1). He also points out that it is not his intention to describe situations that could lead to "is-is not" arguments. Meiring explains that it is his intention to share his experiences and not necessarily to describe the events in which he was involved historically correctly. The book is therefore, according to him, not a history book, but "my story in my language". However, his story is so intertwined with the history of South and Southern Africa that his autobiography is necessarily a work of historical interest. Yet, it is a pity that a former Chief of the Defence Force publishes has to publish his book himself and that publication houses do not stand in line to publish such an important contribution to South African's military history. It is also a pity that the book is only available in Afrikaans. The book could further have benefitted from professional editing. The few spelling mistakes do detract from an otherwise excellent book. Taken as a whole, it is an important and exceptional contribution to the South African military historical mosaic from the early 1970s to the late 1990s.

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## *Book Review*

# **The opportunist: The political life of Oswald Pirow, 1915-1959**

*Alex Mouton*

*David Katz*<sup>439</sup>

*Stellenbosch University*

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Pretoria: Protea  
2021, 256 pages  
ISBN 978-1-48531-169-0

Finding a mainstream South African publisher for an academic work on South African history is a daunting prospect for an author. Doing so when it involves a niche topic on an obscure personality in a forgotten period of South African history can be even more disheartening. Praise for Protea Book House, who backing Mouton, have provided a mainstream publishing vehicle to bring a fascinating period of our history back into the public domain. Works such as *The opportunist: The political Life of Oswald Pirow, 1915–1959* might otherwise have remained inaccessible to the general public, either residing in the rarefied atmosphere of academia or gathering dust on a shelf in a university library as an academic print. The hard truth is that well-researched, peer-reviewed and skilfully written works of history do not necessarily translate into bestsellers, and in most cases, the opposite is true. Publishers with a keen eye on their bottom-line have a set of criteria designed to maximise profit, which often clashes with the lofty standards demanded by academia. For that reason, it is always welcome when a work such as this book by Mouton manages to bridge the academic–popularist divide.

Alex Mouton is a professor of history at Unisa. He has practised his craft by publishing extensively on leading South African political and historical figures in the twentieth century, such as FS Malan and FA van Jaarsveld, as well as leaders of the official parliamentary opposition in South Africa, such as Sir Leander Starr Jameson, Sir Thomas Smartt, JGN Strauss, Sir De Villiers Graaff, Radclyffe Cadman, Colin Eglin, Frederik Van Zyl Slabbert, and Dr AP Treurnicht. A publishing pedigree such as this more than qualifies Mouton to tackle the biography of one of the more elusive and enigmatic figures on the South African political spectrum, Oswald Pirow. It is admirable that Mouton has chosen Pirow, the least understood and least known of our politicians, to present to – what he laments as – “an ahistorical youth who have turned their backs on history”.<sup>440</sup>

Pirow, born in 1890, the son of German immigrants, was educated in Potchefstroom, and received tertiary education in Germany and England. He was keen sportsman and successfully practised law in Pretoria. He became a National Party member

under JBM Hertzog and entered parliament in 1924, becoming Minister of Justice in 1929. He advocated and was a leading cabinet member of the Fusion Government between Hertzog and Smuts. His affinity for aviation, a long-time hobby, informed his responsibility for railways and harbours, which led to his founding of South African Airways. Pirow, a staunch nationalist and republican, was in many ways a visionary and a formidable debater. However, popular history paints a dark picture of Pirow as a vehement anti-communist, an open admirer of fascist totalitarian leaders, such as Hitler and Mussolini, and especially of António de Oliveira Salazar and Francisco Franco. His Germanophilia extended to speaking German exclusively at home, with his daughter declaring in 1939 – to the consternation of the British press – ‘s consternation in 1939, that her father felt more German than South African. Giving impetus to his legacy of as a Nazi sympathiser and eventually and out-and-out Nazi was his stiff opposition to South Africa declaring war on Germany in 1939. His political path of neutrality was an act that drove him and Hertzog to the opposition benches. Eventually, in 1940— – some believed inevitably— – he formed a new Nazi Nazi-styled party, the New Order. His flirtation with Naziism was ruinous to his once sparkling political career, and few lamented his passing in 1959, with even fewer remembering him in a modern-day Democratic democratic South Africa.

