

THE AXIS AND ALLIED MARITIME OPERATIONS AROUND SOUTHERN AFRICA, 1939-1945

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DECLARATION

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Abstract

The majority of academic and popular studies on the South African participation in the Second World War historically focus on the military operations of the Union Defence Force in East Africa, North Africa, Madagascar and Italy. Recently, there has been a renewed drive to study the South African participation from a more general war and society approach. The South African home front during the war, and in particular the Axis and Allied maritime war waged off the southern African coast, has, however, received scant historical attention from professional and amateur historians alike. The historical interrelated aspects of maritime insecurity evident in southern Africa during the war are largely cast aside by contemporary academics engaging with issues of maritime strategy and insecurity in southern Africa.

The all-encompassing nature and extent of the maritime war waged off southern Africa during the Second World War have been far more extensive than suggested in traditional sources. A key understanding of the maritime war is, in effect, incomplete without separate detailed discussions about the opposing Axis and Allied maritime strategies off the coast of southern Africa, the wartime shipping quandaries experienced by the Union of South Africa, and the South African coastal defences. The Axis maritime operations in southern African waters, the so-called maritime intelligence war, and the extended anti-submarine war waged in these waters are equally integral to the discussion.

This dissertation aims to provide a critical, comprehensive analysis of the Axis and Allied maritime operations around the coast of southern Africa between 1939 and 1945. The study investigates this inclusive topic through the aforementioned research objectives. The study does not fall into the general ambit of a regimental, campaign or personal military history. Instead, it straddles the strata of war and offers fresh insights into an episode of the South African military history uncommonly investigated by contemporary military historians.

The dissertation finds that the Axis and Allied maritime operations off the southern African coast were complex in nature, especially regarding the several strategic, military and economic aspects that have always underpinned them. Moreover, in gaining an understanding of these complex operations, the study reveals the general interrelatedness between the rival Axis and Allied maritime strategies and operations around the southern African coast. Previous studies have failed to recognise this interrelatedness, and have instead offered a one-sided, compartmentalised discussion on single aspects associated with the maritime war waged off southern Africa. This study thus distances itself from previous academic and popular historiography on the subject. It offers, rather, a fresh, in-depth discussion underpinned by extensive archival research, access to previously classified material, and a wealth of secondary sources.

Opsomming

Die historiese fokus van die meerderheid akademiese en populêre werke wat handel oor die Suid-Afrikaanse deelname aan die Tweede Wêreldoorlog, is gefokus op die Unieverdedigingsmag se militêre operasies in Oos-Afrika, Noord-Afrika, Madagaskar en Italië. Hedendaags is daar 'n fokus om dié Suid-Afrikaanse deelname aan die oorlog eerder te bestudeer uit die oogpunt oor hóé die oorlog die samelewing beïnvloed het. Die impak van die oorlog op die Suid-Afrikaanse tuisfront, asook die maritieme oorlog wat tussen die Spilmagte en Geallieerdes rondom die suider-Afrikaanse kuslyn gewoed het, het historiese karige aandag van beide professionele en amateur historici ontlok. Dit is 'n onomkeerbare feit dat historici dié interafhanklikheid van die maritieme onveiligheid rondom die Suid-Afrikaanse kus vir gerieflikheidshalwe opsy gesit het.

Die allesomvattende aard van die maritieme oorlog wat rondom die suider-Afrikaanse kuslyn gewoed het gedurende die oorlog, is veel groter as wat die tradisionele historiese bronne voorgee. Dit is 'n feit dat die maritieme oorlog selde verstaan kan word sonder 'n gedetailleerde bespreking oor die Spilmagte en Geallieerdes se maritieme strategieë rondom suider-Afrika, die uitdagende probleme van die verskeping van goedere en die Suid-Afrikaanse kusverdedigingstelsel. Die Spilmagte se maritieme operasies in suider-Afrikaanse waters, die sogenaamde maritieme inligtingsoorlog, sowel as die uitgebreide anti-duikboot operasies in hierdie waters vorm ook 'n integrale deel van hierdie bespreking.

As gevolg hiervan is die doel van hierdie proefskrif om 'n kritiese, allesomvattende analise te bied ten opsigte van die Spilmagte en Geallieerdes se maritieme operasies rondom die suider-Afrikaanse kus tussen 1939 en 1945. Die proefskrif ondersoek die allesomvattende onderwerp deur die voorgenoemde navorsingsdoelwitte. Hierdie proefskrif val nie in die tradisionele bestek van 'n regiments-, veldtog- of selfs persoonlike geskiedenis nie. Inteendeel bied dit 'n nuwe analise oor 'n episode in die Suid-Afrikaanse krygsgeskiedenis wat selde deur kontemporêre krygshistorici ondersoek is.

Die proefskrif bevind dat die Spilmagte en Geallieerdes se maritieme operasies rondom die suider-Afrikaanse kus uiters kompleks was, veral rondom die verskeie strategiese, militêre en ekonomiese aspekte wat dit ondersteun het. Verder bevind die studie ook dat daar 'n definitiewe verwantskap was tussen die Spilmagte en Geallieerdes se maritieme strategieë en operasies rondom die suider-Afrikaanse kus. Die feit dat die meerderheid publikasies die verwantskap ignoreer, en eerder 'n eensydige, gekompartementaliseerde, bespreking en analise bied, bly kommerwekkend. Dié proefskrif distansieer homself dus van die voorheen gepubliseerde akademiese- en populêre geskiedskrywing oor die onderwerp. In stede daarvan bied dit 'n vars in-diepte ondersoek en bespreking, gestaaf deur uitgebreide argivale navorsing, toegang tot voorheen geklassifiseerde inligting, en 'n magdom sekondêre bronne.

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Abbreviations

A/B	Anti-Ship Booms
Adm	Admiral
A/S	Anti-Submarine
ASW	Anti-Submarine Warfare
ASWO	Africa Station War Order
A/T	Anti-Torpedo
BdU	<i>Befehlshaber der U-Boote</i>
BOT	Board of Trade
Capt	Captain
Cdr	Commander
C-in-C	Commander-in-Chief
CGS	Chief of the General Staff
CNIC	Cape Naval Intelligence Centre
Col	Colonel
CSAB	Combined Shipping Adjustment Board
DHQ	Defence Headquarters
DSO (N)	Defence Security Officer (Naval)
ERD	Enemy Reports Department
FAA	Fleet Air Arm
Flt Lt	Flight Lieutenant
Flt Off	Flight Officer
GAdm	Grand Admiral
GC&CS	Government Code and Cypher School
GOC	General Officer Commanding
HDA	Harbour Defence Asdic
HF/DF	High-Frequency/Direction Finding
HMAS	His/Her Majesty's Australian Ship
HMS	His/Her Majesty's Ship
HMSAS	His/Her Majesty's South African Ship
IJN	Imperial Japanese Navy

Lt	Lieutenant
Lt Cdr	Lieutenant Commander
Lt Gen	Lieutenant General
Maj	Major
Maj Gen	Major General
MI5	British Security Service
MI6	British Secret Intelligence Service
M/S	Minesweeping
MSCC	Merchant Shipping Control Committee
MWT	Ministry of War Transport
NCR	Naval Censorship Representative
OB	Ossewabrandwag
OID	Operational Intelligence Department
OKM	<i>Oberkommando der Marine</i>
RAdm	Rear Admiral
RAF	Royal Air Force
RN	Royal Navy
RNVR	Royal Naval Volunteer Reserve
RNVR (SA)	South African Division of the RNVR
RM	Royal Marines
SAAF	South African Air Force
SANF	South African Naval Forces
SANS	South African Naval Service
SAP	South African Police
SAPEX	South African Ports Allocation Executive
SAPO	South African Post Office
SAR&H	South African Department of Railways and Harbours
SDF	Seaward Defence Force
SIGINT	Signals Intelligence
SKL	<i>Seekriegsleitung</i>
SNO	Senior Naval Officer

SO	Staff Officer
SO (I)	Staff Officer Intelligence
Sqn/Sqns	Squadron/Squadrons
TBR	Torpedo Bomber/Reconnaissance
UDF	Union Defence Force
UK	United Kingdom
USA	United States of America
VAdm	Vice Admiral
Wg Cdr	Wing Commander
WSA	War Shipping Administration

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Introduction

1. Background

In recent years, the global maritime domain has grown in stature and in importance. This argument is expressed by editors Francois Vreÿ and Thomas Mandrup in their introduction to *Towards Good Order at Sea: African Experiences* (2015). This rise in prominence is particularly visible in the spheres of innovation, competition and knowledge, where the principal aim is to make more constructive naval use of the oceans. The outcome is the tendency for both traditional and new maritime powers to position themselves strategically to utilise the political, economic, and military potential of the vast oceans. The visible increase in cases of maritime insecurity is associated with this strategic positioning, especially due to the lucrative maritime offerings of commerce, information and resources. Moreover, the willingness or ability of littoral countries with large ungoverned maritime spaces to enforce maritime jurisdiction over these areas remains problematic. Amid the growing global maritime dynamics, Africa, and southern Africa in particular, faces unique problems in ensuring good order at sea.

Vreÿ and Mandrup further argue that the customary strategic outlook of Africa has been largely continental. African coastal states, have, by tradition, tended to neglect their oceans, maritime resources, naval forces, related affairs and other matters that culminate in creating a general state of maritime insecurity in African waters. As a result of this neglect, a general maritime deficit exists today. The shortfall is exacerbated by an observed lack of capacity of both naval forces and national legislative bodies to enforce jurisdiction over the territorial waters of coastal countries.¹

A somewhat similar state of maritime insecurity existed around the southern African coastline shortly before and during the Second World War. This distinct historical case of maritime insecurity was the result of the strategic location of the Union of South Africa astride major shipping lanes rounding the Cape of Good Hope. Its physical positioning was coupled with the general interwar apathy shown for all matters relating to naval and coastal defence, as well as the overreliance on Britain to secure the Union's territorial waters during hostilities. The Axis naval forces thereupon exploited the situation. They launched a series of naval operations with the explicit aim of disrupting merchant shipping traffic along the South African coast. They also sank sufficient Allied vessels in pursuit of the so-called war of tonnage.

The evident state of maritime insecurity has, however, received scant scholarly attention. What has been notably overlooked is the interrelatedness of the Axis and Allied maritime strategies employed in the waters off southern Africa. Concomitant

¹ F. Vreÿ and T. Mandrup, *Towards Good Order at Sea: African Experiences* (Stellenbosch: SUN MeDIA, 2015), p. 5. This sentiment is incidentally shared J. Black, *War in the New Century* (London: Continuum, 2001), pp. 86-90.

matters relating to said strategies include wartime shipping, coastal defences, naval operations, the naval intelligence war and anti-submarine warfare (ASW). An informed study regarding the maritime war off the South African coast thus remains wanting. Few historians and popular writers have been willing to engage with the wealth of primary archival material available on this particular subject in South Africa, the United Kingdom (UK), and further afield.

In *Rethinking Military History*, the renowned British historian Jeremy Black cautions the intrepid military historian to remain ever-aware of the marked distinction between air, land, and naval warfare. He argues, however, that the uniqueness of naval history requires it to be studied by taking the adjoining conflict on land and in the air into account. Despite Black's forewarning, contemporary naval histories, and particularly those focusing on the naval war off the southern African coast between 1939 and 1945, have generally fallen into the trap of isolating naval history to a mere tactical and operational study of the conflict at sea.² In South Africa, this isolationist approach is particularly evident, with the vast majority of historiographical works only addressing the operational level of the naval war.

Black further draws attention to the benefit of re-examining historical events, particularly when the military historian can reconcile a variety of primary and secondary sources on a subject. This allows the military historian the unique opportunity to reinterpret previous historical accounts, probe largely untapped primary archival sources, and provide a fresh analysis on crucial moments in military history.³ The unique occasion to do so has presented itself in this dissertation. This opportunity allows for a re-examination of the Axis and Allied maritime operations off the southern African coast during the Second World War. Black, citing Rory Muir's *Salamanca 1812*, highlights the unique undertaking created with this dissertation, particularly in addressing the research gap. Muir states:

... while the sources are plentiful, they do not always fit neatly together; indeed, they are riddled with contradictions, inconsistencies, gaps and uncertainty ... Normally the historian deals privately with these problems ... This method is inescapable in addressing a large, sweeping subject if the narrative is not to lose its momentum and the reader to miss the thread of the argument. However, it can also mislead the reader by suggesting that our understanding is far more securely based than is the case.⁴

² J. Black, *Rethinking Military History* (Abingdon: Routledge, 2004), pp. 22-23.

³ Black, *Rethinking Military History*, pp. 30-32.

⁴ Black, *Rethinking Military History*, p. 30.

2. Literature Review

A study of the historiography of the Axis and Allied maritime operations around southern Africa during the Second World War, requires a multidisciplinary approach. The discussion that follows initially addresses the historiographical works from a broad perspective, with a particular focus on sources dealing with the relevant aspects of naval strategy, the naval war, the course of the war, U-boats, intelligence and the war economy. The discussion then narrows its focus to include all the relevant source material specifically dealing with aspects correlating directly to Axis and Allied maritime operations in the South African sphere of influence during the war. These facets include interwar naval development, the naval war, coastal defences and intelligence, as well as general sources. What follows is a brief description of these varied historiographical works.

The historiography on naval strategy, in general, is vast. Several sources, however, deserve specific mention as they form the basis for an understanding of the Axis and Allied maritime strategies employed during the Second World War. These texts provide a detailed discussion on the evolution of naval strategic thought, and are recognised primers in the field of naval history and broader maritime studies. These works served as the foundation for the dissertation, particularly in forming a key understanding of naval strategy, naval warfare theory, the wartime application of seapower, as well as critical developments and moments in the naval sphere during the twentieth century. In this respect, the work of Julian Corbett, Paul Kennedy, Greg Kennedy, Alfred Mahan and Ernst King proved most insightful, especially from a strategic point of view.⁵

Several other works add to the ongoing discussion surrounding the evolution of strategic naval thought. Of particular interest to this dissertation were works that focused on the operational level of naval warfare, with a specific emphasis on the changing nature and extent of naval operations throughout history. The work of Wayne Hughes, Christopher McMahan and Douglas Peifer proved immensely valuable sources to consult in this regard, especially as to their varied discussions on the operational application of seapower.⁶ In addition, the works of Andrew Lambert, E.B. Potter and

⁵ J.S. Corbett, *Some Principles of Maritime Strategy* (London: Longmans Green, 1918); P.M. Kennedy, *The Rise and Fall of British Naval Mastery* (New York: Humanity Books, 1986); G. Kennedy, *Britain's War at Sea, 1914-1918: The war they thought and the war they fought* (Basingstoke: Routledge, 2016); G. Kennedy, *The Royal Navy and Imperial Defence, 1919-1945* (London: Routledge, 2008); A.T. Mahan, *Naval Strategy: Compared and Contrasted with the Principles and Practise of Military Operations on Land* (London: Sampson Low, Marston & Company, 1911); E.J. King, 'The Role of Sea Power in International Security' in *Proceedings of the Academy of Political Science*, 21(3), 1945, pp. 79-86.

⁶ W.P. Hughes, 'Naval Operations: A Close Look at the Operational Level of War at Sea' in *Naval War College Review*, 65(3), 2012, pp. 23-46; C.J. McMahan, 'Maritime Trade Warfare: A Strategy for the Twenty-First Century?' in *Naval War College Review*, 70(3) 2017, pp. 15-38; D.C Peifer, 'Maritime Commerce Warfare: The coercive response of the weak?' in *Naval War College Review*, 66(2), 2013, pp. 83-109.

Chester Nimitz, Geoffrey Till and Frank Uhlig also provide a strong sense of the changing nature of naval warfare and strategic thought.⁷ An article by P.A. Stemmet, 'Mahan se Teorie van Seemag',⁸ augments the above discussion from a South African perspective, by using Mahan's theory of seapower as a cursory lense to investigate the importance of the maritime trade routes traversing the Cape of Good Hope. Stemmet's analysis is, however, superficial at best. In addition, Francis Carroll's 'The First Shot was the Last Straw: The Sinking of the T.S.S. Athenia in September 1939 and British Naval Policy in the Second World War',⁹ give an insightful account of the changing nature of British naval policy and strategy on the eve of the outbreak of the Second World War. It is regrettable that these sources are largely general and add little to the discussion on the Axis and Allied maritime strategies employed in the waters off southern Africa during the war.

The strategic and historical importance of the maritime trade routes that round the Cape of Good Hope has received scant historiographical attention. There are, however, some sources of merit. An article by C.M. Meyer, 'From Spices to Oil: Sea Power and the Sea Routes around the Cape',¹⁰ discusses the strategic importance of the maritime trade routes around the Cape of Good Hope. The article primarily examines the post-war period, principally against the backdrop of the Cold War. Its contents are noteworthy, especially when read in tandem with B.H. Malyon's article entitled 'South African Shipping'.¹¹ Malyon gives an interesting account of the state of pre-war shipping in South Africa, especially regarding the strategic value of South African ports which allowed shipping to pass through. In addition, a few texts highlight the strategic importance of the Atlantic and Indian Oceans and Mediterranean during the war, which naturally had a bearing on the shipping situation in South African waters. The foremost authors that engaged with this topic include Rashid Khan, Richard Hammond, Joseph Roucek, Simon Ball, Warwick Dörning and R.W. Close.¹²

⁷ A.D. Lambert, *War at Sea in the Age of Sail* (London: Cassell, 2000); A.D. Lambert, *A Naval History of Great Britain* (London: Conway, 2002); A.D. Lambert, *Naval History 1850-Present* (Aldershot: Ashgate, 2007); E.B. Potter and C.W. Nimitz, *Sea Power, A Naval Power* (Englewood Cliffs: Prentice Hall, 1960); G. Till, *Seapower: A Guide for the Twenty-First Century* (Abingdon: Routledge, 2018); F. Uhlig, 'Fighting At and From the Sea: A Second Opinion' in *Naval War College Review*, 56(2), 2003, pp. 39-52.

⁸ P.A. Stemmet, 'Mahan se Teorie van Seemag' in *Militaria*, 21(3), 1991, pp. 35-40.

⁹ F.M. Carroll, 'The First Shot was the Last Straw: The Sinking of the T.S.S. Athenia in September 1939 and British Naval Policy in the Second World War' in *Diplomacy & Statecraft*, 20, 2009, pp. 403-413.

¹⁰ C.M. Meyer, 'From Spices to Oil: Sea Power and the Sea Routes around the Cape' in *Militaria*, 18(2), 1988, pp. 1-11.

¹¹ B.H. Malyon, 'South African Shipping' in *Journal of the Royal African Society*, 36(145), 1937, pp. 438-446.

¹² R.A. Khan, 'Strategic Role of the Indian Ocean During Second World War' in *Pakistan Horizon*, 35(2), 1989, pp. 39-50; R. Hammond, 'British Policy on Total Maritime Warfare and the Anti-Shipping Campaign in the Mediterranean, 1940-1944' in *The Journal of Strategic Studies*, 36(6), 2013, pp. 789-814; J.S. Roucek, 'The Geopolitics of the Mediterranean, I' in *The American Journal of Economics and Sociology*, 13(1), July 1953, pp. 347-354; J.S. Roucek, 'The Geopolitics of the Mediterranean, II' in *The American Journal of Economics and Sociology*, 13(1), October 1953, pp.

There are two official history series that deserve attention when discussing the general historiographical sources surrounding the naval war. The first is the three volumes of *The War at Sea*¹³ produced by Capt RN Stephen Roskill. Roskill was the erstwhile appointed historian of the Royal Navy, and author of the official histories on Britain's naval contribution to the Second World War. The first two volumes, 'The Defensive' and 'The Period of Balance', are most informative. They deal with the naval war fought in the Atlantic and Indian Oceans throughout 1941-1943, especially from a staunch British perspective. Roskill discusses the strategic direction of the British war effort, and most notably that of the British Admiralty regarding ASW at great length. As this naturally has a bearing on the South African approach to ASW during the war, these volumes remain an extremely valuable historical source. Roskill had unprecedented and unlimited access to both the official UK war records and the captured German naval records, which adds a certain depth to these works.

The second series was written by Stanley Woodburn Kirby, a former British army officer who saw service in both world wars. He formed part of a committee that produced five volumes entitled *The War against Japan*.¹⁴ The second volume of this series, 'India's Most Dangerous Hour' devotes an entire chapter to the Madagascar campaign. It thus contains a wealth of information on the limited Japanese submarine offensive in the Mozambican channel in June and July 1942.

Next to several South African sources pointed out supra, these volumes help to complete the narrative on the Axis and Allied maritime operations around the South African coast during the war. It is true that these sources are overtly British centric and principally considered with the Allied conduct of the war. They form, however, key texts for any study focusing on the maritime aspect of the Second World War. The two official histories are evidently supplemented by the comprehensive official German history series, *Germany and the Second World War*. The series is not yet completed, and is

71-86; S. Ball, *The Bitter Sea: The Struggle for Mastery in the Mediterranean, 1935-1949* (London: Harper, 2009); W.A. Dörning, 'The West and the Cape Sea Route' in *Militaria*, 9(3), 1979, pp. 46-52; R.W. Close, 'South Africa's Part in the War' in *World Affairs*, 106(3), 1943, pp. 184-187.

¹³ S.W. Roskill, *The War at Sea: Volume I – The Defensive* (London: HM Stationary Office, 1954); S.W. Roskill, *The War at Sea: Volume II – The Period of Balance* (London: HM Stationary Office, 1956); S.W. Roskill, *The War at Sea: Volume III – The Offensive (Part I)* (London: HM Stationary Office, 1960); S.W. Roskill, *The War at Sea: Volume III – The Offensive (Part II)* (London: HM Stationary Office, 1961).

¹⁴ S. Woodburn Kirby (et al.), *The War against Japan: The Loss of Singapore* (Vol. I) (London: H.M. Stationery Office, 1957); S. Woodburn Kirby (et al.), *The War against Japan: India's Most Dangerous Hour* (Vol. II) (London: H.M. Stationery Office, 1958); S. Woodburn Kirby (et al.), *The War against Japan: The Decisive Battles* (Vol. III) (London: H.M. Stationery Office, 1961); S. Woodburn Kirby (et al.), *The War against Japan: The Reconquest of Burma* (Vol. IV) (London: H.M. Stationery Office, 1965) and S. Woodburn Kirby (et al.), *The War against Japan: The Surrender of Japan* (Vol. V) (London: H.M. Stationery Office, 1969).

mainly available through on-demand prints. Nevertheless, its volumes allow for valuable grist on the nature and course of the German naval war.¹⁵

Two personal memoirs of great significance add to the historiography on the overall Axis naval strategy, as well as the nature and course of the war at sea. First and foremost is the personal memoir of *Großadmiral* Karl Dönitz, *Zehn Jahre und Zwanzig Tage*.¹⁶ The account offers an in-depth account of his experiences as the supreme commander of the U-boat Arm of the German Navy for the period 1939-1943, as well as of his later appointment as the commander of the German Navy from 1943 to 1945. This publication offers a unique perspective on the combined Axis naval strategy during the war, with an emphasis on German submarine operations. As the work deals with the operations around the coast of South Africa throughout the war, it is a precious source of consultation. Furthermore, the publication provides an invaluable insight into the combined German-Japanese naval strategy in the Southern Oceans. Dönitz's memoir remains one of the most important sources on the German submarine operations to date.

A second personal narrative is that of *Großadmiral* Erich Raeder, and is entitled *Grand Admiral: The Personal Memoirs of the Commander in Chief of the German Navy from 1935 until the final break with Hitler in 1943*.¹⁷ This text offers a valuable insight into the development of the Axis maritime strategy during the interwar period, as well as the initial operational deployments at the start of the Second World War. When read in conjunction with Dönitz's memoir, Raeder's work provides the researcher with a clear understanding of the strategic direction, command and control of the German

¹⁵ W. Deist *et al*, *Germany and the Second World War: Volume I: The Build-up of German Aggression* (Oxford: Clarendon, 1990); K.A. Maier *et al*, *Germany and the Second World War: Volume II: Germany's Initial Conquests in Europe* (Oxford: Clarendon, 1991); G. Schreiber *et al*, *Germany and the Second World War: Volume III: The Mediterranean, South-East Europe, and North Africa 1939–1942* (Oxford: Clarendon, 1995); H. Boog *et al*, *Germany and the Second World War: Volume IV: The Attack on the Soviet Union* (Oxford: Clarendon, 1998); B.R. Kroener *et al*, *Germany and the Second World War: Volume V/I: Organization and Mobilization of the German Sphere of Power: Wartime Administration, Economy, and Manpower Resources 1939–1941* (Oxford: Clarendon, 2000); B.R. Kroener *et al*, *Germany and the Second World War: Volume V/II: Organization and Mobilization of the German Sphere of Power: Wartime Administration, Economy, and Manpower Resources 1942–1944/5* (Oxford: Clarendon, 2003); H. Boog *et al*, *Germany and the Second World War: Volume VI: The Global War* (Oxford: Clarendon, 2001); H.Boog *et al*, *Germany and the Second World War: Volume VII: The Strategic Air War in Europe and the War in the West and East Asia 1943–1944/5* (Oxford: Clarendon, 2006); K. Frieser *et al*, *Germany and the Second World War: Volume VIII: The Eastern Front 1943-1944: The War in the East and on the Neighbouring Fronts* (Oxford: Clarendon, 2007); R. Blanke *et al*, *Germany and the Second World War: Volume IX/I: German Wartime Society 1939–1945: Politicization, Disintegration, and the Struggle for Survival* (Oxford: Clarendon, 2008); B. Chiari *et al*, *Germany and the Second World War: Volume IX/II: German Wartime Society 1939–1945: Exploitation, Interpretations, Exclusion* (Oxford: Clarendon, 2014).

¹⁶ K. Dönitz, *Zehn Jahre und Zwanzig Tage* (Bonn: Athenäum-Verlag Junker und Dünnhaupt, 1958). I consulted the R.H. Stevens English translation of the original book, published as K. Doenitz, *Memoirs: Ten Years and Twenty Days* (Boston: De Capo Press, 1997).

¹⁷ E.J.A. Raeder, *Grand Admiral: The Personal Memoirs of the Commander in Chief of the German Navy from 1935 until the final break with Hitler in 1943* (Boston: Da Capo, 2001).