Historians, such as Mouton introduce, nuanced aspects and insights into the historiography, which popularist historians are ill-equipped to deliver. Academics spend long hours of research, often in dusty, dusky archives, digging out primary documents that they apply to a rigorous process using the historical method. The resulting work runs the torture chamber of peer review, ensuring that they bring something new, profound and factually correct to the table, thereby filling the lacunas in our knowledge. Historians will spend hours presenting and testing portions of their work before the scrutiny and criticism of colleagues. Popularist historians rely on secondary sources exclusively, resulting in their final product often reflecting a mere rehash of limited, outdated and sometimes dubious source material. Journalistic type claims that their role is the reintroduction of long-forgotten history have some validity. However, an excellent academic historian can lay claim to raising awareness and reinterpreting history based on interrogating the indispensable foundations of primary documentation. A glance at his extensive bibliography and footnotes is proof that Mouton has precisely followed this process and delivered a well-researched product.

Mouton provides an interesting and alternative insight into Pirow’s political journey. At one point, it seemed to have an inexorable upward trajectory, only to descend into humiliation and obscurity. The title of the book, *The opportunist*, adequately describes Pirow’s burning ambition, which was the driving force behind his every political move. He based his strategy on opportunism rather than on principle. Pirow arrived at his final political destination when he embraced Nazism, not out of a firm or cherished political conviction, but through steering a course of political opportunism throughout his career. He openly backed the Nazis at a time when many people believed Hitler’s Germany was unstoppable. Mouton presents a view that flies in the face of Pirow’s established place in South African historiography as that of a confirmed fascist. This revelation is indeed news for many interested in this relatively obscure inter-war period of South African

history. Not only is Pirow remembered as a Nazi sympathiser, but the blame for the poor state of South Africa's military preparation on the eve of the Second World War is placed firmly at his feet. Mouton sets the record straight on both accounts in his book.

The author summarises:

Pirow was an intriguing personality. He was ambitious, highly intelligent, cynical, charismatic, competent, energetic, a brilliant orator and an outstanding government minister. The political life of Pirow is the story of a gifted person who through opportunism wrecked a promising career<sup>441</sup>

Mouton delivers a compelling case that Pirow's pacifism at the outbreak of war and his eventual embrace of Nazism were a function of opportunism rather than of any deep conviction. Pirow's poor performance in building and maintaining the Union Defence Force was the result of the Great Depression and the general lackadaisical approach most Western governments had towards rearmament in the inter-war years rather than of his ineptitude. The author reveals that Smuts used Pirow as a scapegoat for the poor condition of the Union Defence Force and destroyed his parliamentary career in a series of parliamentary debates, which forever labelled and ridiculed Pirow as the inventor of the infamous 'Bush Cart'. Pirow's "bush cart strategy" was juxtaposed with Germany's rearmament programme incorporating the symbol of the Blitzkrieg, modern, lethal Panzers.

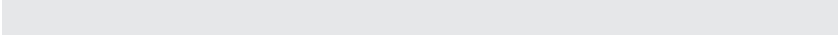
If criticism is to be levelled, then it would be perhaps that, in seeking to redress the long-standing one-dimensional view of Pirow, Mouton has swung the pendulum too far in the other direction. It is difficult to believe that Pirow's embracing of Nazism was pure opportunism and did not involve his evident penchant for fascism early in his career. More believable is the contention that South Africa's poor military preparedness at the time was due to several factors rather than one man's ineptitude. Mouton has managed to place a relatively obscure figure (undeservedly so) back on the South African historiographical map. In doing so, he uses Pirow as a lens to peer into a neglected period of our history – the inter-war years. Mouton has successfully bridged the academic–journalist gap and presented a well-researched, readable book that adds much to our knowledge of Pirow and a fascinating period of South African history.

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- <sup>439</sup> David Katz is a PhD (Mil) candidate in the Department of Military History at the Faculty of Military Science of Stellenbosch University. His dissertation focuses on “General JC Smuts and his First World War in Africa”. Further publications by the author can be accessed on <https://sun.academia.edu/DavidKatz>.
- <sup>440</sup> FA Mouton. “Mouton on Worden, ‘The making of modern South Africa: Conquest, segregation and apartheid’”. Humanities and Social Sciences Online. 2000. <<https://networks.h-net.org/node/10670/reviews/10816/mouton-worden-making-modern-south-africa-conquest-segregation-and>> Accessed on 21 January 2021.
- <sup>441</sup> FA Mouton. Hartfield Book Company, The Opportunist: The Political Life of Oswald Pirow, 1915-1959 (Paperback), <https://www.hartfieldbookco.com/book/9781485311690>> Accessed on 21 January 2021.