Navy during the war. Keith Bird's *Erich Raeder: Admiral of the Third Reich* further supplements these works, by providing a more contemporary analysis of the key role that Erich Raeder played in the spheres of maritime strategy and naval operations during the first years of the Second World War¹⁸ Moreover, the two personal accounts offer somewhat of an in-depth explanation of the German decision to launch dedicated submarine offensives around the coast of South Africa, and are thus of great importance to this study.

Several general works on the subject of the naval war during the Second World War offer valuable insights into the submarine war, anti-submarine matters, merchant losses and, above all, naval strategy. The general sources consulted place the dissertation into the broad context of the Second World War. The texts consulted include works by amongst other Winston Churchill, Williamson Murray and Allan Millet, Andrew Stewart, Hew Strachan, Martin Thomas, Andrew Boyd, James Neidpath, Marc Milner and Ashley Jackson.¹⁹ The texts succeed in confirming concurrent military operations that influenced the course and conduct of the maritime war waged off the South African coast.

Of similar interest are several texts pertaining to the strategic importance of ocean convoys in hauling key logistical needs across the globe during the war. The significance of the convoys, as well as their vulnerability to Axis naval operations, are addressed in the works of John Slader, Kevin Smith, the US Navy Department, and Bernard Brodie amongst other.²⁰

The immense importance of signals intelligence and codebreaking during the war, especially regarding its relation to the conduct of the naval war and ASW in general, is also discussed by various authors. Even though these authors do not concentrate on the naval intelligence war waged in southern Africa specifically, the works of David Khan, Jürgen Rohwer, Donald Steury, Jock Gardner and Marcus Faulkner

¹⁸ K.W. Bird, *Erich Raeder: Admiral of the Third Reich* (Maryland: Naval Institute Press, 2013).

¹⁹ W.S. Churchill, *The Second World War, Vol. IV: The Hinge of Fate* (London: Cassell & Co, 1950); W. Murray and A.R. Millett, *A War to be Won: Fighting the Second World War* (Cambridge, Massachusetts: Harvard University Press, 2001); A. Stewart, *The First Victory: The Second World War and the East Africa Campaign* (London: Yale University Press, 2016); H. Strachan, *European Armies and the Conduct of War* (London: Routledge, 1993); M. Thomas, 'Imperial backwater or strategic outpost? The British takeover of Vichy Madagascar, 1942' in *The Historical Journal*, 39(4), 1996, pp. 1049-1074; A. Boyd, *The Royal Navy in Eastern Waters: Linchpin of Victory 1935-1942* (Maryland: Naval Institute Press, 2017); J. Neidpath, *The Singapore Naval Base and the Defence of Britain's Eastern Empire, 1919-1941* (Oxford: Clarendon Press, 1981); M. Milner, 'The battle of the Atlantic' in *Journal of Strategic Studies*, 13(1), 1990, pp. 45-66; A. Jackson, 'The Empire/Commonwealth and the Second World War' in *The Round Table*, 100(412), 2011, pp. 65-78.

²⁰ J. Slader, *The Fourth Service: Merchantmen at War 1939-45* (Wimborne Minster: New Guild, 1995); K. Smith, *Conflict over Convoys: Anglo-American Logistics Diplomacy in the Second World War* (Cambridge: Cambridge University Press, 1996); US Navy Department, *United States Naval Administration in World War II: History of Convoy and Routing* (Washington: Navy Department, 1945); B. Brodie, 'New Tactics in Naval Warfare' in *Foreign Affairs*, 24(2), 1946, pp. 210-223.

proved extremely insightful and served as a basis for understanding the complex realm of signals intelligence and codebreaking during the Second World War.²¹

A significant number of sources deal directly with the Axis U-boat operations during the war, and while not entirely concerned with the naval operations along the South African coast, provided useful material for research on the topic. The most important works consulted in this regard include those authored by Harold Busch, Holger Herwig, John Keegan, V.E. Tarrant, Theodore Savas, Bob Whinney, Karl Lautenschlager, Stephen Howarth and Derke Law, Eberhard Rossler, John and Chant Batchelor, Mochitsura Hashimoto, Harry Spong, Richard Osborne and Tom Grover, Malcom Llewellyn-Jones and Stephanie Cousineau.²² The above works, combined with the texts previously mentioned, offer a clear understanding of the Axis and Allied maritime operations during the war. The combination of the two groups of sources allows for an additional understanding of several strategic and operational factors that underpinned the maritime operations off the southern African coast.

The economic aspect of the war, particularly its relation to the Axis and Allied maritime operations around southern Africa, is of vital importance to this dissertation. The continued operation of the strategic maritime trade routes around the Cape of Good Hope had a direct correlation with both the Allied and South African war economies throughout the war. It has thus been necessary to consult a wide array of historiographical sources. The most prominent sources in this regard are authored by William Hancock and Margaret Gowing, Iain Johnston-White, Stephen Roskill, Richard

²¹ D. Khan, 'Codebreaking in World Wars I and II: The Major Successes and Failures, their Causes and their Effects' in *The Historical Journal*, 23(3), 1980, pp. 617-639; J. Rohwer, 'Signal Intelligence and World War II: The Unfolding Story' in *The Journal of Military History*, 63, 1999, pp. 939-951; D.P. Steury, 'Naval Intelligence, the Atlantic Campaign and the Sinking of the Bismarck: A Study in the Integration of Intelligence into the Conduct of Naval Warfare' in *Journal of Contemporary History*, 22(2), 1987, pp. 209-233; W.J.R. Gardner, *Decoding History: The Battle of the Atlantic and Ultra* (London: MacMillan Press, 1999); M. Faulkner, 'The Kriegsmarine, Signals Intelligence and the Development of the B-Dienst before the Second World War' in *Intelligence and National Security*, 25(4), pp. 521-546.

²² H. Busch, *U-Boats at War* (London: Putnam, 1955); H.H. Herwig, 'The Failure of German Sea Power, 1914-1945: Mahan, Tirpitz, and Raeder Reconsidered' in *The International History Review*, 10(1), 1988, pp. 68-105; J. Keegan, *Battle at Sea: From Man-of-War to Submarine* (London: Pimlico, 1988); V.E. Tarrant, *The U-boat Offensive 1914-1945* (London: Arms and Armour Press, 1989); T.P. Savas, *Silent Hunters: German U-Boat Commanders of World War II* (Maryland: Naval Institute Press, 2003); R. Whinney, *The U-Boat Peril: An Anti-Submarine Commander's War* (London: Arrow Books, 1989); K. Lautenschlager, 'The Submarine in Naval Warfare, 1901-2001' in *International Security*, 11(3), 1986-1987, pp. 94-140; S. Howarth and D. Law (eds.), *The Battle of the Atlantic 1939-1945: the 50th anniversary International Naval Conference* (University of Michigan: Greenhill, 1994); E. Rossler, *The U-boat: The Evolution and Technical History of German Submarines* (Maryland: Naval Institute Press, 1982); J. Batchelor and C.C. Batchelor, *The Complete Encyclopedia of Submarines 1578-2006* (Lisse: Rebo International, 2009); M. Hashimoto, *Sunk: The Story of the Japanese Submarine Fleet, 1942-1945* (London: Cassell & Co, 1954); H. Spong, R. Osborne and T. Grover, *Armed Merchant Cruisers 1878-1945* (Windsor: World Ship Society, 2017); M. Llewellyn-Jones, *The Royal Navy and Anti-Submarine Warfare, 1917-49* (London: Routledge, 2014); S. Cousineau, *Ruthless War: A Comparative Analysis of German and American "Unrestricted" Submarine Warfare in the Second World War*. Doctoral Thesis, University of Calgary, 2007.

Leighton and Robert Coakley, Charles Feinstein, Michael Postan, Arthur Lewis and H.S. Perry.²³

Additionally, there are several publications dealing with the African war economy and the broader aspects that affected it. The interrelatedness of the African war economies, particularly those countries in southern Africa reliant on the shipping passing through South African ports, highlights the importance of consulting this wide array of source material. The most relevant sources in this regard are those of Carolyn Brown, Judith Byfield, William Clarence-Smith, Raymond Dumett, Peter Henshaw, Milton Katz, Yolandi Albertyn, William Martin, Alfred Tembo and the Union Office of Census and Statistics.²⁴

The literature review next turns its attention to the narrower ambit of South Africa specific historiographical works. The sources of particular interest are those relating to the Axis and Allied maritime operations around the southern African coast during the war. These varied texts proved integral in the completion of this dissertation.

The first set of sources that deserve discussion relates to interwar naval development in South Africa. Those focussing on the establishment of the South African Naval Service (SANS), the Seward Defence Force (SDF) and the South African Naval Forces (SANF) were critical to the study. Three general articles are also noteworthy.

²³ W.K. Hancock and M.M. Gowing, *History of the Second World War – United Kingdom Civil Series: British War Economy* (London: Her Majesty's Stationary Office, 1949); I.E. Johnston-White, *The British Commonwealth and Victory in the Second World War* (London: Palgrave Macmillan, 2017); S.W. Roskill, *A Merchant Fleet in War 1939-1945* (London: Collins, 1962); R.M. Leighton and R.W. Coakley, *Global Logistics and Strategy, 1940-1943* (Washington: US Army Centre of Military History, 1995); C.H. Feinstein, *An Economic History of South Africa: Conquest, Discrimination, and Development* (Cambridge: Cambridge University Press, 2005); M.M. Postan, *History of the Second World War – United Kingdom Civil Series: British War Production* (London: Her Majesty's Stationary Office, 1952); W.A. Lewis, 'The Inter-Relations of Shipping Freights' in *Economica*, 8(29), 1941, pp. 52-76; H.S. Perry, 'The Wartime Merchant Fleet and Postwar Shipping Requirements' in *The American Economic Review*, 36(2), 1946, pp. 520-546.

²⁴ C.A. Brown, 'African Labor in the Making of World War II' in J.A. Byfield, C.A. Brown, T. Parsons, and A.A. Sikainga, (eds.), *Africa and World War II* (New York: Cambridge University Press, 2015), pp. 43-70; J.A. Byfield, 'Producing for the War' in J.A. Byfield, C.A. Brown, T. Parsons, and A.A. Sikainga, (eds.), *Africa and World War II* (New York: Cambridge University Press, 2015), pp. 24-42; W.G. Clarence-Smith, 'Africa's "Battle for Rubber" in the Second World War' in J.A. Byfield, C.A. Brown, T. Parsons, and A.A. Sikainga, (eds.), *Africa and World War II* (New York: Cambridge University Press, 2015), pp. 162-182; R. Dumett, 'Africa's Strategic Minerals During the Second World War' in *The Journal of African History*, 26(4), 1985, pp. 381-408; P.J. Henshaw, 'Britain, South Africa and the Sterling Area: Gold Production, Capital Investment and Agricultural Markets, 1931-1961' in *The Historical Journal*, 39(1), 1996, pp. 197-223; M. Katz, 'A Case Study in International Organisation' in *Harvard Business Review*, 25(1), 1946, pp. 1-20; Y. Albertyn, *Upsetting the Applecart: Government and Food Control in the Union of South Africa during World War II c. 1939-1948*. Master's Thesis, Stellenbosch University, 2014; W.G. Martin, 'The Making of an Industrial South Africa: Trade and Tariffs in the Interwar Period' in *The International Journal of African Historical Studies*, 23(1), 1991, pp. 59-85; A. Tembo, 'Rubber Production in Northern Rhodesia during the Second World War, 1942-1946' in *African Economic History*, 41, 2013, pp. 223-255; Union Office of Census and Statistics, *Official Yearbook of the Union of South Africa and of Basutoland, Bechuanaland Protectorate and Swaziland, No. 23, 1947* (Government Printer, Pretoria, 1948).

These works incidentally all appeared in the peer-reviewed South African Journal of Military Studies, *Scientia Militaria*. They are André Wessels' 'The South African Navy and its Predecessors, 1910-2010: A Century of Interaction with Commonwealth Navies',²⁵ as well as Thean Potgieter's 'Maritime Defence and the South African Navy to the Cancellation of the Simon's Town Agreement' and 'Guiding the Seafarers: The South African Hydrographic Office and the Contribution of the Three Proteas'.²⁶ Not one of these articles are underpinned by the rigorous trawling of the Department of Defence's Documentation Centre (DOD Archives) in Pretoria, South Africa, and are thus judged accordingly.

While these three works may have points worth merit, their discussion of the interwar naval developments in South Africa is negligible. In particular, they overlook the deteriorating Anglo-South African naval relations leading up to the formation of the SDF. Several interrelated matters concerning the development of a South African coastal defence system during this period are also omitted.

The publication of Johan Ellis' 'Oswald Pirow's Five-Year Plan for the Reorganisation of the Union Defence Force, 1933-1939',²⁷ provided some insights into the warped reorganisation of the Union Defence Force (UDF) under Oswald Pirow during the 1930s. The article, however, consults limited archival sources and only offers a superficial discussion of the intricacies surrounding the reorganisation of the UDF mainly from a naval point of view.

Prof Deon Visser[†], an erstwhile military historian at the Faculty of Military Science, published two articles between 2007 and 2008. The articles dealt with the reorganisation of the UDF during the interwar period, mainly from a naval point of view. The articles focussed on the so-called 'Erebus Scheme'. They go some way to highlight both the political and military intricacies at the foundation of interwar Anglo-South African naval relations. These articles, 'Anglo-South African Relations and the Erebus Scheme, 1936-1939' and 'Mutiny' on HMS Erebus, September 1939',²⁸ are a commendable source on the naval development in South Africa leading up to the war. They offer a more in-depth discussion than the occasional drum and trumpet approach of the works mentioned before.

²⁵ A. Wessels, 'The South African Navy and its Predecessors, 1910-2010: A Century of Interaction with Commonwealth Navies' in *Scientia Militaria*, 38(2), 2010, pp. 109-130.

²⁶ T.D. Potgieter, 'Maritime Defence and the South African Navy to the Cancellation of the Simon's Town Agreement' in *Scientia Militaria*, 30(2), 2000, pp. 159-182; T.D. Potgieter, 'Guiding the Seafarers: The South African Hydrographic Office and the Contribution of the Three Proteas' in *Scientia Militaria*, 40(3), 2012, pp. 147-176.

²⁷ J. Ellis, 'Oswald Pirow's Five-Year Plan for the Reorganisation of the Union Defence Force, 1933-1939' in *Scientia Militaria*, 30(2), 2000, pp. 221-234.

²⁸ G.E. Visser, 'Anglo-South African Relations and the Erebus Scheme, 1936-1939' in *Scientia Militaria*, 35(1), 2007, pp. 68-98; G.E. Visser, 'Mutiny' on HMS Erebus, September 1939' in *War & Society*, 27(1), 2008, pp. 59-77.

Several texts authored by Ian van der Waag also outdo the works discussed in the last few paragraphs on the interwar naval development in South Africa. His works include 'The Union Defence Force between the World Wars, 1919-1940',²⁹ 'The Thin Edge of the Wedge': Anglo-South African Relations, Dominion Nationalism and the Formation of the Seaward Defence Force in 1939-1940',³⁰ 'Smuts's Generals: Towards a First Portrait of the South African High Command, 1912-1948'³¹ and 'South African defence in the age of total war, 1900-1940'.³² These works provided useful subject matter, particularly on the developments of the SDF as well as South Africa's coastal defences. What sets Van der Waag's work apart is that it continuously engages with primary archival material located in both South Africa and the UK. He also brings to light a unique understanding of the formative years of the UDF.

The historiographical works relating explicitly to South Africa, were supplemented by Reginald Pound's *Evans of the Broke: A Biography of Admiral Lord Mountevans KCB, DSO, LLD*³³ Sereld Hay's *History of the R.N.V.R. South African Division*,³⁴ and Kenneth Dimpleby's *Hostilities Only*.³⁵

The quantity and quality of the military historical works produced on the South African participation in the Second World War drastically lag behind concurrent international historiographical trends. This is the argument of David Katz in his 2012 article 'A Case of Arrested Development: The Historiography Relating to South Africa's Participation in the Second World War'.³⁶ He maintains that the nadir in the writing up of the official history of South African participation in the war was ushered in when the Afrikaner Nationalist Party assumed power in 1948.³⁷

Despite this actuality, a number of official and semi-official histories on South Africa's participation in the Second World War did appear. The Union War Histories Section was tasked with writing the official histories. However, the section was closed down permanently in 1961 after the appearance of only three publications.³⁸ These

²⁹ I.J. Van der Waag, 'The Union Defence Force between the World Wars, 1919-1940' in *Scientia Militaria*, 30(2), 2000, pp. 183-219.

³⁰ I.J. Van der Waag, "'The Thin Edge of the Wedge': Anglo-South African Relations, Dominion Nationalism and the Formation of the Seaward Defence Force in 1939-1940' in *Contemporary British History*, 24(4), 2010, pp. 427-449.

³¹ I.J. Van der Waag, 'Smuts's Generals: Towards a First Portrait of the South African High Command, 1912-1948' in *War in History*, 18(1), 2011, pp. 33-61.

³² I.J. Van der Waag, 'South African defence in the age of total war, 1900-1940' in *Historia*, 60(1), 2015, pp. 129-155.

³³ R. Pound, *Evans of the Broke: A Biography of Admiral Lord Mountevans KCB, DSO, LLD* (London: Oxford University Press, 1963).

³⁴ S. Hay, *History of the R.N.V.R. South African Division* (Cape Town: Juta, 1920).

³⁵ K.G. Dimpleby, *Hostilities Only* (Cape Town: Unie-Volkspers, 1944).

³⁶ D.B. Katz, 'A Case of Arrested Development: The Historiography Relating to South Africa's Participation in the Second World War', *Scientia Militaria*, 40(3), 2012, pp. 280-317.

³⁷ Katz, 'A Case of Arrested Development', pp. 282-284.

³⁸ J. Grey, "'Standing Humbly in the Ante-Chambers of Clio': the Rise and Fall of Union War Histories", *Scientia Militaria* 30(2), 2000, pp. 260-264.

were: *Crisis in the Desert* (1952),³⁹ *The Sidi Rezegh Battles, 1941* (1957),⁴⁰ and *War in the Southern Oceans, 1939-1945* (1961).⁴¹ The latter is the first important work that warrants discussion. It was the first official narrative to be published on the SDF and SANF during the Second World War. *War in the Southern Oceans* primarily offers a large-scale operational study of both the Axis and Allied naval activities around southern Africa during the war. Its value is in its unrivalled account of the Axis maritime operations off the South African coast during the war. The book's greatest strength is, however, also its greatest weakness because its primary focus is on the German maritime operations.

Some concerns may be raised about *War in the Southern Oceans*. First, it fails to critically discuss the development of the Allied countermeasures around the South African coastline during the war. The combined operations aimed at combatting the maritime threat around the southern Africa coast are also offered as a mere *fait accompli*. Second, a detailed appreciation of the German intelligence networks in South Africa and Portuguese East Africa during the war is lacking, principally regarding the involvement of Axis agents in gathering naval intelligence in pursuit of the maritime war off the South African coast. Thirdly, the Union War Histories Section collected a wealth of primary archival material on the Axis and Allied maritime operations around the South African coast, yet only a fraction of this was used in the final publication of *War in the Southern Oceans*. There is thus a rich collection of mostly untapped primary archival material available to researchers willing to engage with the documentation.

From 1961 the recording of South Africa's war effort remained rather haphazard. This is because the Nationalist Government, as well as citizen force and ex-servicemen's associations, all at one point or other undertook projects aimed at resuscitating the memories of South Africa's participation in the Second World War. This led to the publication of a number of historiographical works, some of which are of dubious quality and often hagiographic in outlook.

There are also only a few revisionary type scholarly works that have re-examined certain aspects of South Africa's wartime history, despite the wealth of declassified primary archival documents available to researchers.⁴² Commander H.R. Gordon-Cumming wrote the first draft narrative of the *South African Naval Forces during the Second World War*, which was completed by December 1950. The manuscript was not published outright, and was instead archived at the DOD Archives. Nonetheless some of Gordon-Cumming's chapters were included in *War in the Southern Oceans*. Some of the most important works on the development of the SDF and SANF were, however, excluded from the publication. By December 1967 a shorter version of Gordon-Cumming's work, which he aptly titled *Brief History (Sea)*, appeared in *A Short History of*

³⁹ J. Agar-Hamilton and L. Turner, *Crisis in the Desert, May-June 1942* (Cape Town, 1952).

⁴⁰ J. Agar-Hamilton and L. Turner, *The Sidi Rezegh Battles, 1941* (Cape Town, 1957).

⁴¹ L. Turner, H. Gordon-Cumming and J. Betzler, *War in the Southern Oceans, 1939-1945* (Cape Town, 1961).

⁴² Katz, 'A Case of Arrested Development', pp. 284-287.

the SA Navy. This work was compiled by A.P. Burgers for the Directorate of Personnel at Naval Headquarters in Pretoria. During the 50 year celebration of the establishment of the South African Navy in 1972, a commemorative publication entitled *South Africa's Navy, The First Fifty Years* appeared was produced. It also contained extracts from Gordon-Cumming's *Brief History (Sea)*. In 1992, some of the unpublished chapters from Gordon-Cumming's narrative were collated by Mac Bisset and printed in a commemorative issue of the South African military journal *Militaria*.⁴³ This publication coincided with the 70th celebration of the founding of the SA Navy.

The Advisory Committee on Military History was formed in the late 1960s with the sole purpose of ensuring that the publication programme of the Union War Histories Section would continue.⁴⁴ Following initiatives from some veteran organisations, and run under the leadership of Neil Orpen, the primary aim of the Advisory Committee on Military History was to complete the history of South Africa's participation in the Second World War. Regrettably, the publications which emanated from this endeavour can at best be classified as semi-official histories. They lack original research and rely too heavily on the unpublished manuscripts of the Union War Histories Section. They therefore add very little to the general body of knowledge on South African participation in the war.⁴⁵ Nine volumes on the South African participation in the war did, moreover, appear between 1968 and 1982.⁴⁶ Jeffrey Grey[†] has however argued that "...these volumes were neither as rigorous, as sophisticated nor as authoritative as the three books produced by [the] Union War Histories."⁴⁷ These volumes are also only be deemed as semi-official histories, and though varying in quality, add to the historiography surrounding the South African participation in the war.

Of these nine volumes, only one contains some valuable material on the Axis and Allied maritime operations around the South African coast during the war. *South Africa at War: Military and Industrial Organization and Operations in connection with the conduct of the War, 1939-1945* includes discussions on the South African and Allied

⁴³ W.M. Bisset, 'Unpublished Chapters from the Official History of the SA Naval Forces during the Second World War' in *Scientia Militaria*, 1992, 22(1), p. v.

⁴⁴ I.J. van der Waag, 'Contested Histories: Official History and the South African Military in the Twentieth Century,' in J. Grey (ed), *The Last Word? Essays on Official History in the United States and British Commonwealth* (Westport: Praeger, 2003), pp. 36-41.

⁴⁵ Katz, 'A Case of Arrested Development', pp. 294-295, 308.

⁴⁶ N. Orpen, *East Africa and Abyssinian Campaigns* (Cape Town, 1968); J.A Brown, *Gathering of Eagles: The Campaigns of the South African Air Force* (Cape Town: Purnell, 1970); N. Orpen. *War in the Desert* (Cape Town: Purnell, 1971); J.A. Brown, *Eagles Strike: The Campaigns of the South African Air Force* (Cape Town: Purnell, 1974); N. Orpen, *Victory in Italy* (Cape Town: Purnell, 1975); H.J. Martin and N. Orpen, *Eagles Victorious: The Operations of the South African Forces over the Mediterranean and Europe, in Italy, the Balkans and the Aegean, and from Gibraltar and West Africa* (Cape Town: Purnell, 1977); H.J. Martin and N. Orpen, *South Africa at War: Military and Industrial Organization and Operations in Connection with the Conduct of the War, 1939-1945* (Cape Town, 1979); N. Orpen and H.J. Martin, *Salute the Sappers, Part 1* (Johannesburg: Sappers Association, 1981); N. Orpen and H.J. Martin, *Salute the Sappers, Part 2* (Johannesburg: Sappers Association, 1982).

⁴⁷ Grey, 'Standing Humbly in the Ante-Chambers of Clio', p. 26.

countermeasures that were established to combat the threat of the Axis maritime operations in the Southern Oceans. In the authors' acknowledgements, Orpen and Martin categorically state that "The official history of naval operations off the South African coast, *War in the Southern Oceans*, has been continuously consulted to correlate information... with the common aim of combating the destructive efforts of the enemy at sea."⁴⁸

Taking the above quotation into consideration, the general impression is that large tracts of the manuscript are a mere revision of material found in *War in the Southern Oceans*. The shortcomings of *War in the Southern Oceans* are thus perpetuated. In fact, at a cursory glance, it becomes rather apparent that the references in the chapters dealing with the Axis maritime operations around the southern African coast are all taken from *War in the Southern Oceans*. The strength of the publication is that it offers a description of the military and industrial organisation of the South African home front throughout the war. The secondary focus is on the Allied and Axis maritime operations around the coast of South Africa. While Orpen's and Martin's approach was anything but original, they did succeed in bringing together some missing aspects on the South African coastal defences and its development throughout the war. The 1991 publication of C.J. Harris' *War at Sea: South African Maritime Operations during World War II*,⁴⁹ which formed part of the poorly regarded Ashanti *South Africans at War* series, unfortunately added no new analysis of the maritime operations around the South African coast during the war. It remains nothing more than a poorly formulated propaganda piece.

It was only in 2008, at the behest of the Naval Heritage Trust of South Africa, that Gordon-Cummings' *Official History of the South African Naval Forces during the Second World War (1939-1945)*⁵⁰ was published in its entirety. The complete work, generally referred to as the 'long history', was a welcome addition to the historiography on the SANS, SDF and SANF, as well as their development throughout the Second World War. This publication naturally filled some of the historical gaps created by the *War in the Southern Oceans*, though the research and analysis surrounding it primarily date back to the late 1940s and early 1950s. The document therefore remains dated and should be interpreted as such.