## *Book Review*

# **Gunship Over Angola : The Story of a Maverick Pilot**

*Steve Joubert*

*Anri Delpont<sup>442</sup>*

*Stellenbosch University*

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Johannesburg and Cape Town: Delta Books  
2019, 240 pages  
ISBN 978-1-86842-930-1

“Most war stories”, according to Hynes, “begin with a nobody-in-particular young man, who lives through the experience of war, to emerge at the end defined by what has happened to him.”<sup>443</sup> One such “nobody-in-particular young man” was national serviceman 74257684BC Private Stephen Pierre Joubert, born on 3 July 1958 in Chingola, then Northern Rhodesia.<sup>444</sup> Since the age of five, he and his family lived in Pretoria. He had a typical childhood in most respects.<sup>445</sup> Barely seventeen years old, he, like many other young men, reported for national service. One year later, in 1977, he stood in a “perfectly pressed” uniform with “buttons and badges [that] sparkled like diamonds” in a large room in a nondescript building at the South African Airforce (SAAF) Gymnasium in Valhalla, Pretoria.<sup>446</sup> Facing him was an intimidating, expressionless collection of brass seated in a semicircle. It was Joubert’s second Pilot Selection Board interview for the Pupil Pilot’s Course. Among the brass was the legendary aviator, World War II and Korean War veteran, then chief of the SAAF, General Bob Rogers. The general asked the first question, “[h]ow long have you wanted to be a pilot?” Joubert responded, “[s]ince I stopped wanting to be an ice cream seller, sir!”<sup>447</sup> Two years later, “on an early November day”, 21-year-old Joubert with wings pinned to his chest stepped onto AFB Ondangwa in South West Africa, now called Namibia.<sup>448</sup> The events that followed changed him forever. It was as Hynes notes, “out of that nobody, war has forged a self”.<sup>449</sup>

Lieutenant Stephen Joubert was not the next Sailor Malan or Edwin Sales, but one of many South African servicemen who served in the War for Southern Africa between 1966 and 1989. The colloquially termed ‘Border War’ erupted in Namibia. Hostilities after that spilt over to Angola and Zambia. Within the broader Cold War context, it was one of the numerous proxy wars.<sup>450</sup> The major theatre of operations of the South African Defence Force (SADF) was in the operational area in northern Namibia bordering Angola. As one of the services, the SAAF played its own, often distinctive, role in this regional conflict. The first half of the narrative in *Gunship over Angola* is set in South Africa, far removed from hostilities. During this time, the contribution by the SAAF was primarily limited to using Alouette III helicopters and Cessna 185 liaison/visual

reconnaissance aircraft in counter-insurgency operations. The main bases for the SAAF were established on Namibia's northern border at Ondangwa, Rundu, Mpacha and Grootfontein, and satellite bases at Ruacana, Eenhana, Nkongo, Buffalo and Omega. After 1975, more bases were added as hostilities intensified, demanding the SAAF to play a more prominent role.<sup>451</sup> Some of these are mentioned in Joubert's account. During this later phase of hostilities, Joubert had his first taste of battle, and began logging pilot-in-command hours, which comprises most of the second part of the book.

Around the late 1970s and early 1980s, all SAAF aircraft types were deployed in the operational area as the conflict escalated. The role of the SAAF also expanded to include close air support, search-and-destroy missions, troop, casualty evacuation, artillery fire control flights and resupply missions.<sup>452</sup> During this time, the Soviets, Cubans and other allies supplied their proxies with more complex and sophisticated technology, such as radar installations and SAM-7 missiles. Thus, the threat of anti-aircraft fire intensified with a concomitant increase in SAAF casualties.<sup>453</sup> In response to the heightened lethality on the battlefield, SAAF pilots developed new tactics, such as low-altitude flying, which reduced the deadliness of these weapons.<sup>454</sup> In many respects, airmen, such as Joubert, had a more distinctive war experience than the boots on the ground. Furthermore, their war experience was not static, but constantly changing. For instance, during one or more operational tours, the experiences could have varied between different intervals as the nature of war evolved. Regarding this, Joubert very capably teases out these developments in the war and the response of airmen to these changing circumstances. Such diversity in South African experiences is rather scarce in contemporary historiography.