Next to *War in the Southern Oceans*, Gordon Cummings' manuscript is one of the most complete historical works on the maritime war off southern Africa during the war. The manuscript provides an unrivalled discussion of the development of the South African coastal defences during the war, as well as the formation and expansion of both the SDF and SANF. While one cannot fault Gordon-Cumming's manuscript from a

⁴⁸ Martin and Orpen, *South Africa at War*, p. xiv.

⁴⁹ C.J. Harris, *War at Sea: South African Maritime Operations During World War II* (Johannesburg: Ashanti, 1991).

⁵⁰ H.R. Gordon-Cumming, *Official History of the South African Naval Forces during the Second World War (1939 - 1945)* (Simon's Town: Naval Heritage Trust South Africa, 2008).

historical point of view, the subsequent editorial process followed by the Naval Heritage Trust leaves a lot to be desired. The editors seemed to have accepted the manuscript as it was. The editors did not engage with the wealth of unpublished archival material available to researchers at the DOD Archives, thus missing the opportunity to enhance Gordon-Cummings' text.

Several other texts have supplemented the afore-mentioned sources on the naval war off southern Africa. The first worth mentioning is Wessels' 'South Africa and the War against Japan 1941-1945' and 'Die stryd teen Nippon: Suid-Afrika en Japan, 1941-1945'.⁵¹ While the former is the original article, the latter is a mere Afrikaans translation of the original. Wessels does, however, engage with an aspect of the South African war effort that has received limited interest. Neither of his articles, however, succeed in placing the limited Japanese submarine offensives of mid-1942 into the larger context of the total Axis maritime operations off southern Africa. The articles have also failed to engage with the wealth of primary archival material available at the DOD Archives.

In 2008 Jochen Mahncke published a book entitled *U-Boats & Spies in Southern Africa: Anecdotes, Legends, Stories*.⁵² Mahncke is an avid enthusiast and an amateur historian, and his book is far from a professional publication. He has taken recourse to a number of secondary sources while writing the manuscript, including *War in Southern Oceans*. His book is also riddled with historical inaccuracies and careless mistakes. As Mahncke's work is based on anecdotes, legends and stories, his book should thus be judged accordingly.

The author's own article, "Good Hunting': German Submarine Offensives and South African Countermeasures off the South African Coast during the Second World War, 1942-1945",⁵³ focussed on the German U-boat operations off the South African coast in particular. The article was made possible through the discovery of valuable primary archival material at the DOD Archives, and focusses on the larger Axis maritime operations in these waters. This article also formed the basis for a more in-depth study on the complex and varied nature of the Axis and Allied maritime operations off southern Africa, and has thus led to this dissertation.

Several general sources have supplemented the available information on the development and functioning of the South African coastal defences during the war. Each of these sources thus complemented the available information found in *War in Southern*

⁵¹ A. Wessels, 'South Africa and the War against Japan 1941-1945' in *Military History Journal*, 10(3), 1996. (<http://samilitaryhistory.org/vol103aw.html>); A. Wessels, 'Die stryd teen Nippon: Suid-Afrika en Japan, 1941-1945' in *Journal for Contemporary History*, 30(3), 2005, pp. 222-241.

⁵² J. Mahncke, *U-Boats & Spies in Southern Africa: Anecdotes, Legends, Stories* (Cape Town: New Voices, 2008).

⁵³ E.P. Kleynhans, "Good Hunting': German Submarine Offensives and South African Countermeasures off the South African Coast during the Second World War, 1942-1945' in *Scientia Militaria*, 44(1), 2016, pp. 168-189.

Oceans and Official History of the South African Naval Forces during the Second World War. In some instances, they have added a new layer of discussion on pertinent issues.

Other general sources deal with the wartime development of radar in South Africa and the work of Special Signal Services in helping to locate U-boats operational off the Union's coastline. The most noteworthy works are authored by Brian Austin, A.C. Brown, the Documentation Centre, Neville Gomm, Frank Hewitt, Geoffrey Mangin and Sheilah Lloyd, as well as N.A. Stott.⁵⁴

A number of sources also provide useful background information on the interwar development of coastal artillery and air forces in South Africa, especially Mac Bisset's 'Coast Artillery in South Africa'⁵⁵ and Tilman Dederling's 'Air Power in South Africa, 1914–1939'.⁵⁶ Any discussion on the wartime development of Saldanha as a safe anchorage for Allied vessels travelling along the extensive South African coast would be incomplete without three particular texts. They are Deon Visser and Fankie Monama's 'Black workers, typhoid fever and the construction of the Berg River – Saldanha military water pipeline, 1942 – 1943',⁵⁷ Jose Burman and Stephen Levin's *The Saldanha Bay Story*,⁵⁸ as well as Deon Visser, André Jacobs and Hennie Smit's 'Water for Saldanha: War as an Agent of Change'.⁵⁹

Next, it is of interest to the dissertation to mention a number of texts that fall into the category of intelligence histories. These publications naturally serve as a point of departure for any discussion on the influence of Axis and Allied intelligence communities on the submarine war around the coast of South Africa. They similarly look

⁵⁴ B.A. Austin, *Schonland: Scientist and Soldier: From lightning on the veld to nuclear power at Harwell: the life of Field Marshal Montgomery's scientific adviser* (Florida: CRC Press, 2001); B.A. Austin, 'The South African Corps of Scientists' in *Military History Journal*, 14(1), 2007. (<http://samilitaryhistory.org/vol141ba.html>); B.A. Austin, 'On the Development of Radar in South Africa and Its Use in the Second World War' in *The Radio Science Bulletin*, 358, 2016, pp. 69-81; A.C. Brown, *A History of Scientific Endeavour in South Africa* (Cape Town: Royal Society of South Africa, 1977); F.J. Jacobs *et al*, *South African Corps of Signals* (Pretoria: SAW Dokumentasiediens, 1975); N. Gomm, 'South Africa's Electronic Shield' in *Military History Journal*, 2(3), 1972. (<http://samilitaryhistory.org/vol023go.html>); F.J. Hewitt, 'South Africa's role in the development and use of Radar in World War II' in *Military History Journal*, 3(3), 1975. (<http://samilitaryhistory.org/vol033fh.html>); F.J. Hewitt, 'Basil Schonland: Memories of the man at work' in *South African Journal of Science*, 98, 2002, pp. 11-13; G. Mangin and S. Lloyd, 'The Special Signal Services (SSS) Shield' in *Military History Journal*, 11(2), 1998. (<http://samilitaryhistory.org/vol112ml.html>); N.A. Stott, 'South Africa's secret war: The war against enemy submarines, 1939-1945' in *Military History Journal*, 11(1), 1998. (<http://www.samilitaryhistory.org/vol111ns.html>).

⁵⁵ W.M. Bisset, 'Coast Artillery in South Africa' in Nöthling, C.J. (ed), *Ultima Ratio Regum* (Pretoria: SADF Military Information Bureau, 1987), pp. 333-357.

⁵⁶ T. Dederling, 'Air Power in South Africa, 1914–1939' in *Journal of Southern African Studies*, 41(3), 2015, pp. 451-465.

⁵⁷ G.E. Visser and F.L. Monama, 'Black workers, typhoid fever and the construction of the Berg River – Saldanha military water pipeline, 1942 – 1943' in *TD: The Journal for Transdisciplinary Research in Southern Africa*, 4(1), 2008, pp. 181-208.

⁵⁸ J. Burman and S. Levin, *The Saldanha Bay Story* (Cape Town: Human & Rousseau, 1974).

⁵⁹ G.E. Visser, A. Jacobs and H. Smit, 'Water for Saldanha: War as an Agent of Change' in *Historia*, 53(1), 2008, pp. 130-161.

at the role which right-wing Afrikaner movements played in sabotage attempts and eavesdropping. Regarding the British Intelligence Service and its role and activities during the war, the five volumes of *British Intelligence in the Second World War*⁶⁰ produced by Harry Hinsley and his colleagues, provide an in-depth account of the British intelligence service throughout the war. Hinsley worked at Bletchley Park during the war, at a senior level, on naval intelligence, and had very full access to the records. Volume four in particular provides valuable information on Anglo-South African cooperation with regard to intelligence gathering and distribution, as well as an analysis of the German intelligence presence and its inner workings in southern Africa. It is far more informative than some of the recent publications on the British intelligence services during the war, despite the fact that a wealth of classified documentation has been declassified since these volumes first appeared.

Several sources have supplemented Hinsley's work and provided a more detailed description on the intelligence network and organisation in South Africa during the war. The works are Ernst Malherbe's *Never a Dull Moment*,⁶¹ Andries Fokkens' *The Role and Application of the Union Defence Force in The Suppression Of Internal Unrest, 1912 – 1945* and 'Afrikaner Unrest within South Africa during the Second World War and the measures taken to suppress it',⁶² and M.C. van Deventer's 'Die Ontwikkeling van 'n Militêre Inligtingsvermoë Vir Die Unieverdedigingsmag, 1937-1943'.⁶³

The afore-mentioned intelligence histories are, however, extremely general, and do not readily engage with the maritime intelligence war waged in southern Africa during the war. In the 1976 publication of *OB: Traitors or Patriots?*, George Visser explores the intricacies of the German intelligence network active in southern Africa during the war.⁶⁴ This publication is commendable, as Visser, a veteran policeman, was personally involved in several of the investigations and operations aimed at apprehending the known Axis agents in the Union. Unfortunately, Visser was never privy to the complete extent of the Axis intelligence network, as is evidenced by his

⁶⁰ F.H. Hinsley *et al*, *British Intelligence in the Second World War, Volume 1: Its Influence on Strategy and Operations* (London: H.M. Stationery Office, 1979); F.H. Hinsley *et al*, *British Intelligence in the Second World War, Volume 2: Its Influence on Strategy and Operations* (London: H.M. Stationery Office, 1981); F.H. Hinsley *et al*, *British Intelligence in the Second World War, Volume 3 (Part 1): Its Influence on Strategy and Operations* (London: H.M. Stationery Office, 1984); F.H. Hinsley *et al*, *British Intelligence in the Second World War, Volume 3 (Part 2): Its Influence on Strategy and Operations* (London: H.M. Stationery Office, 1988); F.H. Hinsley *et al*, *British Intelligence in the Second World War, Volume 4: Security and Counter-Intelligence* (London: H.M. Stationery Office, 1990) and F.H. Hinsley *et al*, *British Intelligence in the Second World War, Volume 5: Strategic Deception* (London: H.M. Stationery Office, 1990).

⁶¹ E.G. Malherbe, *Never a Dull Moment* (Cape Town: Howard Timmins, 1981).

⁶² A.M. Fokkens, *The Role and Application of the Union Defence Force in The Suppression Of Internal Unrest, 1912 – 1945*. MMil Thesis, Stellenbosch University, 2006; A.M. Fokkens, 'Afrikaner Unrest within South Africa during the Second World War and the measures taken to suppress it' in *Journal for Contemporary History*, 37(2), 2012, pp. 123-142.

⁶³ M.C. Van Deventer, 'Die Ontwikkeling van 'n Militêre Inligtingsvermoë Vir Die Unieverdedigingsmag, 1937-1943' in *Militaria*, 25(2), 1995, pp. 86-103.

⁶⁴ G.C. Visser, *OB: Traitors or Patriots?* (Johannesburg: MacMillan, 1976).

inability to identify the real identities of several of the key Axis agents. This criticism may, however, be somewhat unfair considering that a wealth of British intelligence files have been declassified since the appearance of his manuscript.

Five peer-reviewed articles are then worth special mention. They are, Kent Fedorowich's 'German Espionage and British Counter-Intelligence in South Africa and Mozambique, 1939-1944',⁶⁵ Edward Harrison's 'On Secret Service for the Duce: Umberto Campini in Portuguese East Africa, 1941-1943' and 'British Radio Security and Intelligence, 1939-43',⁶⁶ Patrick Furlong's 'Allies at War? Britain and the 'Southern African Front' in the Second World War'⁶⁷ along with Keith Shear's 'Colonel Coetzee's War: Loyalty, Subversion and the South African Police, 1939-1945'.⁶⁸ These publications have proved instrumental in understanding the complex nature of the Allied counterintelligence organisations active in southern Africa. They have also drawn attention to the strained relationships and inter-service rivalry between these diverse organisations throughout the war. In addition, several of the articles discussed the counterintelligence operations during the war, particularly those that occurred in Portuguese East Africa. A reference to these works is vital for any study of the Axis and Allied intelligence networks in southern Africa during the war.

While the afore-mentioned intelligence histories all have their merits, they suffer from one common flaw. None of these authors gained access to the Ossewabrandwag (OB) Archives situated at the North-West University (NWU) in Potchefstroom, South Africa. They did thus not succeed in engaging with the wealth of primary archival material available on the Axis espionage network in South Africa. It does need to be mentioned that the OB documents are all in Afrikaans, and that, even if granted access, researchers from abroad would struggle with the language barrier.

Several sources, mainly written in Afrikaans and of South African origin, have, however, proved instrumental while researching the Axis espionage networks active in southern Africa. They include the work of Lindie Koorts, Christoph Marx, Hans Strydom, Bob Moore, Will and Marietjie Radley, Hans Rooseboom, Hans Van Rensburg and Piet van der Schyff.⁶⁹

⁶⁵ E.K. Fedorowich, 'German Espionage and British Counter-Intelligence in South Africa and Mozambique, 1939-1944' in *The History Journal*, 48(1), 2005, pp. 209-230.

⁶⁶ E.D.R Harrison, 'On Secret Service for the Duce: Umberto Campini in Portuguese East Africa, 1941-1943' in *The English Historical Review*, 122(499), 2007, pp. 1318-1349; E.D.R. Harrison, 'British Radio Security and Intelligence, 1939-43' in *The English Historical Review*, 124(506), 2009, pp. 53-93.

⁶⁷ P. Furlong, 'Allies at War? Britain and the 'Southern African Front' in the Second World War' in *South African Historical Journal*, 54(1), 2009, pp. 16-29.

⁶⁸ Shear, K., 'Colonel Coetzee's War: Loyalty, Subversion and the South African Police, 1939-1945' in *South African Historical Journal*, 65(2), 2013, pp. 222-248.

⁶⁹ L. Koorts, *DF Malan and the Rise of Afrikaner Nationalism* (Cape Town: Tafelberg Publishers, 2014); C. Marx, *Oxwagon Sentinel: Radical Afrikaner Nationalism and the History of the Ossewabrandwag* (Pretoria: Unisa Press, 2008); C. Marx, 'Dear Listeners in South Africa': German

Unfortunately, a certain gatekeeper mentality remained prevalent amongst the staff at the OB Archive regarding access to some of the available archival material. This gatekeeper mentality remained in place until very recently, and naturally affected contemporary research into the organisation. It is unfortunate that some embargoes restricting access to certain documentation at the OB Archive meant that even the aforementioned works did not provide an accurate historical account. The lifting of these embargoes a few years ago means that the record on the nature and extent of the Axis espionage networks in southern Africa can finally be set straight. The same can be said for the principal role that the OB played in supporting this network during the war.

Finally, a few general works on the South African participation in the Second World War have been integral in complementing the previously discussed sources. These publications have proved especially valuable in qualifying certain facts and providing valuable military historical background material to supplement primary archival material. The first of these works is the 2015 publication of Ian van der Waag's *A Military History of Modern South Africa*.⁷⁰ This publication offers an in-depth analysis of the military history of South Africa during the twentieth century. It concurrently offers an unrivalled discussion on the interwar military developments in South Africa. Van der Waag's discussion on the naval and coastal developments within the Union shortly before and during the war is equally commendable. The scope of his work is, however, particularly large, with the concomitant result that he fails to investigate certain prevalent issues relating to this dissertation.

Two separate works by Fankie Monama have also proved useful. Both 'South African Propaganda Agencies and the Battle for Public Opinion during the Second World War, 1939-1945' and *Wartime Propaganda in the Union of South Africa, 1939-1945*,⁷¹ provide a detailed discussion on the propaganda aspect of the South African war effort. As this formed an important aspect of the naval intelligence war off southern Africa, these works supplemented the primary archival material consulted in this regard.

Propaganda Broadcasts to South Africa, 1940 -1941' in *South African Historical Journal*, 27(1), 1992, pp. 148-172; H. Strydom, *Vir Volk en Führer: Robey Leibbrandt & Operation Weissdorn* (Cape Town: Jonathan Ball, 1983); B. Moore, 'Unwanted Guests in Troubled Times: German Prisoners of War in the Union of South Africa, 1942-1943' in *The Journal of Military History*, 70(1), 2006, pp. 63-90; W. Radley and M. Radley, *Twee Poorte: Oorlogservaringe van Twee Suid-Afrikaners Gedurende die Tweede Wêreldoorlog* (Unpublished Manuscript, 1979); H. Rooseboom, *Die Oorlog Trap My Vas* (Johannesburg: Voortrekkerpers, 1940); J.F.J. Van Rensburg, *Their Paths Crossed Mine: Memoirs of the Commandant-General of the Ossewa-Brandwag* (South Africa: Central News Agency, 1956); P.F. Van der Schyff, *Die Ossewa-Brandwag en die Tweede Wêreldoorlog* (Potchefstroom: PU vir CHO, 1983); P.F. Van der Schyff, *Geskiedenis van die Ossewa-Brandwag* (Potchefstroom: PU vir CHO, 1984).

⁷⁰ I.J. Van der Waag, *A Military History of Modern South Africa* (Cape Town: Jonathan Ball, 2015).

⁷¹ F.L. Monama, 'South African Propaganda Agencies and the Battle for Public Opinion during the Second World War, 1939-1945' in *Scientia Militaria*, 44(1), 2016, pp. 145-167; F.L. Monama, *Wartime Propaganda in the Union of South Africa, 1939-1945*. PhD Thesis, Stellenbosch University, 2014.

The last works worth mentioning are several contemporary South African academic works. Despite not focussing on the maritime war off the South African coast specifically, they have influenced the dissertation at one time or another. They are, David Katz' *Sidi Rezegh and Tobruk: Two South African Military Disasters Revisited* and *South Africans versus Rommel: The Untold Story of the Desert War in World War II*,⁷² Tony Garcia's *Manoeuvre warfare in the South African campaign in German South West Africa during the First World War*,⁷³ and Karen Horn's *South African prisoner-of-war experience during and after World War II: 1939 – c.1950*.⁷⁴

It is evident from the above discussion that there has been no recent analysis of the Axis maritime operations off the South African coast during the Second World War, or for that matter, of the Allied response to this threat. This void in the historiography has persisted despite the wealth of primary archival material that is available in both South Africa and the UK. Moreover, the majority of the publications discussed supra are dated, and in several cases remain the objects of political interference. As a result, the texts have their natural limitations. These have left large historical gaps in the historiography of the South African involvement in the war, as well as the Axis and Allied maritime operations around the Union's coastline.

To conclude the literature review, it needs to be mentioned that there are no MA or PhD studies focussing on this specific subject. This study thus aims to fill the identifiable gap in the historiography surrounding the maritime war off southern Africa during the Second World War.

3. Research Aim and Chapter Structure

This study provides a critical, comprehensive analysis of the Axis and Allied maritime operations around Southern Africa between 1939 and 1945. The dissertation investigates this broad topic in terms of the research objectives outlined below and straddles the strata of war by offering fresh insights into an episode of South African military history which has heretofore received little scholarly attention. The dissertation furthermore distances itself from the majority of previous academic and popular works on the subject discussed supra. It offers a fresh, in-depth discussion based on extensive archival research supplemented by a wealth of secondary sources.

To achieve its primary aim, the study has the following secondary objectives. The narrative, constructed over five chapters, focusses on specific aspects of the maritime war waged off the South African coast during the war. The **first chapter** discusses the

⁷² D.B. Katz, *Sidi Rezegh and Tobruk: Two South African Military Disasters Revisited, 1941-1942*. MMil Thesis, Stellenbosch University, 2014; D.B. Katz, *South Africans versus Rommel: The Untold Story of the Desert War in World War II* (Maryland: Stackpole, 2017).

⁷³ A. Garcia, *Manoeuvre warfare in the South African campaign in German South West Africa during the First World War*. MA Thesis, University of South Africa, 2015.

⁷⁴ K. Horn, *South African prisoner-of-war experience during and after World War II: 1939 – c.1950*. PhD Thesis, Stellenbosch University, 2012.

Axis and Allied maritime strategies off the South African coast. The general aspects of naval warfare theory and the foundation of a maritime strategy thus receives specific attention. The British and German naval war plans, however, are evaluated to determine their influence on the rival naval strategies and naval operations in the Southern Oceans. The chapter then focusses on South African wartime shipping dilemmas, especially how they influenced the South African war effort. The final discussion of chapter one is on the strategic importance of South African harbours during the war, paying particular attention to the control, victualling and repair of merchant and naval vessels that visited the Union ports between 1939 and 1945.

The **second chapter** concentrates on the development of the South African coastal defence system between 1933 and 1945. The chapter first investigates the establishment of South Africa's coastal and naval defences during the interwar period, especially against the backdrop of economic rationalisation and Imperial defence. The chapter then discusses the creation of the Seaward Defence Force (SDF), while drawing attention to the somewhat tense Anglo-South African naval relations at the outbreak of the war. The chapter concludes with a lengthy discussion focusing on the development of a comprehensive South African coastal defence system during the war years.

The **third chapter** deals exclusively with the maritime operations of the Axis raiders, mines and submarines off the South African coast during the war. The chapter first investigates the operational successes of the Axis raiders and mines between 1939 and 1942. It then discusses the limited Japanese submarine operations in the Mozambican Channel during 1942 against the background of the strategic German-Japanese Naval cooperation in the western Indian Ocean during the war. A detailed evaluation, from a strategic and operational point of view, of the Axis submarine operations in South African waters concludes the chapter. The sustained U-boat operations from 1942 to 1943 are subsequently deliberated on.

The **fourth chapter** discusses the maritime intelligence war waged in southern Africa during the Second World War. The section commences with an investigation of the instances of sabotage and subversion within the naval sphere in South Africa during the war. It also addresses the initial operational contacts established between the Ossewabrandwag and Germany during the first years of the war. The chapter next focusses on the role, functioning and effectiveness of the FELIX Organisation in southern Africa during the war, with a slant towards its contribution to the gathering and distribution of maritime intelligence to Germany. The culmination of this section investigates the purpose, organisation and success of the Cape Naval Intelligence Centre in southern Africa, with a specific emphasis placed on the operations of each of its core sections – tracking, operational intelligence, security and naval press relations and censorship.

The dissertation concludes with a **fifth chapter**, which focusses on the anti-submarine war off southern Africa between 1942 and 1944. Specific attention is paid to the evolution of ASW in South African waters. A comparison is drawn between the ASW measures put in place before the commencement of the main U-boat offensive in October 1942, and those in force during 1944 when the U-boat offensives ceased altogether. The chapter draws to a close with an evaluation of the effectiveness of the ASW off the South African coast by discussing the sinking of three German submarines between 1942 and 1944. These sinkings reflect positively on the improvements made with regards to ASW in these waters throughout the period concerned.

4. Research Methodology

This is a narrative, qualitative study, with extensive archival research underpinning the dissertation. The DOD Archives, situated in Pretoria, South Africa, serves as the primary point of departure. The archival sources located in this repository are abundant, with several archival groups having been consulted during the course of the research phase. The following groups form the foundation of the study: the Commander Fortress Air Defences (CFAD), Chief of the General Staff (CGS), Chief of the General Staff (War) (CGS War), Commander Seaward Defences (CSD), Diverse (Group 1), Secretary for Defence (DC), South African Air Force War Diaries (SAAF War Diaries) and the Union War Histories (Civil) (UWH Civil). The wealth of primary archival material in these groups that have previously been forgotten and disregarded has been of particular assistance. The DOD Archives have also yielded some photographs and maps which supplemented the primary material and added another dimension to the study.

The UWH Civil group, in particular, proved extremely important to this study, as a wealth of captured and translated Axis documents are found in this archival group. The primary captured documents are of German and Italian origin and are mainly concerned with the conduct of the war in the Western Desert. There are, however, a number of key documents concerned with the Axis conduct of the naval war, which includes: high-level strategic documents concerned with the naval war, personal reminiscences of individual U-boat commanders, operational orders and war diaries of U-boats and raiders, as well as post-war correspondence with former U-boat captains as well as naval staff officers. Unfortunately, the author cannot read the available German or Japanese sources. Fortunately, access to the range of archival material in the UWH Civil group, especially the translated diaries and memoirs of U-boat commanders, offsets this limitation.

The primary sources located at the National Archives of the United Kingdom (TNA), located in Kew, London, supplemented the South African material throughout, and at several times even surpassed them in addressing several aspects of the maritime war waged off the southern African coast during the Second World War. Publications that have added immense value to this dissertation include the Records of the Admiralty

(ADM), Records of the Cabinet Office (CAB), Records of the War Office (WO), Records of the Security Services (KV2/3) and the Records of the Air Ministry, the Royal Air Force, and related bodies (AIR).

The lesser-known OB Archive has also proved immensely valuable. It forms part of the archival collections of the Records, Archives and Museums (RAM) Division at NWU, located in Potchefstroom, South Africa. The collection hosts a wealth of primary material relating to the maritime intelligence war waged off the South African coast. The primary material in this archive offered several new insights into the nature and extent of contacts that existed between the OB and Germany during the war – mainly as to its relation to the naval war waged off South Africa. Of particular value was the related correspondence and audio archival material, which had not been cited before due to the observed gatekeeper mentality. This archive also revealed several photographs of known Axis agents, which have not been in public circulation.

Where the primary sources in the afore-mentioned archives are abundant, secondary sources dealing specifically with the Axis and Allied maritime operations off the South African coast during the war are in short supply. While a number of publications appeared on the South African contribution to the Second World War, very few of these publications readily discuss the all-encompassing nature, course and extent of both the Axis and Allied maritime threat off the South African coast during the war. It was thus necessary to consult the broader field of available academic and popular secondary sources on the Second World War to probe the relevant information referred to in the literature review. The primary archival material thus supplemented these secondary sources. In doing so, it allowed for a better understanding of several pertinent issues relating to the dissertation. In order to ensure uniformity throughout the study, the author sketched all the maps included in the dissertation.

5. Acknowledgements

I am greatly indebted to the professional and academic support that I have received from Prof Ian van der Waag and Dr Kent Fedorowich, my supervisor and co-supervisor respectively. Ian, a Professor of Military History and Chair of the School for Security and Africa Studies in the Faculty of Military Science, Stellenbosch University, has journeyed with me since the inception of this project in 2015. He assisted me in shaping my thoughts around the topic, especially for the initial proposal. He has also provided constant support and encouragement during the completion of this endeavour. Ian is the foremost military historian in southern Africa, and it is an honour to be associated with him as my supervisor, mentor and friend.

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While working as a military historian at the DOD Archives, I met fellow historian Will Gordon. Will is currently a teacher at Midstream College, where he teaches history and geography. Since then, we have forged a strong friendship. Will has always been willing to listen to my rants, enquire about my progress, and provide guidance when I needed it most. Over the past few years, we have regularly exchanged ideas about our dissertations, often over a scrumptious breakfast, or next to a fire with a glass of whisky in hand. Thank you for your friendship, I am grateful that our paths have crossed.

Tony Garcia, a former officer in the defence force, who now resides in New York, also journeyed with me during the completion of the dissertation. Tony has consistently enquired about my progress and provided kind words of encouragement. Tony and I share a keen interest in the initial South African operational deployments during the First World War. We have also had regular academic exchanges on the subject matter of

military history throughout the years. I am thankful for our continued friendship despite the distance between us.

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Several librarians and archivists have provided invaluable assistance during the course of my research. Gerald Prinsloo, the photographic archivist at the DOD Archives, provided several photographs for the dissertation, and readily assisted me during each of my research visits to the archives. Gerald is not only incredibly knowledgeable, he has always been kind in exchanging academic ideas and trawling the archives with researchers in the pursuit of knowledge.

Maryna Rankin is the digital archivist of the RAM Division at NWU, and has kindly facilitated my access to several photographs, audio interviews and accompanying transcripts. Her professional approach greatly aided my research into the Ossewabrandwag. I was able to gain access to a wealth of primary archival material from The National Archives (TNA) of the United Kingdom through Anne Samson, who tirelessly photographed hundreds of files crucial to completing this dissertation. Without Anne's assistance, this dissertation would have been impossible to complete.

Finally, I would like to thank Ilzé Cloete, a former librarian at the Ditsong Museum of Military History in Johannesburg. Ilzé kindly provided me with a wealth of photographic material relating to the naval war off the South African coast during the Second World War. These photos proved invaluable since they have never before appeared in the public domain. I must note, however, that the research support that I received from the staff at the South African Naval Museum in Simon's Town, South Africa remained wanting; I still await a reply from them about a query submitted two years ago.

I dedicate this dissertation to Marit Helen Kleynhans, the bravest woman I know. I am grateful for your continued love and unfailing interest in my research topic. Thank you for having faith in my dream from day one. You are one of a few individuals in the world who has an intimate, and at times unhealthy, knowledge of the Axis and Allied maritime operations around the South African coast during the Second World War. You are my pillar of support, and above all, my best friend.

Militibus Memoria

Chapter 1

The Axis and Allied maritime strategies off the southern African coast, 1939-1945

Introduction

Maritime trade routes passing along the South African coastline has historically always been considered of immense importance. During the Second World War, the strategic significance of these maritime trade routes was heightened due to a considerable increase in the volume of merchant and naval shipping rounding the Cape of Good Hope. As a result, large numbers of merchant and naval vessels called at South African harbours. The continued operation of the trade routes and harbours along the South African coastline was crucial to the overall Allied war effort, especially in terms of linking key operational theatres with one another and ensuring the continued throughput of vital supplies – such as oil from the Middle East. Moreover, the function of the South African war economy also depended on the trade routes as the country relied heavily on imports from and to British, American and Commonwealth markets. From the outbreak of the war, the threat of Axis maritime operations in South African waters remained constant. Naval operations further afield, however, also had a detrimental effect on the South African and Allied shipping programmes.

This chapter has four objectives, which form the basis for understanding the Axis and Allied maritime strategies off the southern African coast during the war. The first objective is to briefly discuss naval warfare theory and the foundation of maritime strategy. The second facet is an analysis of the British and German naval war plans and their influence on naval strategy and operations in the Southern Oceans. Thirdly, South African wartime shipping problems during the war, and how they influenced the South African war effort will be evaluated. The final objective is to discuss the strategic importance of the South African harbours during the war, with a particular focus on the control, victualling and repair of all merchant and naval vessels within its ports.

1.1 Naval warfare theory and the constructs of maritime strategy

A maritime strategy revolves around the principles which govern the conduct of war at sea.⁷⁵ The primary aim of any maritime strategy is to realise and preserve command at sea, where the ability to make full use of the sea waters and deny the enemy access, is of utmost importance. A secondary aim of maritime strategy is to create zones of maritime control across the globe during times of war. A maritime zone of control allows for the safe passage of commercial and military shipping. Such zones further restrict the enemy

⁷⁵ Corbett, *Some Principles of Maritime Strategy*, p. 11. Also see Kennedy, *Britain's War at Sea, 1914-1918*; Kennedy, *The Royal Navy and Imperial Defence, 1919-1945*; Lambert, *War at Sea in the Age of Sail*; Lambert, *A Naval History of Great Britain*; Lambert, *Naval History 1850-Present*; Potter and Nimitz, *Sea Power, A Naval Power*; Till, *Seapower: A Guide for the Twenty-First Century*.

from using this same area for its sea communications. Complete dominion over such zones is, however, rarely established. In fact, control instead remains disputed as sporadic attacks and incursions form a constant threat. The uses of command at sea are varied but are primarily either offensive or defensive in nature. The naval theorist Alfred Mahan suggests six principles that influence the maritime strategy of a seapower. These are geographical position, physical conformation, the extent of territory, the population size, the national character, and the character of the government.⁷⁶

Stephen Roskill, the erstwhile historian of the Royal Navy (RN), and author of the official histories on Britain's naval contribution to the Second World War, further suggests that maritime power rests on the possession of three essential elements. These facets – strength, security and transport – must be ever-present for the successful fulfilment of a nation's maritime strategy. The strength element comprises all the different instruments of war which work on or beneath the surface of the sea or in the air. Maritime control greatly depends on the tenacity and availability of such naval and air forces. The security factor relates to the possession and safety of the bases from which all the instruments of maritime power must work. If bases are lacking or inadequately defended, the ships and aircraft cannot fulfil their functions. The transport element predominantly pertains to the Merchant Navy. An adequate Merchant Navy is able to feed the home population, carry exports from overseas, and transport armies to various theatres. The support of the Merchant Navy is crucial, especially regarding a competent shipbuilding and ship-repair industry which enables the replacement of losses and repair of damaged ships.⁷⁷

Historically there are six principal methods identified for the use of naval forces in war. First, the defence of coasts and harbours has been the concern of armies and air forces. Local naval forces, such as small craft, submarines and minefields, can act in a mutually supportive role to defend coasts and harbours. Second, maritime power projection entails all offensive operations from across the sea. This projection can include aerial and offshore bombardments, amphibious raids ashore, and fully-fledged invasions. Strong navies normally conduct such operations against weaker navies, often along sparsely defended coasts. Third, the fleet-in-being principally requires a substantial naval presence in a strategically located area to inhibit the successful deployment of a more powerful naval power.

The fourth method concerns the fleet battle, where the aim is to gain command of the sea. It thus involves the defeat or destruction of the enemy's principal naval force at sea. After a successful fleet battle, friendly naval forces can redeploy to new operational areas to help destroy the enemy's weaker warships or to capture, blockade

⁷⁶ Brodie, 'New Tactics in Naval Warfare', pp. 210-211; Herwig, 'The Failure of German Sea Power, 1914-1945', p. 70. Also see King, 'The Role of Sea Power in International Security', pp. 79-80; Stemmet, 'Mahan se Teorie van Seemag', pp. 35-37.

⁷⁷ Steury, 'Naval Intelligence, the Atlantic Campaign and the Sinking of the Bismarck', pp. 209-210; Roskill, *The War at Sea: Volume I – The Defensive*, pp. 6-7.

and destroy other military and commercial shipping. Fifth, stronger fleets often employ military blockades to confine weaker fleets to port. Blockades succeed in achieving what successful fleet battles fail to do.

The last point is of significant importance to this study. It typically involves the weaker sea power taking recourse to commerce raiding in wartime.⁷⁸ Also known as *guerre de course*, maritime commerce warfare has the explicit objective of frustrating the enemy by destroying or capturing its commercial shipping during the war. Commerce raiding is, however, decidedly opportunistic, and is considered the indecisive strategy of the weak in contemporary naval theory. Against this theoretical backdrop, blockade and interdiction regularly underpin maritime coercion. This is the case where larger states have more powerful naval forces to employ during periods of war. Accordingly, weaker nations accept their naval inferiority, with the caveat, however, that their navies are still strong enough to provide certain offensive options during the war period. Commerce raiding winds up being their natural response to blockade and interdiction, though it has no history of success – but only of distraction and damage.⁷⁹

1.2 Rival maritime strategies off the South African coast – a question of shipping?

On 6 September 1939, the Union of South Africa became an active participant in the Second World War when it joined the Allied cause and declared war on Germany. South Africa's strategic position regarding geographical location would be a key determinant of both the Axis and Allied maritime strategies throughout the war.

The waters off the Cape of Good Hope, which formed a critical maritime nodal point, became a vital link in the main Allied supply routes to and from the Middle East, the Indian Subcontinent and the Far East.⁸⁰ Although geographically removed from the main area of naval operations in the North Atlantic, South Africa had to contend with a great increase to the usual sea traffic that flowed through its ports. South Africa also had to ensure the safe passage of all friendly shipping travelling along its coastline, and safeguard shipping that visited its ports. At that point in time, the South African coastline stretched from the mouth of the Kunene River on the Atlantic Ocean to Kosi Bay on the Indian Ocean. Thean Potgieter, a South African naval historian, came to the conclusion that the Cape of Good Hope was the real centre of the British Empire until perhaps the 1870s (see Map 1.1). This is because it was equidistant from Australia,

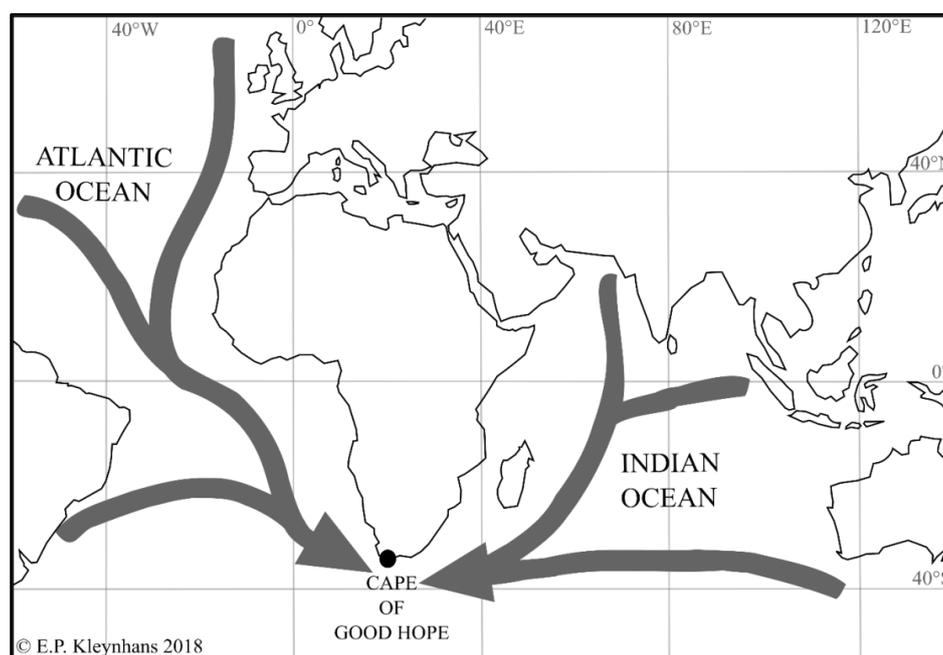
⁷⁸ Uhlig, 'Fighting At and From the Sea: A Second Opinion', pp. 39-45; Hughes, 'Naval Operations: A Close Look at the Operational Level of War at Sea', pp. 23-26.

⁷⁹ Peifer, 'Maritime Commerce Warfare: The coercive response of the weak?', pp. 83-85; McMahon, 'Maritime Trade Warfare: A Strategy for the Twenty-First Century?', pp. 15-38.

⁸⁰ Turner *et al*, *War in the Southern Oceans*, p. 1; Meyer, 'From Spices to Oil', pp. 1-10. See also Malyon, 'South African Shipping', pp. 438-446; Neidpath, *The Singapore Naval Base and the Defence of Britain's Eastern Empire, 1919-1941*, pp. 2, 6, 9, 13, 38.

China, India, Gibraltar, the West Indies and the Falkland Islands.⁸¹ The British historian Paul Kennedy supports this view. He maintains that Cape Town was perhaps “the most important strategic position in the world in the age of sea power.”⁸²

Jamie Neidpath, however, states that the Cape of Good Hope was only one of the five keys which locked up the British Empire, along with Singapore, Alexandria, Gibraltar and Dover. Neidpath, in contrast to Kennedy, suggests that the true centre of the British Empire was east of the Suez Canal in the Indian Ocean. He maintains that the three keys for continued control over the Indian Ocean was British possession of the Cape of Good Hope, Aden and Singapore. British control over Egypt and the Middle East remained crucial too, as such control guarded access to one of the principal maritime trade routes passing through the Mediterranean to the Indian Ocean. Neidpath finally argues that a strong British naval presence in Singapore was essential to keep Australia and New Zealand within the imperial orbit, while it also acted as a gateway to the Pacific during the war.⁸³ If the British, however, lost control over one of the three keys to the Indian Ocean – as it did after the fall of Singapore in February 1942 – there would be a series of drastic military, economic and logistical consequences to the overall Allied war effort. Moreover, control over the remaining two keys to the Indian Ocean would then become extremely important, in large degree due to the observed interconnectivity of the Allied war effort.



Map 1.1: Strategic location of the maritime nodal point of the Cape of Good Hope

⁸¹ Potgieter, 'Maritime Defence and the South African Navy', p. 164; This view is further reinforced by Dörning, 'The West and the Cape Sea Route', pp. 46-47; Close, 'South Africa's Part in the War', p. 185.

⁸² Kennedy, *The Rise and Fall of British Naval Mastery*, pp. 129-131.

⁸³ Neidpath, *The Singapore Naval Base and the Defence of Britain's Eastern Empire, 1919-1941*, pp. 2, 6, 9, 13, 38.

On 30 January 1939 the Admiralty approved the RN's war plans for the imminent global conflict. These plans primarily dealt with the waging of concurrent naval wars against Germany and Italy, as British defence planners did not expect Japan to initially side with the Axis Powers during the opening stages of the war. Nonetheless, the naval war plans stated, as a secondary consideration, that the RN should anticipate Japanese naval hostility aimed at both Britain and France. The British expected Germany in particular to dispute its maritime control in two distinct ways: through its available surface warships and disguised merchant raiders; and through a sustained submarine offensive aimed at destroying British and Allied seaborne commerce. The basis of the British maritime strategy during the war was thus to maintain command at sea and establish zones of maritime control at key locations across the globe.⁸⁴

The Admiralty considered the continued operation of key ocean trade routes as imperative to its naval strategy. The ocean passages passing through the Mediterranean from the Middle East, the Indian subcontinent and the Far East were markedly crucial. The loss of these trade routes due to Axis naval operations would force the Admiralty to divert Allied merchant traffic along the longer but potentially safer sea route around the Cape of Good Hope.⁸⁵ The RN thus deployed a number of anti-submarine (A/S) hunting units at strategic locations across the globe to help protect critical maritime trade routes. The protection of these maritime trade routes became the responsibility of the RN's foreign naval commands. These commands were comprised of the North Atlantic Station (Gibraltar), South Atlantic Station (Freetown), the America and West Indies Station (Bermuda), the East Indies Station (Ceylon) and the China Station (Singapore and Hong Kong). The Dominion Navies also each accepted a measure of responsibility for control of the waters adjacent to their territories. Such acceptance of responsibilities was, however, dependent on their individual strengths and capacity. The British maritime strategy also called for the total economic blockade of Germany from the outset of war.⁸⁶

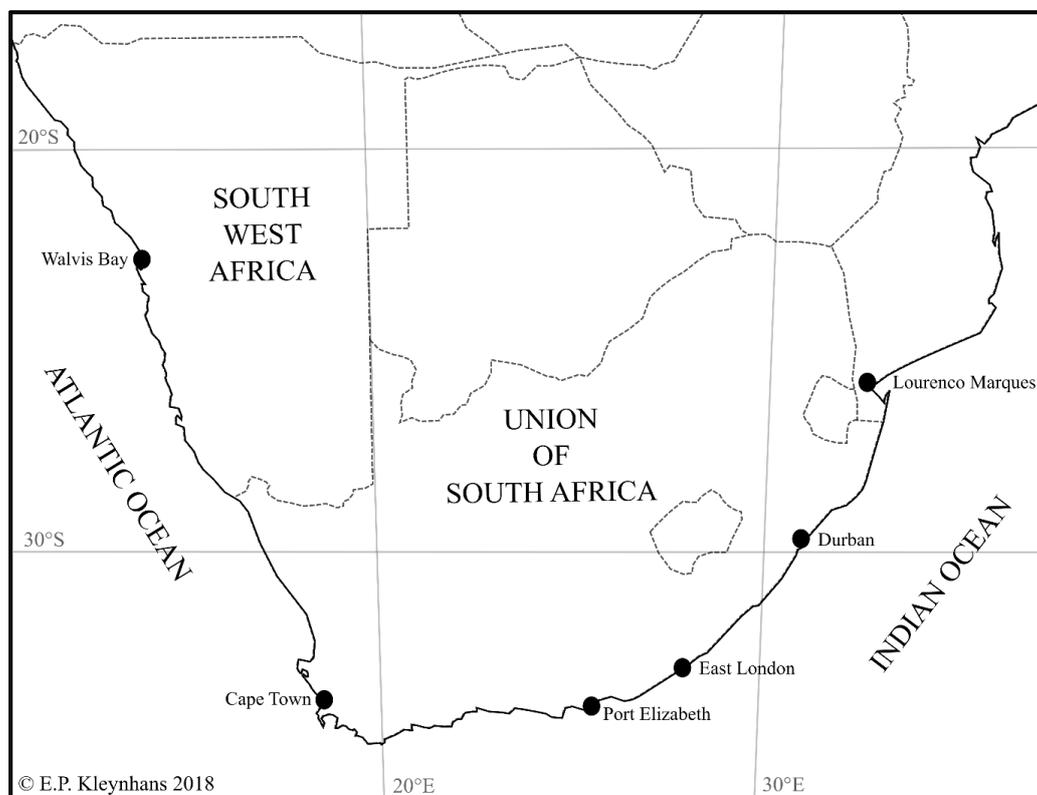
The key to the Allied naval strategy in South African waters was the establishment of a definite maritime zone of control in order to ensure the continued safe passage of merchant shipping around the Cape of Good Hope. The defence and sustained operation of this key shipping route was thus not only a South African problem. Because of its vital importance to the war effort, it was also a combined Allied dilemma. British and South African defence planners estimated that the main aim of the Axis naval operations in South African waters would be to sever the Allied maritime trade routes to and from the Middle East, the Indian subcontinent and the Far East. The

⁸⁴ Roskill, *The War at Sea: Volume I – The Defensive*, pp. 41-45; Carroll, 'The First Shot was the Last Straw', p. 407.

⁸⁵ Roucek, 'The Geopolitics of the Mediterranean, I', pp. 349-354; Roucek, 'The Geopolitics of the Mediterranean, II', pp. 71-80; Martin and Orpen, *South Africa at War*, p. 7; Roskill, *The War at Sea: Volume I – The Defensive*, p. 42.

⁸⁶ Roskill, *The War at Sea: Volume I – The Defensive*, pp. 42-43; Jackson, 'The Empire/Commonwealth and the Second World War', pp. 67-70.

majority of maritime attacks were thus expected in the areas where the sea traffic would be most concentrated and congested – the ports of Durban, Port Elizabeth and Cape Town (see Map 1.2).⁸⁷



Map 1.2: Principal southern African harbours

The defence of South Africa's maritime trade routes throughout the war fell into two broad categories. In order to ensure the maintenance of sea communications around the South African coast, the Union's threat perception and counter-measures had to take into consideration the differing maritime perils prevalent in the Atlantic and Indian Oceans. The maritime menace off South Africa's Atlantic coast was initially confined to German submarines and surface raiders operational in the South Atlantic. British Naval Intelligence estimated that German naval activity off the South African coast would be limited, especially owing to the vast operational distances involved. The combined threat was exacerbated by the fact that both U-boats and surface raiders were known to have the ability to mine vital coastal junctures along the South African coastline.⁸⁸

⁸⁷ Department of Defence Documentation Centre (DOD Archives), Diverse, Group 1, Box 126, File: Coastal appreciations general. *A Japanese attack on South Africa: An appreciation from the enemy point of view*, 29 Sept 1942; DOD Archives, Diverse, Group 1, Box 126, File: Coastal appreciations general. *Most secret communication between DECHIEF and OPPOSITELY regarding the scales of attack by sea and air in South African waters*, 8 Apr 1943.

⁸⁸ DOD Archives, Diverse, Group 1, Box 126, File: Coastal appreciations general. *A Japanese attack on South Africa: An appreciation from the enemy point of view*, 29 Sept 1942; DOD Archives, Chief

The maritime threat along South Africa's Indian Ocean coast was confined to that of Japanese and Italian naval forces operational in the area. Despite its nearest base being 5 000 miles away, the Imperial Japanese Navy (IJN) posed a direct menace to the merchant traffic off the entire South African eastern seaboard. This was especially the case when the IJN was provisioned from the Vichy French in Madagascar and possible subversive elements in Portuguese East Africa.

The closest maritime danger to South Africa in 1940 came from the Italian submarines known to be based in the Red Sea port of Massawa, a mere 3 800 miles from the strategic port of Durban. The presence of Japanese and German warships in the Southern Atlantic and Indian Oceans was deemed a possibility, but thought of as unlikely.⁸⁹ The Chief of the General Staff of the Union Defence Force (UDF), Lt Gen (Sir) Pierre van Ryneveld, anticipated that the primary naval risk to South Africa was posed by the Japanese and Italian submarines active in the Indian Ocean. The German threat was considered, but discarded due to the vast operational distances involved in deployments to the Indian Ocean.⁹⁰ These threat perceptions prevailed well into 1944, and even extended into 1945.

In May 1939 the *Kriegsmarine*, the German Navy, received its battle instructions for the impending conflict. In the event of war, the German Navy would be tasked with protecting the German coastline and its seaborne communications, attacking the shipping of its adversaries, and supporting land and air operations along the German coastline. Most importantly, it would act as a strategic-political instrument of war. Owing to the negligible strength of the *Kriegsmarine*, however, Germany had no specific maritime strategy to follow on the eve of the Second World War.⁹¹ The *Oberkommando der Marine*⁹² (OKM) accepted the naval inferiority of the *Kriegsmarine* from the outset. Along with the *Seekriegsleitung*⁹³ (SKL), the OKM advocated the aggressive deployment of its available naval forces in operations against British and Allied seaborne trade in the North Atlantic.⁹⁴

of the General Staff (CGS) War, Box 122, File: Raiders. *Secret report on possible operation of Italian submarines in the Indian Ocean*, 3 July 1940.

⁸⁹ DOD Archives, Diverse, Group 1, Box 126, File: Coastal appreciations general. *A Japanese attack on South Africa: An appreciation from the enemy point of view*, 29 Sept 1942; DOD Archives, Diverse, Group 1, Box 126 File: Coastal appreciations general. *Most secret communication between DECHIEF and OPPOSITELY regarding the scales of attack by sea and air in South African waters*, 8 April 1943; DOD Archives, CGS War, Box 122, File: Raiders. *Secret report on possible operation of Italian submarines in the Indian Ocean*, 3 Jul 1940.

⁹⁰ DOD Archives, CGS War, Box 122, File: Raiders. *Secret report on possible operation of Italian submarines in the Indian Ocean*, 3 Jul 1940.

⁹¹ Raeder, *Grand Admiral*, pp. 279-281.

⁹² The *Oberkommando der Marine* was the High Command of the German Navy. As such it was the highest administrative and command authority of the *Kriegsmarine*.

⁹³ The *Seekriegsleitung* was the Maritime Warfare Command of the Germany Navy.

⁹⁴ Raeder, *Grand Admiral*, pp. 282-286.

The German naval war plans explicitly focused on trade warfare on the open oceans. The aim was firstly a concentrated confrontation with British and Allied merchant shipping through surprise attacks by disguised merchant raiders. The war plans further called for the laying of a series of minefields at critical coastal junctures across the globe. Lastly, the naval war plans focussed on the use of the U-boats in operations aimed at disrupting and destroying British seaborne trade. The *OKM* intended to use its submarines to work against British and Allied shipping in the areas where its surface raiders were not operational, and where the sinking potential was significant.⁹⁵ U-boat operations were hence earmarked for the North and Central Atlantic, the West Indies, the waters off the Cape Verde Islands, Freetown in Sierra Leone and the Bay of Biscay. As an additional measure, the German naval war plans called for surface raiders and submarines, along with a few capital ships, to deploy to their respective operational areas before the declaration of war, and to strike an immediate and decisive blow to British and Allied shipping.⁹⁶

During the first two years of the war, the German maritime strategy was solely focussed on continuing its successes in the Battle of the Atlantic, where it managed to reduce British imports from 55 million tons in 1939 to a mere 35 million tons in 1941. By operating as far afield as the Mediterranean, Brazil and West Africa, the U-boats were on the brink of sinking Allied merchant shipping faster than it could be replaced. By 1942 the Battle of the Atlantic reached its pinnacle when the U-boat successes in the North Atlantic started to dwindle. These decreasing losses were the result of the increasing skill of Allied convoy and escort commanders; reliable submarine detection equipment and significant improvements in A/S weapons. Furthermore, the Allied ability to read German naval ciphers by mid-1941; a higher numbers of escorts, and the diminished 'air gap' in the North Atlantic contributed to the dwindling of U-boat successes. Along with these, the heavy loss of skilled personnel in the German Navy directly led to a decline of moral and combat effectiveness.⁹⁷

In 1941, a *Befehlshaber der U-Boote (BdU)*⁹⁸ appreciation highlighted the fact that the Cape Town–Freetown convoy route would make an excellent target for a concentrated U-boat offensive. This possibility was highly conceivable especially as the closure of the Suez Canal would lead to the redirection of all seaborne trade around the Cape of Good Hope. The Cape Town–Freetown convoy route passed along the strategic maritime nodal point of the Cape of Good Hope, with a great number of ships passing through South African ports. By the end of October, the *BdU* had temporarily withdrawn

⁹⁵ Cousineau, *Ruthless War*, pp. 100, 182-183; Roskill, *The War at Sea: Volume I – The Defensive*, p. 55.