Since 1966, a plethora of titles on the 'Border War' has appeared.<sup>455</sup> Early titles up to the late 1980s tended to glorify participation by South Africans.<sup>456</sup> Among these were a lacklustre official history and several general histories published around the conclusion of hostilities.<sup>457</sup> From the 1990s onward, a new trend of published personal accounts reached the shelves, which gained impetus since the 2000s. Quite often, revised editions of titles published in the previous decade re-appeared to feed readers' growing appetite for war reminiscences. Initially, most of these titles adopted a mostly 'top-down' approach.<sup>458</sup> In recent years, accounts 'from below' have begun to fill the historiographical hiatus and opened a window into the lives of 'ordinary men'.<sup>459</sup>

Interestingly, as Wessels notes, military enthusiasts have always had an insatiable craving for literature on special operations.<sup>460</sup> It is surprising that such enthusiasm has not extended to the excitement and vivacity of the war in the sky. Alternatively, the dearth of literature on such topics has defused or redirected interest in them. The role of the SAAF, particularly the experiences of airmen, has largely been absent in South African historiography. The contribution by the SAAF has been limited mainly to mentions or sections in literature on the war,<sup>461</sup> – with some exceptions.<sup>462</sup> It is here that Joubert's book makes a valuable contribution to the lacuna in current historiography.

The title of Joubert's book, *Gunship over Angola: The story of a maverick pilot*, is somewhat misleading. Granted, its glossy cover and bold title will catch anyone's eye peering through a bookshop window or browsing on the web. The same applies to



the pulse-throbbing publisher's blurb. The first impression of the book is both striking and dramatic, which understandably it aims to do and certainly achieves it, but this simultaneously distracts from the value of the book, albeit perhaps inadvertently. Joubert's book is much more than a vividly graphic description of a battle sequence in the sky. It does include such battlefield narratives and plenty to spare with all the sensory elements to make readers feel like they are experiencing the battle first-hand. The book also provides a unique perspective, which Joubert had as an airman involved in the chain of casualty evacuation. Against this bird's eye view, Joubert's account highlights the subtle nuances between civilian, battle, landmine and other forms of casualties, as well as the influence of racial prejudices on evacuation and treatment. However, the title is only descriptive of the second half of the book.

The first part of the narrative begins with a brief description of Joubert's genealogy and family life through early childhood and adolescence, leading up to Joubert reporting for national service. Compared to others who loathed the idea of military conscription, Joubert saw this as an opportunity to become a pilot, since his family was not affluent and could therefore not afford private funding for his training. After basic training, he was transferred to the Air Defence School at Air Force Base (AFB) Waterkloof, followed by his operational deployment at Ellisras. He was then selected for the Pupil Pilot's Course 1/77 as a candidate officer at the Central Flying School (CFS) Dunnottar. The next phase was to attend the Flight Training School (FTS) Langebaanweg, which included a seven-day Survival Course at Kranshoek. A three-month Officer's Course at the South African Air Force College (SAAFCol) followed. Joubert writes, "a combination of factors"<sup>463</sup> led to him becoming a helicopter pilot; thus, he was posted to 87 Advanced Flying School (AFS) at AFB Bloemfontein. He finally became a fully-fledged Alo III commander in the 17 squadron. The next day he departed for the centre of airborne operations for his first operational tour, which is covered in the second half of the book.

The first half of the book is dismissed in the title despite the value of this half for opening a rare window onto the rigours of becoming a SAAF pilot, which entails much more than practical flight hours and adrenaline-fuelled aerobatics. The book also provides a realistic glimpse of everyday experiences, ranging from exhilarating to frustrating and even to infuriating. To this can be added the obstinate nature of the military regime and obtuse military hierarchy entrusted to mould chivalrous officers and command daring pilots – all of which contrasts with the all too often romantic and nostalgic notions held by many of heroically masculine brass, buttons and uniforms.