⁹⁶ Raeder, *Grand Admiral*, pp. 283, 287-288.

⁹⁷ Tarrant, *The U-boat Offensive 1914–1945*, pp. 100–101. For a more in depth discussion see for instance Rossler, *The U-boat: The Evolution and Technical History of German Submarines* and Howarth and Law (eds.), *The Battle of the Atlantic 1939-1945*; Milner, 'The battle of the Atlantic', pp. 45-66.

⁹⁸ It was the title of the supreme commander of the *Kriegsmarine's* U-boat Arm during the war, but also referred to the Command HQ of the U-boat arm itself.

all U-boats from the West Coast of Africa. The disengagement was due to a considerable reduction in British shipping along this trade route, which effectively denied the area of the sinking potential required to sustain a U-boat offensive.⁹⁹ By February 1942 the operational situation once more changed, especially after the *B-Dienst*¹⁰⁰ reported that there was a definite increase in British transatlantic shipping along the Cape Town-Freetown route.¹⁰¹

By the latter half of 1942, the *BdU* concluded that the sinking results in the North Atlantic had decreased to such an extent that a U-boat operation off the southern African coast proved viable. Such an endeavour would also cause a diversionary effect, forcing the Allies to split their naval forces between protecting the North Atlantic, the American Eastern seaboard and the Atlantic coast of Africa.¹⁰² Moreover, South African waters were still considered 'virgin' waters by the *BdU*. Despite some previous forays, the *BdU* did not favour sending single U-boats to operate off the southern African coast. Their independent actions would alert the Allies and force the adoption of stringent A/S measures. A single submarine operating off the South African coast would furthermore not reach the satisfactory sinking results needed to justify its deployment. The *BdU* realised that any operation in South African waters could only materialise once adequate numbers of U-boats were accessible to launch a concentrated attack, and sustain it for an indefinite period to allow for sufficient sinking results. The primary focus throughout the naval conflict was the waging of a war of tonnage through the sinking of Allied merchant shipping, and not merely the tying down of enemy naval forces through diversionary attacks.¹⁰³

1.3 South Africa, the Allied war effort, and the wartime shipping problem

Some of the most enduring aspects of the Second World War were the problems associated with providing adequate shipping to implement the Allied war production plans, and for the Allies to keep abreast of the ever-changing military situation. Added to this was the accompanying problem of allocating enough shipping to meet the logistical and economic requirements of the civilian populations, and to help deploy Allied manpower and war equipment over geographically removed strategic areas.

⁹⁹ Doenitz, *Memoirs: Ten Years and Twenty Days*, p. 176.

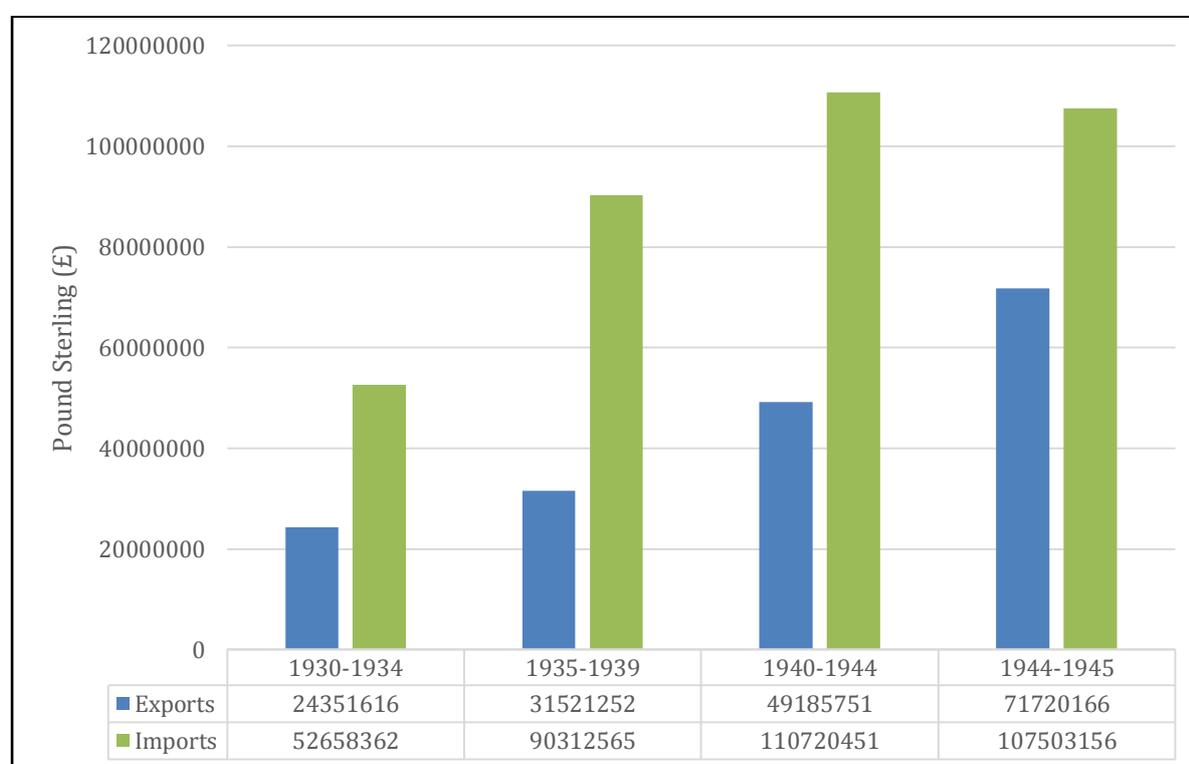
¹⁰⁰ The *B-Dienst* was the cryptographic section of the Naval High Command, which helped to monitor Allied radio traffic and hence tried to decipher these messages. See Doenitz, *Memoirs: Ten Years and Twenty Days*, p. 242.

¹⁰¹ Doenitz, *Memoirs: Ten Years and Twenty Days*, pp. 213–214.

¹⁰² Busch, *U-Boats at War*, pp. 146–147; Doenitz, *Memoirs: Ten Years and Twenty Days*, p. 238.

¹⁰³ DOD Archives, Union War Histories (UWH) Civil, Box 341, File: U-Boat matters. *Questions and answers submitted by UWH section to Fregattenkapitän Gunter Hessler re U-boat warfare in South African waters*. Hessler incidentally also wrote the British confidential account of the U-boat war, which was published in 1989 as *The U-Boat War in the Atlantic 1939-1945*.

Unsurprisingly, shipping was vital to the overall Allied strategy throughout the war.¹⁰⁴ It is a well-established fact that a British defeat would have been inevitable during the first two years of the war, had the RN been unable to keep the vital sea trade routes which linked the island nation to the rest of the Commonwealth and the United States of America (USA) open. The continued operation of these vital trade routes formed an essential pre-condition for ultimate victory in the war. Without the continued flow of seaborne trade between the Allied nations, it would have been impossible for the Allies to mobilise to their full strengths, coordinate and maximise their industrial and productive efforts, or conduct the final offensives which brought the war to a successful end.¹⁰⁵ It is under these conditions that South Africa's shipping requirements and associated problems during the war come to the fore. This aspect of the South African war effort has received little to no scholarly attention, despite its importance in understanding both the Axis and Allied maritime strategies off the Southern African coast during the war.



Graph 1.1: Monetary worth of South African imports and exports, 1930-1945¹⁰⁶

¹⁰⁴ DOD Archives, UWH Civil, Box 16, File: The War Time Shipping Problem. *Introduction and Background to the Shipping Crisis of 1942/1943*.

¹⁰⁵ Slader, *The Fourth Service: Merchantmen at War 1939-45*, pp. 13-17. Also see Roskill, *A Merchant Fleet in War 1939-1945*; Smith, *Conflict over Convoys: Anglo-American Logistics Diplomacy in the Second World War*.

¹⁰⁶ Union Office of Census and Statistics, *Official Yearbook of the Union of South Africa*, No. 23, Chapter XXIV, pp. 14-21. Also see for instance Gardner, *Decoding History: The Battle of the Atlantic and Ultra*.

After the declaration of war, the maintenance of the South African civilian economy warranted two actions. These were the expansion of her wartime production and the full exploitation of the country's natural and industrial resources (see Graph 1.1). It also necessitated that the Union procure a broad range of imported supplies. Furthermore, the shipment of the Union's exports to various global destinations, predetermined by London and later on by Washington, was required. These imports and exports were set in motion as a contribution to the Allied war effort.¹⁰⁷

During the first few months of the war, the Allies did not face a serious lack of commercial vessels for the transport of goods. Despite heavy shipping losses sustained during the Battle of the Atlantic, the Allies could more than compensate for these losses. They did so through the acquisition of merchant vessels from European nations overrun by German forces, or through the creation of new construction programmes.¹⁰⁸ The German occupation of Denmark, Norway, the Netherlands, Belgium and France in 1940 eased some of the pressure placed on the British and Allied merchant fleets. This was due to their respective merchant fleets becoming available for the Allied shipping cause.

The accessibility of these merchant fleets subsequently caused several complications. While both the British and Germans naturally desired to press the majority of these merchant fleets into their service, this was no easy task. With the help of the Dominions, Britain was able to seize any such shipping that called at Commonwealth ports, thus preventing these vessels from escaping Allied control.¹⁰⁹ This often involved the detention of the vessels and the internment or repatriation of pro-Nazi, or reluctant masters and seamen – even in South Africa.¹¹⁰ On certain occasions, vessels that were technically treated as an enemy craft, were seized as prizes of war. This was particularly the case with Vichy French shipping. Upon agreement, these ships were then either allocated to South Africa or the United Kingdom (UK) for wartime usage.¹¹¹

South Africa did not face any palpable difficulties of supply during this period, and the British export drive, which continued well into 1941, meant that sufficient export tonnage was earmarked to heed the Union's every need. The shipping situation, however, soon deteriorated, especially when the Middle East, and both East and North

¹⁰⁷ DOD Archives, UWH Civil, Box 16, File: The War Time Shipping Problem. *Introduction and Background to the Shipping Crisis of 1942/1943*.

¹⁰⁸ For a more in depth discussion of the Battle of the Atlantic see Gardner, *Decoding History: The Battle of the Atlantic and Ultra*; Lautenschlager, 'The Submarine in Naval Warfare, 1901-2001', pp. 94-140; Cousineau, *Ruthless War*, 2007.

¹⁰⁹ DOD Archives, UWH Civil, Box 73, File: Year Book, Section XI. *Shipping*.

¹¹⁰ North-West University (NWU), Records, Archives and Museum Division (RAM Div) (Potchefstroom), Ossewabrandwag Archive (OB Archive), A.F. Schulz Versameling. *Nazisme in Andalusia Interneringskamp, 9 Okt 1940 – 22 Nov 1944*. For more on this, see Moore, 'Unwanted Guests in Troubled Times', pp. 63-90; Malherbe, *Never a Dull Moment*, p. 215.

¹¹¹ Martin and Orpen, *South Africa at War*, p. 325; Clarence-Smith, 'Africa's "Battle for Rubber" in the Second World War', p. 168. Also see Feinstein, *An Economic History of South Africa*.

Africa, became important theatres of military operations from around mid-1940.¹¹² The closure of the Mediterranean to merchant shipping after the Italian entry into the war in June 1940, and the capitulation of France in the same month placed further strain on Allied merchant shipping. The burden on the Allies was heightened by the significant number of merchantmen diverted to Russia after the commencement of Operation Barbarossa.

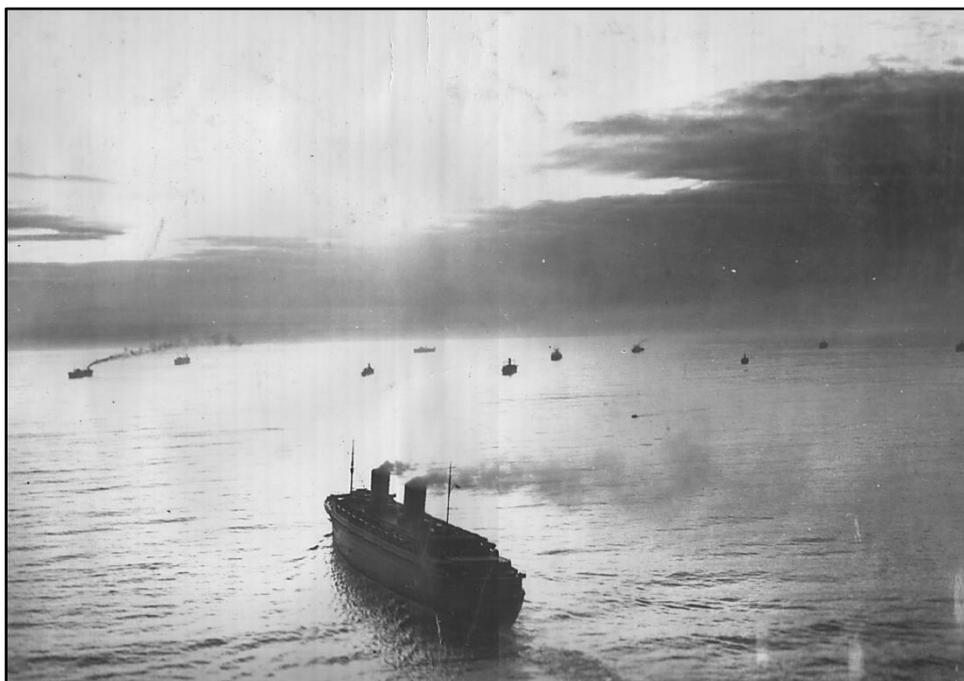


Fig 1.1: An Allied merchant convoy approaching Cape Town Harbour, 1940s¹¹³

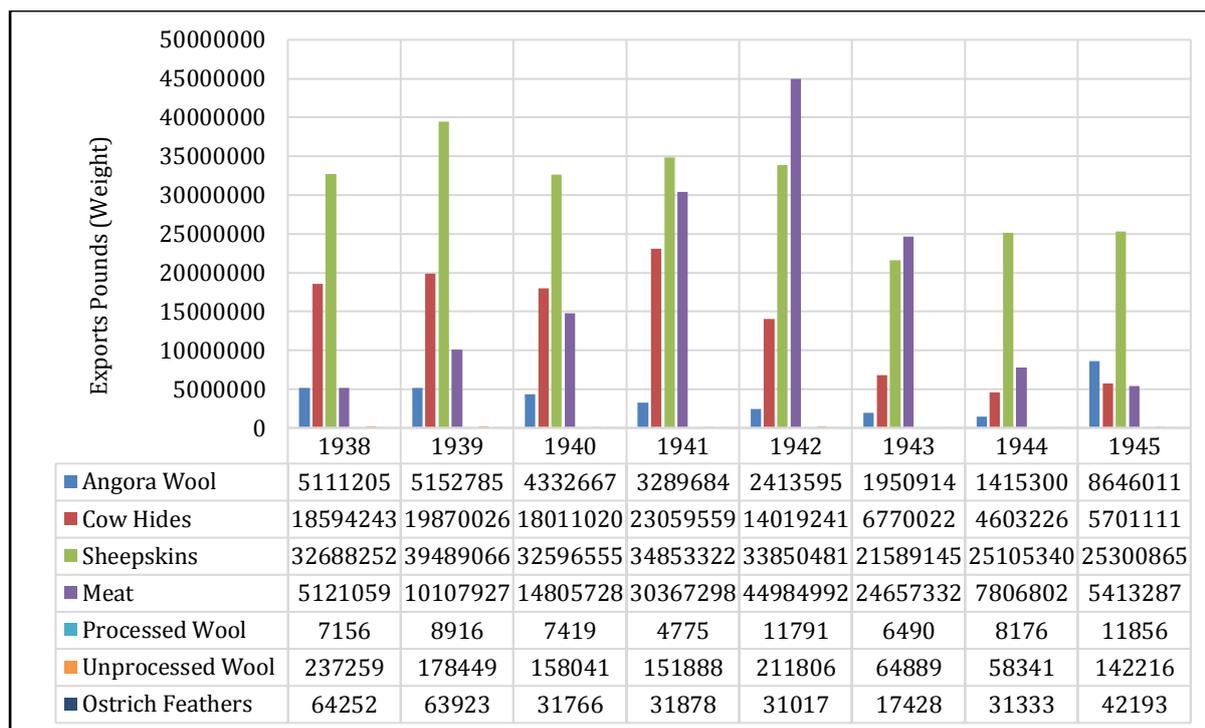
The Japanese and American entry into the war in December 1941 further served to exacerbate the matter.¹¹⁴ Their entry combined to trigger a grave shipping crisis, where the demand for shipping space vastly increased. This state of affairs held serious misgivings for South Africa, as the Union could obtain only such imports as were allocated to her through the process of combined planning overseen by the British Ministry of War Transport (MWT).¹¹⁵

¹¹² Leighton and Coakley, *Global Logistics and Strategy, 1940-1943*, p. 47; Stewart, *The First Victory*, pp. 48-52; Katz, *Sidi Rezegh and Tobruk*, pp. 6-8, 25. The latest South African work to appear on the campaign in North Africa is Katz, *South Africans versus Rommel*.

¹¹³ South African National Museum of Military History, Masondo Reference Library. *SA Navy Photo Collection, S.A. 459*.

¹¹⁴ Murray and Millett, *A War to be Won*, pp. 92-98, 110-120, 169-181; Hammond, 'British Policy on Total Maritime Warfare', pp. 789-790. Also see Ball, *The Bitter Sea: The Struggle for Mastery in the Mediterranean, 1935-1949*.

¹¹⁵ DOD Archives, UWH Civil, Box 16, File: The War Time Shipping Problem. *Introduction and Background to the Shipping Crisis of 1942/1943*.



Graph 1.2: Export of principal South African products in weight, 1938-1945¹¹⁶

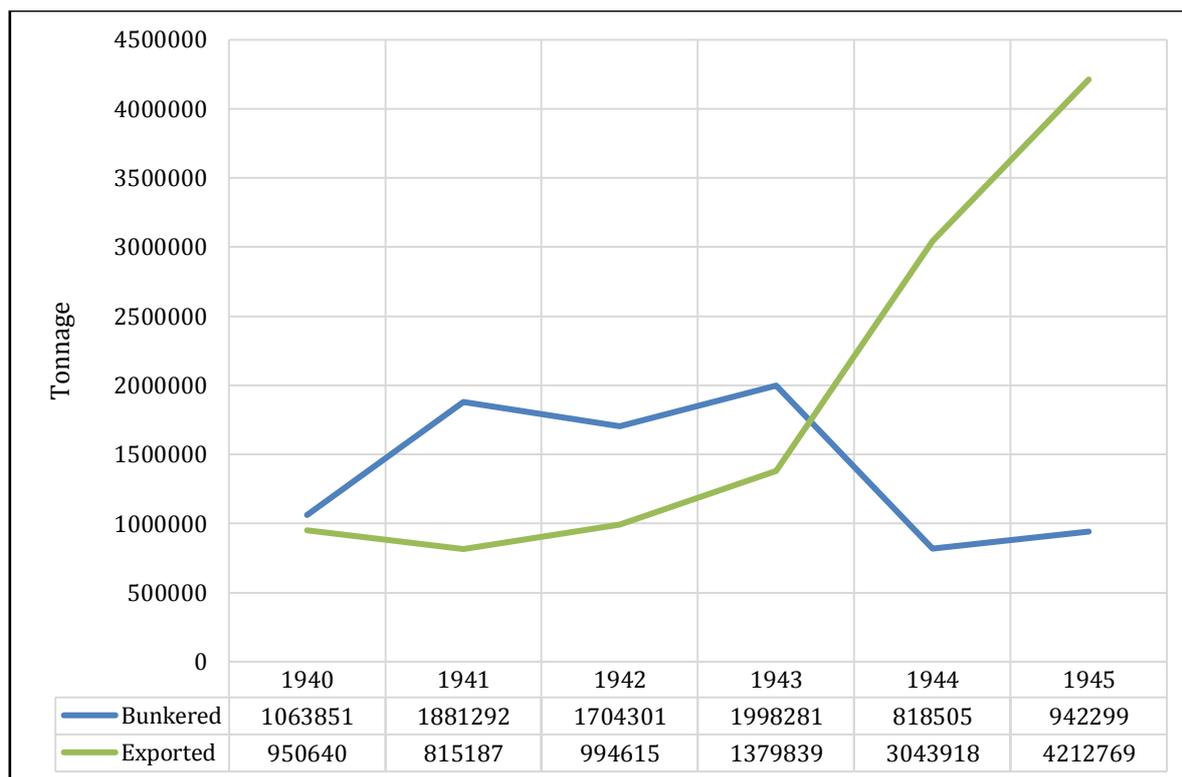
Two main problems underpinned the South African shipping problem throughout the war. The first problem related to the available freight space for imports, especially those originating from the UK, North America and the rest of the Commonwealth. The second problem dealt with the freight space needed to export South African raw materials, agricultural produce and other finished products from its various industries (see Graph 1.2). These two problems were, however, interrelated. The securing of shipping for imports was entirely dependent on the importance, and destination, of the exports.

The leading South African wartime exports, chiefly coal, were destined for the Middle East and the Eastern Group Supply Council countries (see Graph 1.3).¹¹⁷ Moreover, the vessels used for exports did not suffer frequent diversions. Shipping space for South African exports to the UK and the USA was considered adequate, despite a persistent shortage of refrigerated space for fruit from the Union.¹¹⁸ The main South African exports to these markets were wool, maize, fruit, manganese and chrome ore.

¹¹⁶ Union Office of Census and Statistics, *Official Yearbook of the Union of South Africa*, No. 23, Chapter XXIV, pp. 26-28.

¹¹⁷ The Eastern Group Supply Council was a wartime body established in 1940 with the sole intention of coordinating the build-up of war materiel in the British colonies and dominions east of the Suez Canal. Their ultimate aim was to reduce the amount of supplies shipped from the United Kingdom.

¹¹⁸ Albertyn, *Upsetting the Applegart*, p. 11. DOD Archives, UWH Civil, Box 16, File: The War Time Shipping Problem. *Introduction and Background to the Shipping Crisis of 1942/1943*; Lewis, 'The Inter-Relations of Shipping Freights', pp. 58-59.



Graph 1.3: Coal bunkered and exported from the principal South African ports, 1940-1945¹¹⁹

As the war progressed, Britain irregularly furnished the various exporting countries with a list of articles that should receive preference for export. This list included certain foodstuffs, metals, ores and textile raw materials. The only item exportable from South Africa at the time was wool. By March 1940, after some initial delays, a notable increase in British imports of wool from the Union was observed. Despite this increase, nearly 230,000 bales of wool destined for export to Europe remained stockpiled at various South African ports, primarily due to inadequate shipping. However, the shipment of manganese ore to the United States during this period posed no problem.¹²⁰ Although neutrality legislation precluded American vessels from entering areas proclaimed as war zones, South African waters at that stage were still not considered as such an area. The result was an increasing amount of American shipping diverted to the South African run. This diversion in shipping was organised principally through the South African Purchasing Commission in Washington, and

¹¹⁹ Union Office of Census and Statistics, *Official Yearbook of the Union of South Africa*, No. 23, Chapter XII, p. 16.

¹²⁰ Brown, 'African Labor in the Making of World War II', pp. 64-65; DOD Archives, UWH Civil, Box 73, File: Year Book, Section XI; *Shipping*; Postan, *British War Production*, p. 157.

through consultation with the American War Shipping Administration (WSA) and the British Merchant Shipping Mission in the USA.¹²¹



Fig 1.2: South African agricultural produce ready for export to the United Kingdom¹²²

The South African Department of Railways and Harbours (SAR&H) operated a fleet of three ocean-going vessels. The *SS Dahlia*, *SS Aloe* and *SS Erica* operated in a triangular service between the Far East, Philippines, Borneo, Australia, Mauritius, Madagascar, Reunion, Beira and other coastal ports en route to Cape Town. This facilitation was, however, abandoned shortly after the outbreak of war as a result of the Axis and Allied naval operations in South African waters.

Several Vichy French merchant ships (henceforth merchants/merchantmen) became prizes of war during Operations Kedgerie and Bellringer – a joint action by the RN, South African Air Force and the Seaward Defence Force (SDF). These ships, together with other chartered and requisitioned vessels, including an oil-tanker, augmented the existing fleet to amount to no less than fifteen ships.¹²³ This fleet was employed on a variety of duties to circumvent the restriction that the wartime shipping burden placed on South Africa. These responsibilities included the transportation of UDF troops to the

¹²¹ DOD Archives, UWH Civil, Box 12, File: SA War Economy 1939-1945. *Procurement of Supplies – SA Purchasing Organisation in USA*; DOD Archives, UWH Civil, Box 35, File PO/29. *South African Purchasing Commission Inception and Organisation, 1940-1947*.

¹²² South African National Museum of Military History, Masondo Reference Library. *SA Navy Photo Collection, S.A. 1703*.

¹²³ Gordon-Cumming, *Official History of the South African Naval Forces*, pp. 47-54; Turner *et al*, *War in the Southern Oceans*, pp. 89-95.

Middle East and the conveyance of petroleum products from the Middle East to the Union. The said vessels ensured that a large part of the Union's urgent import requirements was carried in bulk and dispatched promptly. Included were supplies of grain, phosphates, railway sleepers and other timber, as well as more general cargo.