As previously noted, the book is divided into two parts; the first is titled "The age of innocence", followed by "Time to grow up". The suggestive juxtaposition of the two titles aptly reflects, as Hynes remarks, "[n]obody, however young, returns from the war still a boy and in that sense, at least, war does make men."<sup>464</sup> Joubert's account also resonates with more recent literature, which tends to spotlight the legacies of trauma, violence and conscription interlaced with calls for healing and reconciliation with the past.<sup>465</sup> Such themes often mirror a sense of admonishment for the state and the military's failure to provide psychological support and assistance to these men. As Joubert poignantly argues:

If I bear any grudge at all, it is against the military establishment, not for moulding me into the fighting man that I became for ten years ... but rather because they blatantly shirked their responsibility to switch me back into a balanced, considerate and compassionate human being when my fighting days were over.

The Official Secrets Act (No. 16 of 1956) “discouraged” men like Joubert from not only “questioning the status quo” but also seeking professional counselling.<sup>466</sup> As Joubert comments, “seeking counselling from anyone, amateur or professional ... was banned outright by the authorities and dire consequences were threatened.”<sup>467</sup> As a result, Joubert was “not functioning at an optimum emotional level [...] for a long time to come”.<sup>468</sup>

The impact of war experiences and a combination of other factors inspired Joubert to write this book. As he acknowledges, “[i]t is often said that ‘writing about it’ is one of the most cathartic things that human beings who have undergone trauma can do.”<sup>469</sup> Joubert concludes with words of encouragement to others of his generation to make amends with the past – whether through writing or through talking. Unfortunately, readers were only given a slight glimpse into the experiences alluded to in a few brief paragraphs. The shortcomings of the military and war trauma might explain why Joubert chose not to immerse the reader fully in his inner conflict and sense of isolation and alienation in post-war civilian life.

However, Joubert excels in achieving three-dimensionality with his humorous vignettes and anecdotes sprinkled from beginning to the near end of *Gunships over Angola*. The perfectly balanced humour ranges from youthful indiscretions to describing how innovative training techniques could help pupil pilots judge the correct height when landing an aircraft. In such cases, pupils had to sit on the roof of the ablution block, which “was mathematically calculated ... to be the precise height” before the plane levelled off for landing. Pupils had to hold a ruler in the left hand to imitate the plane’s throttle lever. A broomstick in the right hand represented the joystick, while the sweeping section represented the rudder pedals. To “add authenticity” to the “simulation”, pupils had to “imitate the noise of the radial engine”. As Joubert comments, he wondered what the response of their parents would be to see their sons, the elite of the SAAF, “flying imaginary aircraft in close formation, spasmodically moving hands and feet, while making toddler-like noises, while sitting on the shithouse roof.”<sup>470</sup>

The inclusion of a solid comical element in a morose war narrative might seem surprising – or not. Many writers have done so in the past. Among these are Mel Brooks, Charlie Chaplin, Taika Waititi, Roberto Benigni, and Vincenzo Cerami. However, in this instance, it could be that firstly, Joubert is a self-perceived “avid objectivist” or “maverick” who was subjected to a strict, hierarchical, often impractical military environment. Secondly, he writes that he hopes his family will one day take the time to read his story. Despite the intended audience, other readers with an interest in war reminiscences or the war ‘up north’, whether ‘civvy’ or soldier, academic or military enthusiast, *Gunship over Angola* is a must read.

## ENDNOTES

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- <sup>442</sup> Anri Delpoit is a lecturer in the Department of Military History in the Faculty of Military Science at Stellenbosch University. She is also the Book Review Editor of *Scientia Militaria*.
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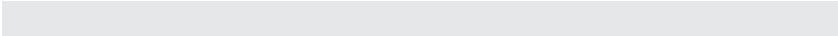
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## *Book Review*