Following the Japanese conquests in the Far East, the Union had to search for new markets from which it could procure supplies of palm oil, rubber and oilseed, amongst others. South Africa was able to source these products from various countries in West Africa, who were able to meet the Union's heavy demands for railway sleepers, timber, fish meal and coffee. In the course of 1942 a regular service was inaugurated by the SAR&H between the Union and a number of ports on the West African coast. Cargoes on the outward voyages consisted of South African exports, principally coal, cement, ore, manufactured goods and various foodstuffs. A lively business developed to the benefit of all the territories concerned.¹²⁴

Imports to South Africa, especially from the UK, proved unproblematic up until July 1941. Some importers complained about general delays, diversions and the non-delivery of imports, but these were inevitable consequences of the establishment of convoys coupled with mounting shipping losses in the North Atlantic. The available cargo space for imports was divided up between the urgent requirements of the South African war industries, basic civilian needs, and non-essential consumer goods. The South African ports also served the broader import and export requirements of Southern Africa for the duration of the war.¹²⁵ Throughout this period the UK shipped more commercial cargo to South Africa than any other country. Up until that time, however, the inhabitants of South Africa rarely felt the strain of war. This state of affairs was only possible as long as the allocation of adequate shipping space was not a significant determinant in the country's import policy.¹²⁶

Two leading causes lay the foundation for this state of affairs. First, until September 1941 the Union Government avoided introducing any strict controls over imports and exports, partly due to the unique internal political climate within South Africa.¹²⁷ Its reticence lay in stark contrast to the rest of the British Commonwealth. The Commonwealth abided by the controls instituted by the British Ministry of Economic Warfare early in the war to prevent any trading with the Axis powers. South Africa, however, required export permits from potential importers. The Department of Commerce and Industries introduced certificates of origin and interest in an attempt to effect a positive influence on the Union's external trade. Importers were also required to

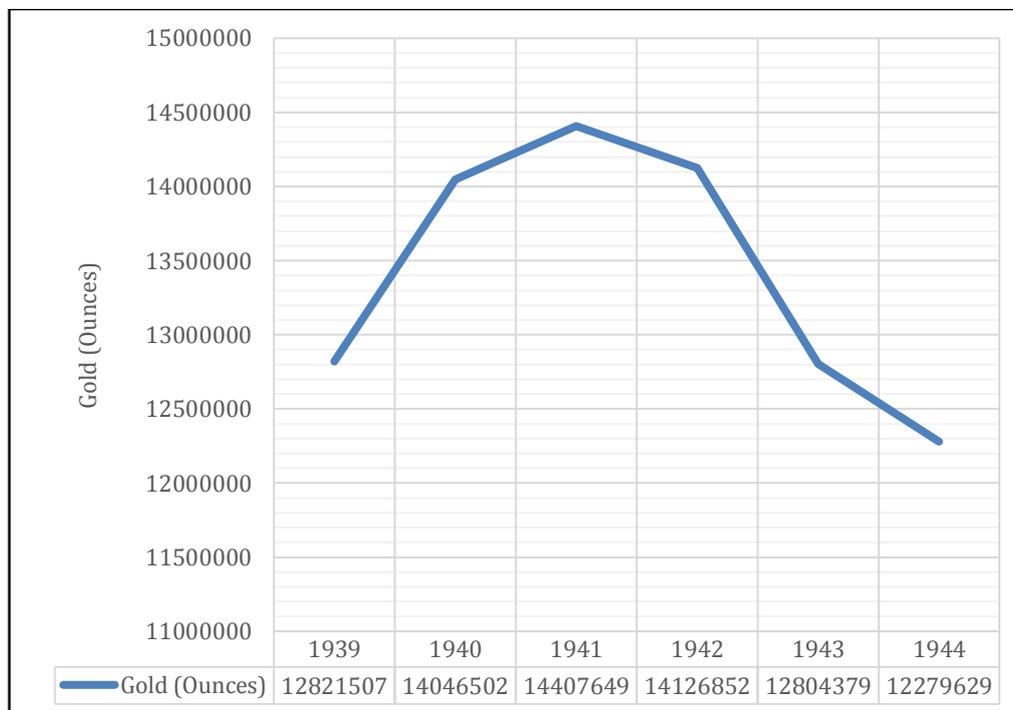
¹²⁴ DOD Archives, UWH Civil, Box 24, File: SA Railways and Harbours Departmental Civil War History Vol VIII. *Ports & Shipping*.

¹²⁵ DOD Archives, UWH Civil, Box 73, File: Year Book, Section XI; *Shipping*. See for instance, Dumett, 'Africa's Strategic Minerals During the Second World War', pp. 381-408; Tembo, 'Rubber Production in Northern Rhodesia', pp. 223-255.

¹²⁶ Henshaw, 'Britain, South Africa and the Sterling Area', pp. 208-209.

¹²⁷ For more on this unique political situation see Marx, *Oxwagon Sentinel*.

apply for Essentiality Certificates. They could, in turn, provide the certificates to overseas suppliers for furnishing to their respective export control authorities. These measures were an official attempt by the Union Government to provide legitimate support for South African imports of scarce commodities and raw materials.¹²⁸



Graph 1.4: South African wartime gold production, 1939-1944¹²⁹

Second, the British export policy during the first two years of the war indirectly discouraged the South Africans from introducing any effective measures to control goods entering the country. The British export drive throughout this period attempted to secure enough foreign exchange to finance the war effort. This state of affairs had a profound impact on South Africa, none more so than after the introduction of the Lend-Lease Act in March 1941. South Africa enjoyed a relatively privileged position in the Commonwealth due to its rich gold deposits and accompanying industries. The country therefore played a crucial role in the British export drive throughout this period. South Africa largely funded its war effort through its rich gold deposits, which secured a significant amount of foreign currency. This situation only changed once the Lend-Lease Act came into effect (see Graph 1.4).¹³⁰

¹²⁸ DOD Archives, UWH Civil, Box 16, File: The War Time Shipping Problem. *Introduction and Background to the Shipping Crisis of 1942/1943*; DOD Archives, UWH Civil, Box 111, File: Import Control. *Certificates of Essentiality*.

¹²⁹ Union Office of Census and Statistics, *Official Yearbook of the Union of South Africa*, No. 23, Chapter XXII, p. 27.

¹³⁰ Martin, 'The Making of an Industrial South Africa', p. 84; Henshaw, 'Britain, South Africa and the Sterling Area', p. 208; Dumett, 'Africa's Strategic Minerals During the Second World War', pp. 383-384; Van der Waag, *A Military History of Modern South Africa*, p. 191.

The introduction of the Lend-Lease Act held a number of misgivings for South Africa, none more so than forcing the Union to source her main imports of steel, non-ferrous metals, machine tools, oil and motor vehicles from the USA. The Lend-Lease Administration also obligated the Union Government to provide firm evidence for the need of imports for the Union's war effort.¹³¹ This requirement coincided with an attempt by the American authorities to extend their export licensing. Lend-Lease material was either exempted or automatically licensed, as opposed to goods obtained from outside the parameters of Lend-Lease. Here, the requirement was for each country, including South Africa, to establish some form of import licensing to authenticate all orders placed in the USA by private traders.

South Africa established the Union Priority Board on 11 July 1941 to deal with all privately ordered goods from the USA which were subject to export licensing. On 10 September the Union Government instituted the Import and Export Control Board. The aim was to enforce a system of import control applicable to all non-sterling countries. The system of control was not comprehensive, yet it signalled the start of a radical change apropos import control. South Africa adopted a priority rating schedule to help facilitate imports from the USA. This structure eventually formed the foundation of a much stricter and more comprehensive system of import control from 1942 onwards.¹³²

The UK's export policy was influenced by the introduction of Lend-Lease, though it took some months for the British export drive to lose its momentum. A large number of British exporters were fearful of losing their business in South Africa to American exporters. They consequently clung to the South African market with much ardour.

The introduction of import licensing for goods purchased in the USA gave the South African importers ample warning of the prospect of future import restrictions. This led to hefty private orders of goods placed towards the end of 1941. Two concerns led to a dire state of affairs. They were the absence of import control over South African orders placed in the UK, and the fact that hardly any South African importers applied for Essentiality Certificates unless the goods ordered were subject to British export licensing. Thus neither the Department of Commerce and Industries nor the British Board of Trade (BOT), had any inkling as to what products were on order and what goods were bound for South Africa.¹³³

¹³¹ Byfield, 'Producing for the War', pp. 27-28.

¹³² DOD Archives, UWH Civil, Box 73, File: Year Book, Section XI; *Shipping*; Albertyn, *Upsetting the Applecart*, p. 13.

¹³³ DOD Archives, UWH Civil, Box 16, File: The War Time Shipping Problem. *Introduction and Background to the Shipping Crisis of 1942/1943*.



Fig 1.3: An Allied vessels taking on important local supplies, 1940s¹³⁴

By the end of 1941, the global shipping crisis became a stark reality, adding an immense pressure to the Allied forces during the war. The most immediate causes of strain included the heavy demands for military needs in the Middle East; the American and Japanese entry into the war; the Japanese conquest of the Far East, and the mounting successes of the German submarines during the Battle of the Atlantic.¹³⁵ The British authorities had for some months, however, been aware of the changing military situation, and the impact that this would have on shipping requirements. The flow of imports to the Union during this period was nonetheless hardly interrupted. Both Union Government cargo and commercial goods were promptly shipped owing to the untiring efforts of the Stores and Shipping Branch located at South Africa House in London. Commercial imports duly amounted to between 40,000 and 50,000 tons per month in 1941.¹³⁶

Be that as it may, the Union authorities were warned that such ample shipping provision was not possible in the future, as the UK faced increasing shipping shortages due to a large number of priority imports and essential war supplies destined for the Middle East. The outcome was an immediate reduction in the number of sailings to

¹³⁴ South African National Museum of Military History, Masondo Reference Library. *SA Navy Photo Collection, S.A. 1227.*

¹³⁵ This viewpoint is furthered by Boyd, *The Royal Navy in Eastern Waters: Linchpin of Victory 1935-1942* as well as Neidpath, *The Singapore Naval Base and the Defence of Britain's Eastern Empire, 1919-1941.*

¹³⁶ DOD Archives, UWH Civil, Box 16, File: The War Time Shipping Problem. *Shipment of Union Government Cargo from the United Kingdom.*

South Africa and the rest of the Commonwealth. Despite the warning passed by the MWT, none of the Commonwealth Governments fully grasped to what extent the shipping situation would deteriorate in 1942. The extension of the Allied war effort in that year created a heavy demand for shipping which far exceeded the available capacity of the Allies. The availability of shipping for imports became the main element influencing the South African economy and its accompanying war effort. Coupled with the question of port accessibility, was the lack of effective machinery for import control. The function of the machinery was to exclude non-essential goods from the ever-lengthening shipping queues. The MWT, however, doubted whether the South African authorities appreciated the seriousness of the situation facing the planning authorities in London. The Union government was thus increasingly urged to cooperate and match its imports to the greatly reduced shipping tonnage on hand.¹³⁷

From the beginning of 1942, and well into 1943, the shortage of shipping to South Africa remained burdensome. As a result, economy in shipping became vital, especially in terms of eliminating unnecessary cargoes and making the most economical use of the available shipping. In an early attempt to gain a measure of control over the outstanding shipments to the Union, the establishment of the South African Advisory Shipping Committee was undertaken in April 1942. It was composed of representatives from the Shipping Section of South Africa House, the BOT, MWT, the London Chamber of Commerce, and various export groups and shipping lines.

The Advisory Shipping Committee's arduous task was to sort essential orders from non-essential ones, as neither the BOT nor the Department of Commerce and Industries could provide any reliable data on outstanding cargo not yet shipped. Moreover, most of the orders from the UK were not covered by Essentiality Certificates and pre-dated the system of priority ratings. South African Importers were also often unaware that their orders were ready for shipment to South Africa. Similarly, British exporters with completed orders in their warehouses could not help in assessing the priorities of the goods for shipment.¹³⁸

¹³⁷ DOD Archives, UWH Civil, Box 16, File: The War Time Shipping Problem. *Introduction and Background to the Shipping Crisis of 1942/1943*; DOD Archives, UWH Civil, Box 16, File: The War Time Shipping Problem. *The Beginning of Shipping Control over Commercial Cargo*.

¹³⁸ DOD Archives, UWH Civil, Box 73, File: Year Book, Section XI; *Shipping*; DOD Archives, UWH Civil, Box 114, File: Priority Rating. *Backlog of Cargo from UK*.



Fig 1.4: Key imports ready for delivery to Cape Town, 1940s¹³⁹

By May 1942 a central list of incomplete orders was drawn up through the assistance of the Chamber of Commerce in London, in an attempt to clear the substantial backlog of orders awaiting shipment to South Africa. This list was then matched with cables from South Africa requesting the shipment of selected goods. The cables enabled the MWT and BOT, in conjunction with South Africa House, the South African Trade Association and the South African Section of the London Chamber of Commerce, to draft a priority rating shipping schedule.¹⁴⁰

The system of priority rating (see Table 1.1), along with Essentiality Certificates, formed the basis for the immediate control over the placement of shipping orders. It helped to determine which goods should be shipped, which goods should be shipped at a later date, and what cargo should not be shipped at all. At first, the priority rating schedule made allowance for ratings from 1 to 17, but the range was reduced to between 1 and 11 with the worsening of the supply position. No sooner than this had occurred, the BOT restricted future orders to South Africa to within the ratings 1 to 6.¹⁴¹

¹³⁹ South African National Museum of Military History, Masondo Reference Library. *SA Navy Photo Collection, S.A. 1201.*

¹⁴⁰ DOD Archives, UWH Civil, Box 16, File: The War Time Shipping Problem. *The Beginning of Shipping Control over Commercial Cargo*; DOD Archives, UWH Civil, Box 107, File War/C/131: Coordination of Allied War Effort – Control of Supply and Shipping. *Telegram from the Secretary of State for Dominion Affairs, London, to the Minister of External Affairs, Cape Town, 28 Jan 1942.*

¹⁴¹ DOD Archives, UWH Civil, Box 108, File: Import Control. *Priority Rating*; DOD Archives, UWH Civil, Box 111, File: Import Control. *Priority Rating Shipping.*

	Shipping Category	Shipping Priority	
Group 1	War Supplies	Very Urgent	1
		Urgent	2
		Normal	4
		Future	7
Group 2(a)	Railways, Government Departments, Basic Industries (mining, explosives, agriculture, iron and steel)	Urgent	3A
		Normal	6A
		Future	10A
Group 2(b)	Essential Government and Other Utility Services	Urgent	3B
		Normal	6B
		Future	10B
Group 3	Essential Industries (chemicals, cement, timber and less important mining)	Urgent	5
		Normal	9
		Future	13
Group 4	Industries Producing Essential Commodities	Urgent	8
		Normal	12
		Future	15
Group 5	Industries Producing Less Essential Commodities	Urgent	11
		Normal	14
		Future	16

Table 1.1: Priority rating schedule for the shipment of cargoes to South Africa¹⁴²

As an interim arrangement, the Union Government, provided a basis of division for the outstanding cargo. The cargo was to be apportioned into four main groups in order of importance to the South African war effort (see Table 1.2). This was, however, only a temporary solution to the overburdening South African shipping problem. Throughout the entire process, the South African authorities continually exacerbated the shipping problem by extending the system of priority rating. To their detriment, the authorities also issued Essentiality Certificates for goods not considered essential to the Union's war effort. This action added to the accumulation of unshipped cargo, which by May 1942 amounted to at least 150,000 tons of cargo sitting aground in warehouses or at the docks in the UK. Orders held by exporters in various warehouses additionally amounted to 400,000 tons. To aggravate matters, the MWT could pledge a mere 5,000 to 6,000 tons of shipping per month on the South African run for the immediate future.¹⁴³

¹⁴² DOD Archives, UWH Civil, Box 16, File: The War Time Shipping Problem. *Appendix I*.

¹⁴³ DOD Archives, UWH Civil, Box 16, File: The War Time Shipping Problem. *The Beginning of Shipping Control over Commercial Cargo*.

Good Ordered By	Priority of Shipment
Director General War Supplies, Department of Defence and the British Admiralty	A1
War Supplies ordered through any channel with a priority rating of 1 or 2	A2
Goods ordered by SAR&H, Government Departments and other Essential Public Services	B1
Good ordered through any channels with a priority rating of 3A or 3B	B2
Goods covered by Essentiality Certificates and shipped according to their respective priority ratings.	C
Other Goods According to Priority Ratings (as with above)	D

Table 1.2 Interim four group division for outstanding cargoes for South Africa¹⁴⁴

After the Union Government and the MWT reached an agreement, a license for export to South Africa became a prerequisite from the BOT. During the months of June and July 1942, the entire staff of South Africa House worked overtime in an attempt to assess shipping priorities. They also worked to issue Essentiality Certificates for shipments with a rating between 1 and 8 – contrary to the restrictions imposed by the BOT. After scrutinising the entire backlog of cargo, South Africa House issued nearly 23,000 Essentiality Certificates. It continued to issue Interim Certificates at a rate of 100 per day. With this formidable task accomplished, the function of the Advisory Shipping Committee was reduced to merely reviewing the broader issues surrounding the shipping situation and advising whether or not goods should be shipped. By August, all shipments with a priority rating above five were suspended, due to further wartime demands on available shipping. This increase in cooperation between South African and British authorities drew export cargoes from Britain to within manageable proportions. This collaboration, coupled with the opening of a Central Shipping Register in London for all cargoes destined for South Africa, allowed for the increasing matching of shipping with cargoes in the correct order of priority.¹⁴⁵

Despite these efforts, and the initial success of this scheme, the 5,000-6,000 tons of available shipping per month proved entirely insufficient in lifting the backlog of accumulated cargo. The Union Government estimated that it required at least 10,000

¹⁴⁴ DOD Archives, UWH Civil, Box 16, File: The War Time Shipping Problem. *Appendix II*.

¹⁴⁵ DOD Archives, UWH Civil, Box 73, File: Year Book, Section XI; *Shipping*.

tons of shipping each month to merely lift the current cargo with a priority rating between 1 and 5. This ruled out the consideration of 60,000 tons of accumulated cargo with similar priority ratings. There was also a considerable tonnage of cargo rated 6 to 8 that awaited shipping. The MWT undertook to improve the situation during the remainder of 1942 after several presentations to the British Minister of War Transport, Frederick Leathers, the 1st Baron Leathers. An immediate result of this effort was the provision of additional shipping for the South African run between July and September (see Table 1.3). The likely target of 10,000 tons of shipping per month in both October and November was accordingly exceeded. By the end of 1942, the backlog of shipping with a high priority had decreased to a somewhat manageable 35,000 tons.¹⁴⁶

	Union Government Cargo	Commercial Cargo
July	10,596 tons	12,400 tons
August	4,355 tons	8,150 tons
September	6,706 tons	15, 251 tons
October	5,547 tons	38, 968 tons
November	3,950 tons	30, 890 tons

Table 1.3: Ministry of War Transport shipments to South Africa, Jul-Nov 1942¹⁴⁷

In January 1943, Lord Leathers made it clear that the substantial liftings accomplished towards the end of 1942 would be impossible to repeat. He warned that it would even prove difficult to maintain the minimum of 10,000 tons of commercial cargo per month. The MWT realised that it needed a comprehensive long-term shipping programme to address the Union's import needs. Without such a programme, it was a challenge to plan and allocate equitable tonnage to South Africa. This was because the shipping situation was as yet unstable and liable to sudden fluctuations due to unforeseen crises.

In August 1942 the Combined Shipping Adjustment Board (CSAB) was created in Washington. The establishment of the CSAB helped to facilitate the process of combined planning of Allied shipping during the war. The MWT and the WSA became responsible for programming the shipping requirements of their respective areas of control.¹⁴⁸

¹⁴⁶ DOD Archives, UWH Civil, Box 16, File: The War Time Shipping Problem. *Clearing the Accumulation of Commercial Cargo, and the commencement of Combined Shipping Adjustment Board Procedure, Jun-Dec 1942*; DOD Archives, UWH Civil, Box 113, File: Shipping – Shipping for July and August 1942. *Telegrams from South African Litigation, Washington to PrimeSec Pretoria, 22 Jul 1942*; DOD Archives, UWH Civil, Box 113, File: Shipping – Position in June 1942. *Telegram from Oppositely, London, to South African Litigation, Washington 17 Jun 1942*.

¹⁴⁷ DOD Archives, UWH Civil, Box 16, File: The War Time Shipping Problem. *Clearing the Accumulation of Commercial Cargo, and the commencement of Combined Shipping Adjustment Board Procedure, Jun-Dec 1942*.

¹⁴⁸ DOD Archives, UWH Civil, Box 107, File War/C/131: Coordination of Allied War Effort – Control of Supply and Shipping. *Telegram from Secretary of State for Dominion Affairs, London, to Minister*

Under this arrangement, South Africa were expected to provide the MWT with a detailed programme of its shipping requirements well in advance. These requirements were then assessed in combination with other claimants who were competing for the available, but limited, shipping space. The South African shipping programme thereupon received the required allocation of Allied shipping. Such detailed programmes of shipping allowed the CSAB to plan the global transportation of the maximum amount of goods in the minimum number of movements. It subsequently optimised return cargo opportunities and ensured the minimum wastage of shipping space.¹⁴⁹ The result was a reduction of waste from production facilities, notably the manufacture of export goods which could not be shipped according to the system of priority ratings.

From August 1942 until January 1943 the MWT stressed the need for a forward programme to help plan for adequate shipping space. South Africa, like other countries, was slow to comply with the new requirements. The CSAB thus found it very difficult to plan to meet the Union's required shipping needs, as well as the needs of Southern and Northern Rhodesia, East Africa, Madagascar and other African destinations, whose cargo passed through South African ports. This complacency naturally had a pernicious effect on the South African war economy.¹⁵⁰

After the establishment of the CSAB, the responsibility for securing shipping from North American ports was shifted from the office of the South African Purchasing Commission in Washington to the Union High Commissioner's Office in London. By the end of 1942, a serious shipping concern developed at North American ports that held grave consequences for the Union. Throughout the preceding year, the flow of cargo from North America to the Union was hampered by recurring crises, which threatened to disrupt both the South African private and armaments industries.

An American Economic Mission, headed by D.C. Sharpstone, visited South Africa in 1942 to evaluate first-hand the Union's growing shipping requirements from the USA. This mission found that the Union's war effort was largely dependent on raw materials and other crucial supplies shipped from North America. Upon its return to America, the Sharpstone Commission testified that the Union did indeed need a greater tonnage of shipping to maintain the function of its war economy. Sir Arthur Salter, head of the

for External Affairs, Cape Town, 27 Jan 1942. Also see Perry, 'The Wartime Merchant Fleet and Postwar Shipping Requirements', p. 527; M. Katz, 'A Case Study in International Organisation', pp. 4-6.

¹⁴⁹ DOD Archives, UWH Civil, Box 107, File War/C/131: Coordination of Allied War Effort – Control of Supply and Shipping. *Telegram from High Commissioner, London, to Minister for External Affairs, Cape Town, 2 Mar 1942*; Lewis, 'The Inter-Relations of Shipping Freights', pp. 58-59; Hancock and Gowing, *British War Economy*, pp. 412-417.

¹⁵⁰ DOD Archives, UWH Civil, Box 16, File: The War Time Shipping Problem. *Clearing the Accumulation of Commercial Cargo, and the commencement of Combined Shipping Adjustment Board Procedure, Jun-Dec 1942.* For more on the South African war economy, see Johnston-White, *The British Commonwealth and Victory in the Second World War.*

British Merchant Shipping Mission in Washington between 1941 and 1943, took up this grave matter with Lord Leathers so as to further press the Union's urgent shipping needs upon both the British and American authorities. By the end of 1942, the MWT and the WSA agreed on a joint target of providing six merchants per month for carrying commercial and government cargo from North America to South Africa, the Rhodesias and East Africa. Through this course of action, the shipping situation somewhat improved, and the monthly expected tonnage of imports from North America averaged at 50,000 tons of cargo.¹⁵¹

	Union Government Cargo	Commercial Cargo	Total
USA	100,406 tons	111,161 tons	211,567 tons
Canada	20,065 tons	36,491 tons	56,556 tons
Total	120,471 tons	147,652 tons	268,123 tons

Table 1.4: Summary of cargo awaiting shipment from North America to South Africa, Nov-Dec 1942¹⁵²

In January 1943, there was nearly 270,000 tons of Union government and commercial cargo awaiting shipment from North America (see Table 1.4). Most of this consignment was needed by the Union armaments industries and for defence related matters. If shipping continued at the rate of 50,000 tons per month, it would take nearly six months to clear the accumulated cargo alone while making no allowances for new orders. The accumulation of steel at US ports destined for South Africa was also problematic. This was because the American authorities were adamant not to issue permits for new steel production for the Union because of a significant amount of unshipped steel at North American ports. The accumulated cargo also included smaller amounts of essential supplies. Included among the materials were industrial lubricants, sulphur and other chemicals for the munitions industry, ships stores for victualling convoys at Union ports, machine tools, timber, aircraft parts, textiles, agricultural machinery, paper and other necessities indispensable to the South African armaments industry and the civilian economy.¹⁵³ Despite various representations at a ministerial level to stress the seriousness of the shipping state of affairs, there was no reserve shipping pool on hand to alleviate the matter. South Africa also had to contend with the UK and the rest of the Commonwealth for the available shipping space.¹⁵⁴

¹⁵¹ DOD Archives, UWH Civil, Box 16, File: The War Time Shipping Problem. *The Effect of Combined Shipping Procedure upon the Responsibilities of the Union High Commissioner's Office 1942-1944.*

¹⁵² DOD Archives, UWH Civil, Box 16, File: The War Time Shipping Problem. *The Effect of Combined Shipping Procedure upon the Responsibilities of the Union High Commissioner's Office 1942-1944.*

¹⁵³ Close, 'South Africa's Part in the War', p. 187; Dumett, 'Africa's Strategic Minerals During the Second World War', pp. 386-387.

¹⁵⁴ DOD Archives, UWH Civil, Box 73, File: Year Book, Section XI; Shipping; DOD Archives, UWH Civil, Box 16, File: The War Time Shipping Problem. *The Effect of Combined Shipping Procedure upon the Responsibilities of the Union High Commissioner's Office 1942-1944.*

South Africa met the shipping crisis head-on from January 1943. Henceforth the Inner Control Committee, of the Union Supply Coordinating Board, matched all import programmes to the Union. The Inner Control Committee decided between competing claims for shipping space to be allocated to the Department of Defence, the War Supplies Directorate, and urgent civilian needs. The system of priority ratings did, however, have one grave defect. Severe shortages were a constant threat since any order for a high priority commodity automatically took precedence over the shipment of goods of a lower priority. This occurred regardless of the date of the order, nor of its identified need.