# **The Battle of Bangui: The inside story of South Africa's worst military scandal since Apartheid**

*Warren Thompson, Stephan Hofstatter and James Oatway*

*Evert Kleynhans<sup>471</sup>*

*Stellenbosch University*

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The Battle of Bangui has assumed near mythical proportions within South Africa, and specifically in the South African National Defence Force (SANDF). During the battle that occurred in March 2013, a small force of crack South African troops engaged a 7 000-strong Seleka rebel force in an effort to stem their advance on Bangui – the capital of the politically unstable and resource-rich Central African Republic (CAR). Over the course of two days, the South African force fought a number of gallant actions and inflicted heavy casualties on the advancing rebel forces. However, the South Africans could not hold out indefinitely, especially against overwhelming odds and after taking some casualties during the ensuing fighting. Moreover, they soon found themselves surrounded in their makeshift base within Bangui, where they were ultimately forced to negotiate a ceasefire with the Seleka rebels. Following the ceasefire, the South African contingent returned to South Africa, and so began the process of trying to make sense of the rationale to deploy SANDF troops to CAR, and what exactly happened during the so-called ‘Battle of Bangui’. Most importantly, the country, the defence force, and the respective families, had to come to grips with the unnecessary loss of South African lives in a seemingly distant corner of Africa.

In early 2021, Penguin Books published Warren Thompson, Stephan Hofstatter and James Oatway’s *Battle of Bangui: The inside story of South Africa’s worst military scandal since Apartheid*. In the book, the authors set about to get to the elusive truth surrounding the South African deployment to the CAR, which was underpinned by a bilateral defence agreement signed between the two countries as far back as 2006. As investigative journalists, Thompson, Hofstatter and Oatway uncovered the political, diplomatic and economic reasons that led to the deployment of SANDF troops to CAR. These varying reasons were, and for the most part still are, kept secret from the South African public and Parliament. However, the authors left no stone unturned in trying to get to the bottom of the story. Over a period of seven years, they gained exclusive access to both the officers and men who fought in the battle; investigated classified information

related to the events; travelled to Bangui to obtain documentation and meet the Seleka rebel leaders who took part in the battle; interviewed the exiled former president of the CAR François Bozizé in Paris, and talked to the families of the fallen South African soldiers. As a result of their untiring efforts, the authors managed to present a hard-hitting and factual account that reports on the strategic, tactical and logistical blunders, along with the secret diplomatic and commercial deals that ended in the now infamous Battle of Bangui.

The military historian Ian van der Waag argues that the military historiography cycle generally passes through several distinct phases. The first phase is dominated by journalism and war reportage, which is followed by official histories in the second phase. The third phase comprises personal and regimental accounts, with the last phase culminating in academic works that are far more critical than the above in their approach.<sup>472</sup>

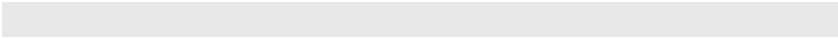
To date, only two books have been written on the Battle of Bangui. The first book was authored by the well-known defence analyst Helmoed-Römer Heitman, and was titled *The Battle in Bangui: The untold inside story*.<sup>473</sup> This latter book, only some forty pages long, appeared mere weeks after the events culminated in the CAR, and offered the first vignette into what had happened in Bangui over those two fateful days in March 2013. However, one has to question how Heitman obtained his detailed information in the first place, and whether this publication was not a simple propaganda stunt from the defence force and/or government to stymie enquiries into the debacle. Next followed Thompson, Hofstatter and Oatway's 2021 publication, which trumps Heitman's earlier version of the events.

If one follows Van der Waag's analogy, then these two publications definitely fall into the first phase of the military historiography cycle. What should logically follow next is an official history authored by military historians and/or strategists working within the broader Department of Defence. These authors should have access to the classified information withheld from Heitman, Thompson, Hofstatter and Oatway, and their role would be to offer a more complete, pro-government and pro-SANDF, version of the events. One can only speculate if and when such an official history will materialise. Hopefully in the future we will also see the publication of some personal and regimental accounts dealing with the Battle of Bangui, which will in all likelihood then be followed by a more critical academic response. The above will of course all depend on the availability of and access to classified material laying bare the SANDF deployment to the CAR.

All in all, the *Battle of Bangui: The inside story of South Africa's worst military scandal since Apartheid* is a riveting read from start to finish and a welcome addition to the historiography. Thompson, Hofstatter and Oatway offer an unrivalled account of the Battle of Bangui, filled with heroism, camaraderie, terror, sorrow and triumph over adversity. In doing so, they offer a fresh perspective on an episode in the South African military history that some in the establishment might conveniently want to forget. The book comes highly recommended, and can be considered for inclusion into university course material, particularly modules that deal with military history, strategic studies and political science.

## ENDNOTES

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# NOTES TO CONTRIBUTORS

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