To meet this established lack of balance, a 'shipping term', indicating the year and quarter for shipment (e.g. 3/44), was authorised on the Essentiality Certificates. The combination of the priority rating and the shipping term, which indicated the urgency of a shipment, provided the WSA and MWT with a 'shipping indication' of the order in which shipments should proceed. Goods of a high priority, would, if not shipped in the indicated quarter, be given a higher indicator in the following quarter.¹⁵⁵ The Inner Control Committee was able to satisfy some of the urgent needs arising from the shipping crises. This was done by issuing immediate over-riding priorities and providing the MWT and WSA with a schedule of the Union shipping requirements covering the period of January 1943 to June 1944.

South Africa's shipping requirements from North America over this period were divided into three six-monthly periods, averaging 360,000 tons, 339,000 tons and 360,000 tons respectively. These figures were more than double the target allotted by the WSA and MWT and were entirely unrealistic.¹⁵⁶ Regrettably, the accumulation of unshipped cargo, especially steel, remained constant, so much so that the American War Production Board stopped the production of steel for South Africa until the level of unshipped steel had fallen below 25,000 tons.¹⁵⁷ Towards mid-1943 the shipping dilemma for South Africa became even more acute with the reopening of the Mediterranean to commercial traffic following the Allied successes in North Africa. The direct result was a drastic reduction in shipping around the Cape of Good Hope.¹⁵⁸

To meet the deteriorating shipping situation from North America, the MWT continuously tried to raise the shipping targets to South Africa. The British Merchant Shipping Mission also took up the matter with the WSA. Despite the general concern shown towards this affair, the new monthly target for shipping totalled only 45,000 tons – considerably less than the Union Government's stated minimum requirement of

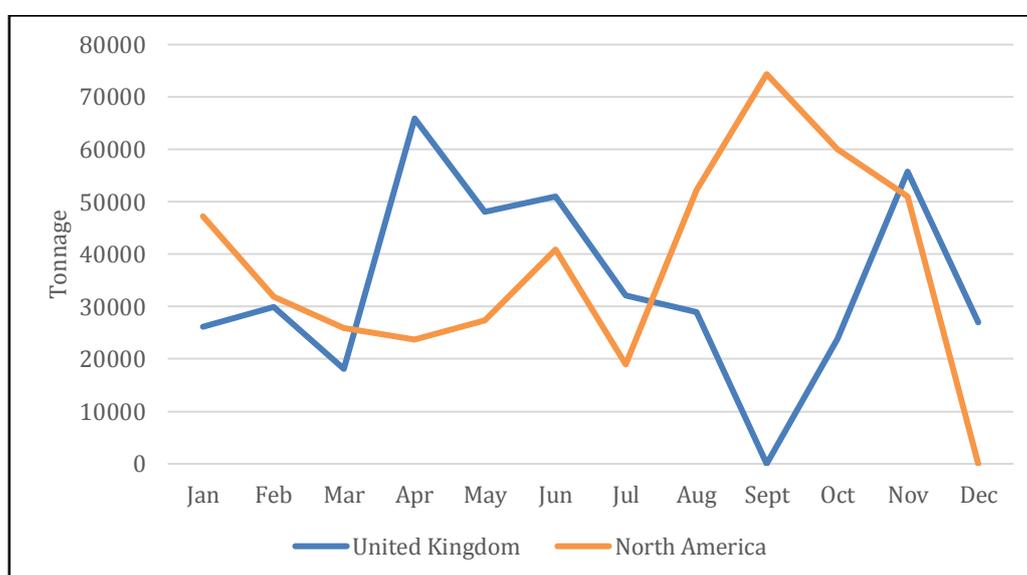
¹⁵⁵ DOD Archives, UWH Civil, Box 108, File: Import Control. *Shipping Term Allocation*; DOD Archives, UWH Civil, Box 110, File: Import Control. *Shipping Term System*.

¹⁵⁶ DOD Archives, UWH Civil, Box 16, File: The War Time Shipping Problem. *The Effect of Combined Shipping Procedure upon the Responsibilities of the Union High Commissioner's Office 1942-1944*.

¹⁵⁷ DOD Archives, UWH Civil, Box 110, File: Procurement. *Steel Shipment and Orders at Hand*; DOD Archives, UWH Civil, Box 110, File: Shipping. *Shipment of Steel Supplies*.

¹⁵⁸ Van der Waag, *A Military History of Modern South Africa*, pp. 200-203.

60,000 tons per month. By June of 1943, the MWT agreed to supply another ship for the North America/South Africa run for July and August. The provision would help ease the acute steel shortage in South Africa. This vessel shipped no less than 35,000 tons of steel, as well as an additional 6,000-7,000 tons of general cargo. By August, the shipping situation had improved despite the continuous accumulation of unshipped cargo at North American ports – then estimated at 224,000 tons, excluding steel. In September and October there was some respite, with eight additional ships dispatched from North America for the South Africa/Middle East coal service. The additional ships enabled the clearing of a substantial portion of the accumulated cargo. A gradual reduction in the Union's shipping requirements from North America, coupled with the allocation of additional shipping space, thus greatly improved the shipping situation from North American ports by 1944 (see Graph 1.5).¹⁵⁹



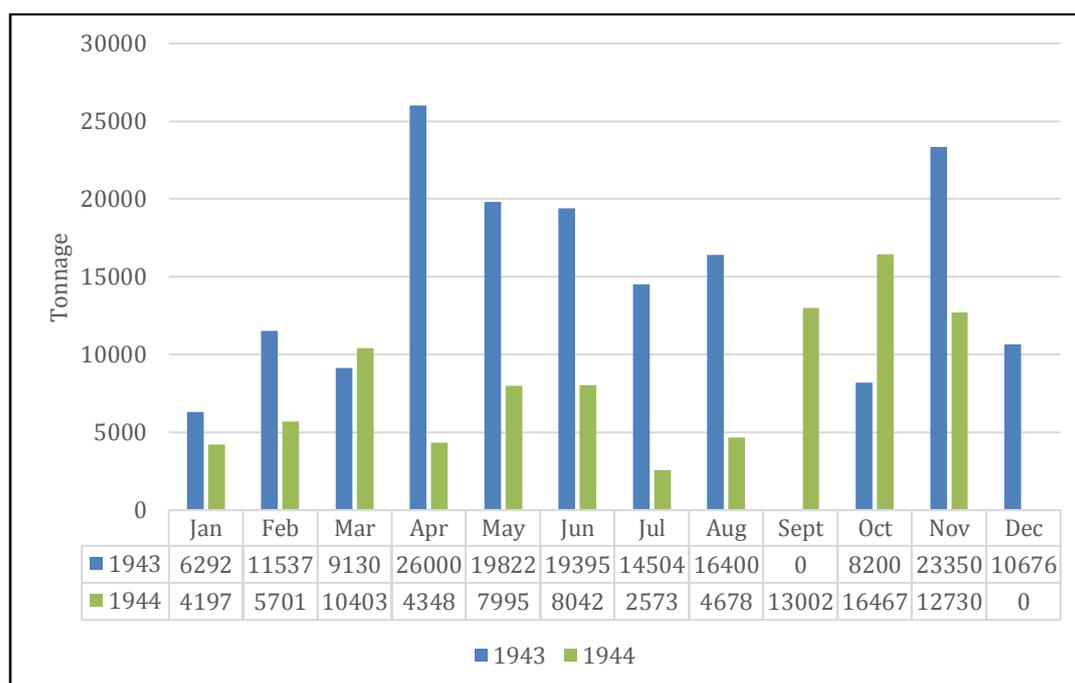
Graph 1.5: Comparative statement of shipping tonnage from the United Kingdom and North America to South Africa, Jan-Dec 1943¹⁶⁰

Even though South Africa's shipping programmes from both the UK and North America proved satisfactory by mid-1944, shipments from the UK had improved somewhat earlier. In May 1943, there were only about 10,000 tons of accumulated cargo at British ports. As a result of improved priority ratings and larger shipments from Britain, there was a marked increase in the volume of non-essential goods that reached South African ports during the latter half of that year. In anticipation of further shipping improvements, the list of goods rated 1 to 5 was increased in February 1944 to include a host of non-essential goods. This period of ease in controls coincided with the

¹⁵⁹ DOD Archives, UWH Civil, Box 73, File: Year Book, Section XI; *Shipping*; DOD Archives, UWH Civil, Box 60, File: C 38. *Wartime Shipping Problem*.

¹⁶⁰ DOD Archives, UWH Civil, Box 36. File: Shipping. *Statement of Shipments from the United Kingdom during the Period Jan to Dec 1943*; DOD Archives, UWH Civil, Box 36. File: Shipping. *Statement of Shipments from North America during the Period January to December 1943*.

build-up to the Allied invasion of France, and the concurrent Allied campaign in Italy. These incidents caused severe congestion at British ports. Between January and August 1944 the MWT was only able to reach the minimum target of 10,000 tons shipped to South Africa per month, and by June the accumulated cargo once more reached 30,000 tons. This was, notwithstanding, only a temporary shipping crisis, and by September the MWT resumed its regular shipping programme to South Africa (see Graph 1.6). Throughout the remainder of the war, and despite the ever-present stringency of the circumstances in which shipping found itself, no further crises impinged on the South African shipping programme.¹⁶¹



Graph 1.6: Shipments of commercial cargo from the United Kingdom to South Africa, 1943-1944¹⁶²

The Union of South Africa emerged from the war without having faced a severe breakdown of its war economy, and without severe civilian austerity. This was a remarkable feat considering the earlier unreliable import controls and the lack of strategic foresight regarding planning of shipping freight. Had the Union Government previously adopted self-imposed restrictions of consumption at an earlier stage, it might have alleviated the shipping troubles it faced at the beginning of 1942. South Africa could do nothing to improve the position of shipping by itself, except to cooperate fully with the Anglo-American shipping authorities throughout. The fact remains that the

¹⁶¹ DOD Archives, UWH Civil, Box 112, File: Import Control. *Priority Rating in Relaxation to Shipping*; DOD Archives, UWH Civil, Box 111, File: Shipping. *Position in 1945*; DOD Archives, UWH Civil, Box 16, File: The War Time Shipping Problem. *The Effect of Combined Shipping Procedure upon the Responsibilities of the Union High Commissioner's Office 1942-1944*.

¹⁶² DOD Archives, UWH Civil, Box 16, File: The War Time Shipping Problem. *The Effect of Combined Shipping Procedure upon the Responsibilities of the Union High Commissioner's Office 1942-1944*.

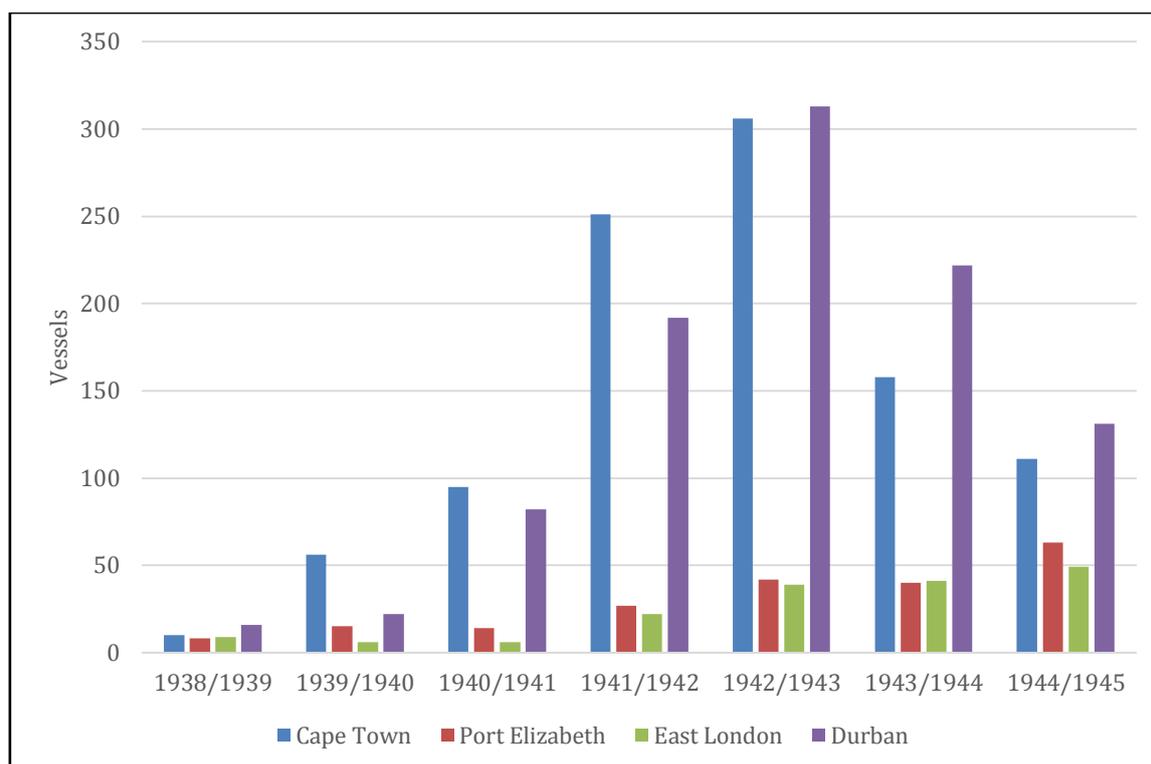
combined policies of the Union Government, the MWT, WSA, and even the CSAB, were unable to alter the global shipping situation throughout the war.

Several geographic, economic and military variables imposed a number of limitations on the planners who aimed to meet the shipping predicament head-on. Some of these factors favoured South Africa from a shipping perspective. Others had such effects that troubles with shipping were merely perpetuated. South Africa's saving grace was its geographic location astride the strategic shipping route to and from the Middle East, which meant that there was always plenty of shipping passing through South African waters. Had the Mediterranean remained open to shipping throughout the war, the Union would have fared much worse from a shipping point of view. Despite this geographic advantage, the Union was unable to produce significant export surpluses which formed a vital part of the British and American import programmes. This shortcoming naturally increased the difficulty of providing a higher regular tonnage of shipping for the Union. Without return cargoes, the loss to the UK import programme in particular, would have crippled the Allied war effort.

1.4 The control, victualling, and repair of Allied shipping in South Africa

The South African harbours were not duly strained at the outbreak of the war. The Union authorities did realise though, that as the war progressed, Union ports would increase in strategic value. This would result in an inevitable rise in the presence of Allied naval vessels, troop transports and merchant shipping calling at these ports. As follows, the SAR&H implemented a host of development plans to provide additional facilities in anticipation of the greater use of South African ports. This farsighted policy by the Union authorities was justified by 1940. Following the Italian entry into the war and the closure of the Mediterranean, a large number of Allied merchants and naval vessels were forced to make use of the strategic shipping lane around the Cape of Good Hope (see Graph 1.7). The Japanese invasion of the East Indies and Burma, as well as Japan's occupation of Singapore and Hong Kong, only added to the complications. South African waters at once became a vital link in the main Allied supply routes to and from the Middle East, the Indian subcontinent and the Far East. The Union ports also provided vital anchorage, victualling, dry-docking and repair facilities to the visiting naval and merchant vessels.¹⁶³

¹⁶³ DOD Archives, UWH Civil, Box 24, File: SA Railways and Harbours Departmental Civil War History Vol VIII. *Ports & Shipping*.



Graph 1.7: Total number of Allied naval vessels that called at the major South African ports, 1939-1945¹⁶⁴

Along with the provision of a key connection between Allied supply routes, the South African harbours acted as the lifeline of the Union. The best part of the Union exports and imports passed through its ports at one stage or another. This turn of events naturally placed additional strain on the control measures and infrastructure of the SAR&H since 1940.

At the outbreak of the war, most South African ports were considered inadequate to handle existing peacetime merchant traffic, despite upgrades in some harbours. South Africa was, however, fortunate that actual hostilities did not extend to any of its territories. Neither the Ossewabrandwag nor other Axis elements succeeded in destroying any of the SAR&H harbour facilities during the war, despite several attempts at sabotage by the former.¹⁶⁵

¹⁶⁴ DOD Archives, UWH Civil, Box 24, File: SA Railways and Harbours Departmental Civil War History Vol VIII. *Ports & Shipping*.

¹⁶⁵ NWU, RAM Div, Ossewabrandwag Archive (OB Archive), Transkripsie/Bandopname *D.J.F. Scribante – Sabotage van Durbanse Hawe*.



Fig 1.5: The return of the 1st South African Division from North Africa, 1943¹⁶⁶

Although the war placed severe pressure on South African manpower and materials, the development of the harbours continued unabated to ensure the speedy turn-around of shipping in South African ports. Pre-war development plans for SAR&H harbours, which included the provision of additional sheds, cranes and cargo-handling facilities did, however, have to be abandoned. The highest priority was given to essential work for the maintenance and expansion of vital harbour services. During the first few years of the war, inadequate use was made of the Port Elizabeth and East London harbours to relieve shipping congestion at Cape Town and Durban.¹⁶⁷ Before these harbours became viable and offered a quicker turn-around time, adequate oil storage had to be constructed, and sufficient coal-bunkering and repair facilities established. Some of the most notable developments took place in Cape Town, Durban

¹⁶⁶ South African National Museum of Military History, Masondo Reference Library. *SA Navy Photo Collection, S.A. 4491.*

¹⁶⁷ DOD Archives, UWH Civil, Box 73, File: Year Book, Section XI. *Shipping.*

and East London. Cape Town harbour saw the construction of the Sturrock and Duncan Docks and at East London the Princess Elizabeth Graving Dock was built. At Durban, the Maydon Channel was widened and deepened, the general Maydon Wharf, Point Area and Salisbury Island upgraded, and a Royal Air Force Flying Boat Base established.¹⁶⁸



Fig 1.6: The official opening of the Duncan Dock at Cape Town Harbour, 1943¹⁶⁹

The suspension of airmail services and the irregularity of surface mail added a further dimension to the shipping predicament in South African harbours. This meant that ships often arrived ahead of the copies of their manifests or bills of lading, which naturally created delays in the handling and clearing of accumulated cargo at SAR&H sheds and along the wharves. The diversion of shipping from one South African port to another was also complicated, especially since the South African authorities had to match ship arrivals with an adequate number of rolling stock at each port. The system was complicated as long hauls marked the South African railway system and rolling stock, as a rule, remained scarce.

Many of the merchant vessels which called at South African ports were, furthermore, bound for other destinations, and the cargo they brought to the Union was merely the result of topping up. These merchant ships invariably formed part of convoys which amassed in Union ports before continuing on their outward journeys.

¹⁶⁸ DOD Archives, UWH Civil, Box 23, File: SA Railways and Harbours Departmental Civil War History Vol VIII – Addenda to Volumes I and II Ports and Shipping. *Port Development*.

¹⁶⁹ South African National Museum of Military History, Masondo Reference Library. *SA Navy Photo Collection, S.A. 4699*.

This congestion proved a nightmare for the South African authorities. Not only did all of these vessels have to be accommodated, bunkered, watered, and replenished with logistical stores, a high proportion of them needed repairs. A further frustration experienced was that of procuring sufficient ships' stores. This was partly because the priority ratings afforded to the import of ships' stores by South African handlers in Britain and North America were too low to ensure that they obtained the required supplies posthaste. Given the strategic situation this was rather unreasonable, as the quick turnaround of naval and merchant vessels calling at South African ports remained imperative.¹⁷⁰

It took the South African authorities a considerable amount of time to come up with adequate solutions to all of the shipping related problems within its sphere of influence. To start with, the Merchant Shipping Control Committee (MSCC) was established on 7 December 1939. The objective of the MSCC was to cooperate with the Union representative of the British Ministry of Shipping, the forerunner of the MWT. Their combined efforts would result in controlling the supply of coal and oil for use as fuel in vessels and the use of South African harbours for docking and repairs. It would also enforce discipline amongst merchant crews and coordinate the supply of ships' stores. Later on, the MSCC relinquished some of its responsibilities to other South African authorities.¹⁷¹



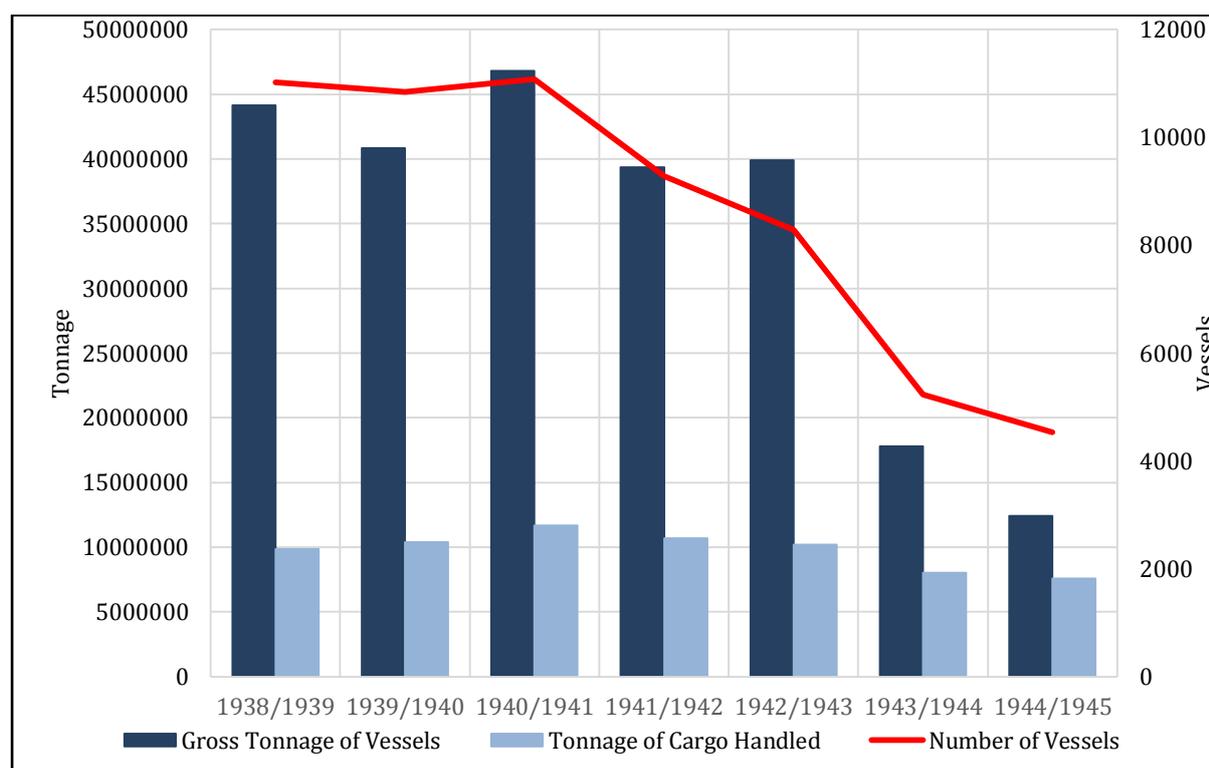
Fig 1.7: *HMS Illustrious* calling at Cape Town during the war¹⁷²

¹⁷⁰ DOD Archives, UWH Civil, Box 24, File: SA Railways and Harbours Departmental Civil War History Vol VIII. *Ports & Shipping*.

¹⁷¹ Martin and Orpen, *South Africa at War*, p. 136.

¹⁷² South African National Museum of Military History, Masondo Reference Library. *SA Navy Photo Collection, S.A. 951*.

The Union harbours were the most taxed during the 1940/1941 fiscal year, especially after the closure of the Mediterranean to shipping, when the total number of merchant vessels that passed through South African waters reached record figures for the war. During this period, 11,082 merchant vessels, comprising 46,831,026 gross registered tons, called at South African ports. An accompanying total of 11,652,522 tons of cargo additionally passed through South African ports during this timespan, with a record figure of 5.5 million tons of cargo landed (see Graph 1.8).¹⁷³



Graph 1.8: Fluctuations in the handling of vessels and cargo at South African and South West African ports, 1939-1945¹⁷⁴

It soon became imperative to appoint senior officials from the SAR&H to act as port directors at Cape Town and Durban. The functions of these Port Directors varied. They had to represent the Government, through the Minister of Railways and Harbours, in respect of administrative questions arising in connection with the administration and functioning of ports and shipping. They were expected to coordinate the activities of the civil and military departments at the respective ports, as well as coordinate their relations with the commercial community. They had full powers to act on behalf of the

¹⁷³ DOD Archives, UWH Civil, Box 24, File: SA Railways and Harbours Departmental Civil War History Vol VIII. *Ports & Shipping*.

¹⁷⁴ DOD Archives, UWH Civil, Box 24, File: SA Railways and Harbours Departmental Civil War History Vol VIII. *Ports & Shipping*. Stats reworked from the information contained in the document. Please note that these stats are complete, unlike those contained in Turner *et al*, *War in the Southern Oceans*, p. 258 and Gordon-Cumming, *Official History of the South African Naval Forces*, pp. 319-320.

Government, except where important points of policy were concerned.¹⁷⁵ The Port Directors also had the power to investigate, where necessary, items brought to their attention where the opinion was that improvements at the ports could be affected. When the supply of ships' stores became critical, partly due to importing difficulties, the Port Directors took the responsibility of certifying and expediting all applications for import permits, and to ascertain that such stores remained in bond and not cleared for other purposes. The appointment of Directors at Durban and Cape Town met with considerable success in the coordination of the efforts and activities of the naval, military and civilian authorities. Their assignment also allowed for closer contact with the representatives of the MWT and the WSA. The results were so satisfactory that it was decided to extend the powers of the Directors at Durban and Cape Town to encompass the ports of East London and Port Elizabeth.¹⁷⁶

By the middle of 1942, the offensive operations conducted by enemy submarines along the South African coast intensified and became an increasing menace to Allied shipping in the Southern Oceans. These operations, coupled with the somewhat heavy toll taken by Allied shipping as from October 1942, necessitated the Union Government to speed up the turnaround of merchant vessels visiting its ports. These operations also prompted the British Admiralty and the South African Naval Forces (SANF) to speed up and intensify its anti-submarine warfare measures. The SANF was tasked with provision of the safe conduct of merchant vessels along the South African coast.¹⁷⁷

The MWT, in consensus with the Union Government, appointed a commission by mid-1942. Headed by R.B. Tollerton and C.E. Wurtzburg, the objective of the commission was to make an exhaustive analysis of the status of shipping in South African waters. One of the main points considered by the commission was the overbearing need for the quick turn-round of merchant shipping in South African harbours. The commission recommended the establishment of an organisation that could obtain accurate and advance information regarding all shipping under British control approaching South Africa, as well as their respective ports of call, specific logistical requirements, and expected times of arrival in port. This organisation would also have the power to divert shipping to appropriate anchorages when needed. In short, the commission would have the power to divert shipping, but would not have enough power to interfere with the day-to-day operation or control of the harbours operated by the SAR&H. The MWT made representations to the WSA, who duly agreed to cooperate in the functioning of this recommended organisation.¹⁷⁸

¹⁷⁵ DOD Archives, UWH Civil, Box 73, File: Year Book, Section XI. *Shipping*.

¹⁷⁶ DOD Archives, UWH Civil, Box 24, File: SA Railways and Harbours Departmental Civil War History Vol VIII. *Ports & Shipping*.

¹⁷⁷ Kleynhans, 'Good Hunting', pp. 173-183.

¹⁷⁸ DOD Archives, UWH Civil, Box 24, File: SA Railways and Harbours Departmental Civil War History Vol VIII. *Ports & Shipping*.

The South African Ports Allocation Executive (SAPEX), sanctioned by the Union Minister of Transport, was created on 1 January 1943. It promptly took over the responsibility of combatting the long turn-around time of shipping in South African harbours.¹⁷⁹ VAdm (Sir) Campbell Tait, Commander-in-Chief of the South Atlantic Station, and the chief representative of the MWT in South Africa came to an agreement that Cape Town should become the headquarters of SAPEX. The Cape Town Port Director also acted as the Chairman of SAPEX.



Fig 1.8: Vice Admiral (Sir) Campbell Tait – C-in-C South Atlantic Station (1942-1944)¹⁸⁰

The SAPEX committee comprised of representatives of the SAR&H, the MWT, the WSA, the RN, the SANF and the Union Controller of Ship Repairs. The committee, which sat daily in Cape Town, received advance information of all shipping approaching South African waters. This information included their cargo manifests and ultimate destination, along with their bunkering, stores and repair needs. The data gathering was made possible through the use of a universal form used by all ports of despatch across the globe. These were supplemented by VELOX and VESCA messages¹⁸¹ received

¹⁷⁹ Hancock and Gowing, *British War Economy*, p. 420; Martin and Orpen, *South Africa at War*, p. 136.
¹⁸⁰ <https://artuk.org/discover/artworks/vice-admiral-sir-william-campbell-tait-18861946-175436> (Accessed 29 June 2018).

¹⁸¹ After the outbreak of the war in Europe the British Admiralty once more took recourse the Lloyds reporting system, the relationship dating back nearly 200 years, and hence modified it to meet wartime needs and augment it by including reports from routing officers, intelligence

through naval channels, that provided all the essential information needed without putting a strain on the already heavily taxed cabling facilities. The committee was, however, constantly aware of the security risks associated with the daily transmission of such shipping information, and took all possible means to prevent the leakage of shipping information to enemy agents.¹⁸²

The SAR&H also provided SAPEX with additional findings. These included the daily returns of all the shipping in South African harbours; the amount of cargo being loaded and discharged and the amount of coal or oil being bunkered. Further information entailed whether water and stores were being taken on; whether repairs were being done – with estimates of when each of these would be completed – and when the ship would be ready to sail.

SAPEX was required to take into account the different harbour facilities for handling ships and cargo, along with the availability of rail connections and escorts by surface ships and aircraft, as well as the impact of delays on group sailings. Such information allowed SAPEX to order merchant shipping to the most suitable ports in each situation. Customs officers and port authorities would accordingly be alerted, crew's mail redirected, and cargo manifests and other documents forwarded to the various ports concerned.¹⁸³

The question of final delivery, however, remained contentious for SAPEX, as it was essentially the concern of each shipping line. After the matter was referred to the MWT and the WSA, the various shipping lines were instructed to make out all Bills of Lading for cargo shipped to South African ports for a named port, or any other port in South Africa, as directed by SAPEX. The commission made a further effort to spread the load of imported traffic over the four main South African ports. It did so by recommending that the Allied exporting countries should load their cargo for discharge at each of the four main Union ports. Along with the Canadian authorities, the MWT readily accepted the proposal. The single caveat was that there be no unnecessary delay in cargo handling. The United States authorities did not welcome the suggestion at first. They did, however, subsequently agree to a three port loading scheme – also with the provision that there be no delay in the despatch of American ships.¹⁸⁴

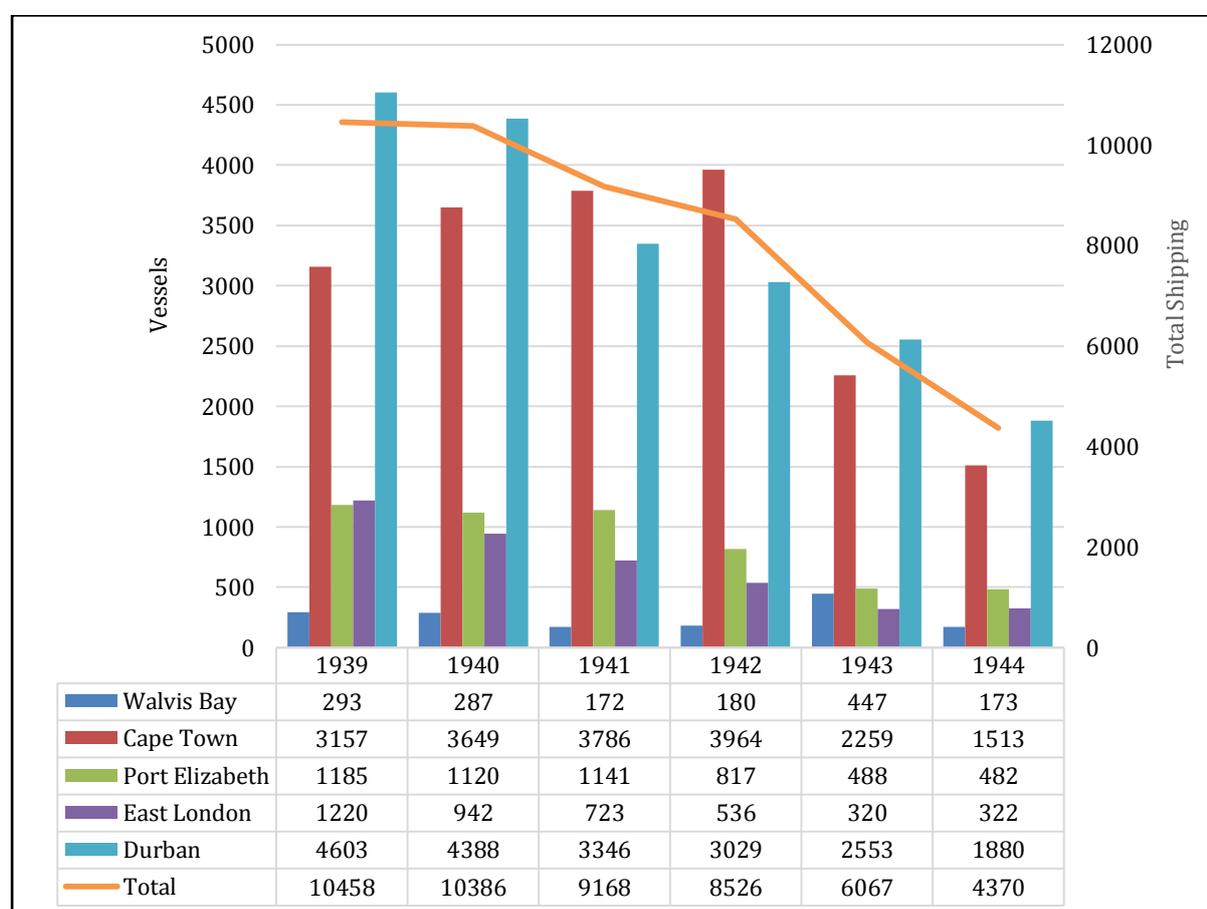
centres and additional reporting officers to permit a reasonably accurate plot of all merchant shipping world-wide. This system was called the "VESCA" (Vessel and Cargo) system. The VELOX messaging system allowed for confidential shipping information to pass between ports and the Reporting Officers in the Cape Intelligence Area. The VELOX telegrams was essentially a coded and re-coded message and comprised the VELOX message in plain language, the ship's signal letter along with a dummy letter, the estimated time of arrival, and the time of origin and date in plain language. See US Navy Department, *History of Convoy and Routing*, p. 63.

¹⁸² DOD Archives, UWH Civil, Box 24, File: SA Railways and Harbours Departmental Civil War History Vol VIII. *Ports & Shipping*.

¹⁸³ Martin and Orpen, *South Africa at War*, p. 136.

¹⁸⁴ DOD Archives, UWH Civil, Box 24, File: SA Railways and Harbours Departmental Civil War History Vol VIII. *Ports & Shipping*.

An off-shoot of this redistribution of shipping arrivals amongst South African ports, was the establishment of Saldanha Bay as a defended lay-by anchorage.¹⁸⁵ Saldanha is South Africa's only natural protected anchorage. Even so, it lacked an adequate supply of water and harbour facilities, which prevented it from handling a large number of ships at any one time. From 1942 the South African authorities attempted to rectify this position. Initially, fresh water was conveyed from Cape Town by a water-tanker on a temporary basis. Lighters and temporary bunker facilities were conversely available on a more permanent basis. The harbour at Saldanha, also underwent several key developments. Among these were the installation of a pipeline from the Berg River to supply 1 million gallons of water per day, a reinforced concrete jetty, a ship-repair depot and oil storage tanks. Unfortunately, most of these projects only reached completion after the port's greatest need had passed.¹⁸⁶



Graph 1.9: Total merchant shipping handled at South African ports, 1939-1944¹⁸⁷

¹⁸⁵ Burman and Levin, *The Saldanha Bay Story*, pp. 145-152.

¹⁸⁶ Gordon-Cumming, *Official History of the South African Naval Forces*, pp. 189-195. For more on the development of Saldanha during the war see Visser and Monama, 'Black workers, typhoid fever and the construction of the Berg River – Saldanha military water pipeline', pp. 196-198; Visser, Jacobs and Smit, 'Water for Saldanha', pp. 141-143.

¹⁸⁷ DOD Archives, UWH Civil, Box 24, File: SA Railways and Harbours Departmental Civil War History Vol VIII. *Ports & Shipping*. Note that statistics on merchant shipping handled at Saldanha

By early 1943 there was a drastic change in the war situation. The Allied success in North Africa and the opening of the Mediterranean shipping route meant that far fewer Allied naval vessels and merchantmen would use the strategic shipping lanes around the Cape of Good Hope. This had a dramatic effect on the South African shipping position, with a drastic decline in the volume of shipping calling at Union ports for the remainder of the war (see Graph 1.9). Despite this reduction in shipping, the tonnages of imported cargo handled at South African ports remained fairly constant. The Cape Town and Durban ports remained particularly busy owing to an increasing demand for South African exports. Throughout the war, the combined efforts of the SAR&H, MSCC, SAPEX, MWT and WSA ensured the quick turn-around of both the Allied merchant shipping and naval vessels which called at South African ports.¹⁸⁸

Before the outbreak of the war, ship repairs in South Africa consisted mainly of minor overhauling of merchant vessels and the maintenance of fishing trawlers and whalers. Only two ports possessed graving docks, with nearly 150 men employed between them. By 1941, following the closure of the Mediterranean to Allied shipping in 1940, nearly 60% of the merchant and naval shipping that rounded the Cape of Good Hope required repairs. This demand necessitated major repairs and overhauls to be facilitated at South African harbours.¹⁸⁹

On 31 January 1941, a Director of Merchant Ship Repairs was appointed to decide on the priority of repair work and its allocation. The Director of Merchant Ship Repairs further allocated repair work between various firms on a cost-plus pricing basis, which seemed the only feasible method. Unfortunately, the cost-plus pricing basis did not furnish a strong incentive on the firms to complete the work in the shortest possible time. Both the RN and SDF, however, allocated their own repair work, which received priority above the Allied merchants. This division between authorities naturally led to some challenges. By September 1941 a Controller of Ship Repairs was appointed with authority to decide on all priority repairs, and direct all shipping repair work in the Union. He also had a seat on SAPEX, and gave valuable advice to this committee, especially on the completion dates of vessel repairs. The Controller of Ship Repairs further centralised the supplies used in shipping reconditioning into the Merchant Shipping Repair Pool, upon which contractors could draw as the need arose. In addition, his office was responsible for the procurement and importation of the overseas material needed to undertake shipping repairs. The appointment of Deputy

during the war is incomplete, though there was a definite surge in merchant vessels visiting the port from the latter half of 1942 to mid-1943.

¹⁸⁸ DOD Archives, UWH Civil, Box 73, File: Year Book, Section XI. *Shipping*.

¹⁸⁹ DOD Archives, UWH Civil, Box 23, File: SA Railways and Harbours Departmental Civil War History Vol VIII – Addenda to Volumes I and II Ports and Shipping. *Memorandum on the Ship Repair Organisation*; Martin and Orpen, *South Africa at War*, pp. 136-137.

Controllers at each of the principal South African ports assisted the Controller of Ship Repairs in the execution of his duties.¹⁹⁰



Fig 1.9: Naval repair work undertaken at a South African port during the war¹⁹¹

Graving dock space, however, remained very limited, and by the middle of 1942, as many as 78 ships lay idle outside South African harbours awaiting repairs. This episode was largely due to the loss of docking facilities in the Middle and Far East, which especially confirmed the strategic importance of the Durban graving dock. A further imminent matter was the acute shortage of skilled labour. The scarcity of skilled workers was largely a result of artisans being transferred from the Witwatersrand against their liking. The resultant state of affairs occurred at the expense of the crucial munitions and engineering industries vital to the South African war economy.

At the height of the shipping repair work period, nearly 1,300 men were employed at Durban, 932 men at Cape Town, 204 men at Port Elizabeth and a further 135 men in East London.¹⁹² Despite the above-mentioned pitfalls, the number of ships repaired in South African ports was considerable. The weekly average of ships repaired

¹⁹⁰ DOD Archives, UWH Civil, Box 23, File: SA Railways and Harbours Departmental Civil War History Vol VIII – Addenda to Volumes I and II Ports and Shipping. *Establishment and Functioning of Controller of Ship Repairs*; DOD Archives, UWH Civil, Box 23, File: SA Railways and Harbours Departmental Civil War History Vol VIII – Addenda to Volumes I and II Ports and Shipping. *Memorandum on the Ship Repair Organisation*.

¹⁹¹ South African National Museum of Military History, Masondo Reference Library. *SA Navy Photo Collection, S.A. 564*.

¹⁹² DOD Archives, UWH Civil, Box 23, File: SA Railways and Harbours Departmental Civil War History Vol VIII – Addenda to Volumes I and II Ports and Shipping. *Establishment and Functioning of Controller of Ship Repairs*.

from March 1941 to March 1943 totalled sixty-two. A number of vessels were repaired after being torpedoed, while some craft were converted into armed cruisers and hospital ships. Some Allied liners had their boilers completely overhauled, while repairs to naval guns were also carried out. At least 4,451 ships were fitted with degaussing equipment, and many with radar and asdic equipment. Three floating docks were built along with the production of several general launches, cutters, dinghies, lifeboats and special equipment such as Fairmile motor launches. Most of this work had never been contemplated in South Africa before the war.¹⁹³ By the end of 1943 there was a marked decline in the number of ships being repaired, especially after the Mediterranean was re-opened for naval craft. The ship repair organisation was, however, kept in readiness for the predicted Middle East offensive. By March 1944 this need no longer existed. As a result, the Ship Repair Control Organisation in South Africa was permanently closed down well before the Japanese surrender in 1945 (see Table 1.5).¹⁹⁴

	Merchant ships	Naval ships	Harbour craft	Total
Cape Town	2,964	844	115	3,293
Durban	3,889	1,538	228	6,655
Port Elizabeth	465	117	27	609
East London	231	139	61	431
Walvis Bay	19	11	0	30
Total	7,568	2,649	431	10,648

Table 1.5: Total number of ships repaired in South Africa, 1941–1944¹⁹⁵

Conclusion

It is undeniable that a close study of shipping forms the basis to understanding the Axis and Allied maritime strategies in South African waters during the war, largely due to the interconnectivity of the Allied war effort particularly in the naval sphere. The availability of merchant shipping for imports and exports was crucial to the continued functioning of the South African war economy. Sourcing this shipping proved problematic, as South Africa often desired more imports than the Allied shipping programmes were able to provide. The introduction of a number of control measures, such as priority rating and the establishment of the CSAB, helped to ease South Africa's wartime shipping dilemma. The strategic location of South Africa astride a main maritime trade route meant that large numbers of naval and merchant vessels visited

¹⁹³ DOD Archives, UWH Civil, Box 25, File: Shipping Repairs. *South Africa's Achievement in Wartime Shipping Repairs*; DOD Archives, UWH Civil, Box 73, File: Year Book, Section XI. *Shipping*.

¹⁹⁴ DOD Archives, UWH Civil, Box 23, File: SA Railways and Harbours Departmental Civil War History Vol VIII – Addenda to Volumes I and II Ports and Shipping. *Establishment and Functioning of Controller of Ship Repairs*.

¹⁹⁵ DOD Archives, UWH Civil, Box 73, File: Year Book, Section XI. *Shipping*; DOD Archives, UWH Civil, Box 23, File: SA Railways and Harbours Departmental Civil War History Vol VIII – Addenda to Volumes I and II Ports and Shipping. *Establishment and Functioning of Controller of Ship Repairs*.

its harbours as they passed round the coast during the war. South Africa evidently had to exercise control over all the vessels which visited its ports. It also had to make adequate provision for the victualling and repair of these vessels.

The establishment of SAPEX, and the appointment of the Controller of Ship Repairs, helped the South African authorities to exercise a large measure of control over the shipping situation in general. Despite its continued importance to the Allied war effort, the South African contribution with regard to shipping, remains under-appreciated. The importance of the Cape Town/Freetown shipping route did, however, not go unnoticed by the *OKM* and *SKL*. They maintained that far-flung operations off the coast of South Africa were only feasible if there was sufficient sinking potential to justify a sustained U-boat offensive. It is thus rather unsurprising that the Axis and Allied maritime strategies off the South African coast during the war were reactionary rather than preventative in nature. This comes to the fore in the following chapters, where the execution of the Axis and Allied maritime strategies in South African waters are discussed at length. The first step of this discussion involves the measures taken to protect the South African coast, which are investigated in Chapter 2.

Chapter 2

The development of the South African coastal defence system, 1933-1945

Introduction

The South African naval and coastal defences were in a state of constant development throughout the interwar period. South Africa, however, remained reliant on the United Kingdom (UK), and the Admiralty in particular, for its coastal and naval defence. At the outbreak of war, the Union Government was determined to re-establish a distinctly South African naval asset to control its maritime defence. The Admiralty, however, viewed these developments with concern. The idea of re-establishing the navy had an unequivocal effect on Anglo-South African naval relations and the conduct of the naval war in South African waters.

The Seaward Defence Force (SDF) officially assumed the responsibility for South Africa's coastal and naval defences in January 1940. Without delay, it took over the former British responsibilities of minesweeping (M/S), anti-submarine (A/S) duties, Port War Signal Stations, Examination Services, and other fixed naval and harbour defences at the principal South African ports. South Africa, however, remained somewhat reliant on the Admiralty for technical and training support, and for the provision of specialised equipment needed for coastal defence. The exigencies of the naval war in the Southern Oceans naturally tested the Union's coastal and naval defences.

This chapter has three broad objectives. Its first objective is to investigate the formation of South Africa's coastal and naval defences during the interwar period, especially against the backdrop of economic rationalisation and Imperial defence. The second objective is to critically discuss the creation of the SDF and Anglo-South African naval relations at the outbreak of the war. Last, the chapter evaluates the development of a comprehensive South African coastal defence system during the war.

2.1 Interwar rationalisation, Imperial defence and the South African Naval Service

A number of part-time naval volunteer units preceded the formal establishment of a permanent South African naval force. The earliest of these volunteer units to come about were the Port Elizabeth Naval Volunteer Brigade in 1861, the Natal Naval Volunteers in 1885, and the Cape Colonial Division of the Royal Naval Volunteer Reserve (RNVR) in 1905. These forces formed the foundation of South Africa's coastal

defence organisation, despite several organisational and financial constraints that plagued these units.¹⁹⁶

The South African Defence Act of 1912 formalised the amalgamation of the Cape Colonial Division and Natal Naval Volunteers in July 1913 into a single unit known as the South African Division of the RNVR (RNVR (SA)). Though not a permanent naval force, the RNVR (SA) was funded by the Union Government and essentially formed part of the Union Defence Force (UDF). The Royal Navy (RN) did, however, remain responsible for its peacetime organisation, training, administration and discipline. The RNVR (SA) was therefore at the disposal of the Admiralty during the war. The RNVR (SA) rendered valuable service to the RN in the course of the First World War by mobilising men for service aboard vessels and at various shore establishments. Moreover, the RNVR (SA) facilitated a measure of naval interaction between South Africa, the UK and other Dominions. The post-war demobilisation of the RNVR (SA) once more highlighted the dire state of naval affairs in the Union.¹⁹⁷

In 1921, South Africa took a drastic step in terms of its coastal and naval defence. Until then, South Africa maintained no permanent naval forces, and despite the existence of the RNVR (SA), it continued to rely on the Admiralty for its naval and coastal defence. This defence, and the concomitant politics of the 'naval contribution', however, came at a price, and amounted to an annual levy of £85,000. South Africa suspended its payment of this regular financial imposition in 1921, and decided to develop its own naval capability henceforth. Unsurprisingly, the establishment of the South African Naval Service (SANS) on 1 April 1922 held far-reaching consequences in terms of naval and coastal defence.¹⁹⁸ For the first time, South Africa possessed a permanent naval force of its own. The service was primarily tasked with the protection of its territorial waters and extensive coastline.

The establishment of the SANS allowed for different sections for general duties, M/S and hydrography, while also allowing for the expansion and training of the RNVR (SA). Furthermore, the Admiralty allocated three naval vessels to South Africa: a survey ship HMSAS *Protea*¹⁹⁹ and two M/S trawlers, HMSAS *Sonneblom* and HMSAS *Immortelle*.²⁰⁰ The former conducted a number of hydrographic surveys along the South African coastline, while the latter was used for the training of all RNVR (SA) officers and ratings. The first officer commanding SANS was Cdr N.H. Rankin, a retired RN captain. The Admiralty further transferred a depot ship to the SANS, and HMSAS *Africander*

¹⁹⁶ Gordon-Cumming, *Official History of the South African Naval Forces*, pp. 1-3. Also see Hay, *History of the R.N.V.R. South African Division*.

¹⁹⁷ Wessels, 'The South African Navy and its Predecessors', pp. 110-111; Potgieter, 'Maritime Defence and the South African Navy', pp. 166-167.

¹⁹⁸ Van der Waag, 'The Union Defence Force Between the World Wars', p. 194.

¹⁹⁹ The former minesweeper *HMS Crozier*.

²⁰⁰ The former *HMS Foyle* and *HMS Eden* respectively.

became the nominal administrative headquarters of the embryonic naval force, consisting of a mere 16 officers and 117 ratings.²⁰¹

In 1923, an Imperial Conference was held in London. This conference gave special attention to the question of mutual assistance and cooperation in the Imperial defence. The meeting recognised the legal right of Dominion Governments to decide on both the nature and extent of any military action it would take in the defence of the British Empire during future wars. The guiding principles required each portion of the Empire to be primarily responsible for its own local defence. Furthermore, adequate provision to protect maritime communications was called for. The provision of naval bases across the globe with repair and refuelling capabilities would also ensure the strategic and operational mobility of the RN. Finally, the maintenance of a minimum standard of naval strength would be assured, and the development of air forces established throughout the Empire. South Africa, however, took no immediate steps in this regard. Their reticence was partly due to the new National Party Government's policy of resigning its responsibility of colonial policing, and focusing instead on the protection of its neutrality. In 1926, Col Frederic Creswell, the Union Minister of Defence, reiterated South Africa's stance on Imperial defence at the Imperial Conference in London, and confirmed that there was no legal provision for the UDF to render war service outside the confines of southern Africa.²⁰²

Despite South Africa's strong position on its commitments to Imperial defence, defence matters in the Union were acute. Amid a general reorganisation of the structure of the UDF in 1922, and an amendment of the Defence Act during the same year, the South African defence establishment was in a dire state of affairs. By the mid-1920s, the UDF faced the prospect of further reorganisation largely due to manpower and budgetary constraints. Further, by 1927, the effective strength of the Permanent Force had plateaued at 151 officers and 1,259 other ranks. The manpower concerns were, however, a triviality when compared to the worsening financial climate due to the onset of the Great Depression. The destabilising effect of the Great Depression had a profound impact on the Union's defence budget, which by 1932 amounted to a meagre £736,831. By 1933 the cumulative effect of manpower and budgetary constraints left the UDF in a precarious position. All told, the UDF was ineffective, undermanned and incapable of effectively defending South Africa.²⁰³

The maintenance of the SANS also proved somewhat too costly amidst growing budgetary confines. The annual budget was £62,000, with an additional £12,000 allocated for the continued operation of the RNVR (SA) – amounting to nearly 10% of the entire 1932 defence budget. Naval defence, it seemed, indeed proved too costly for

²⁰¹ Potgieter, 'Maritime Defence and the South African Navy', pp. 167-168; Gordon-Cumming, *Official History of the South African Naval Forces*, p. 7. For more on the hydrographic survey of the South African coast see Potgieter, 'Guiding the Seafarers', pp. 147-176.

²⁰² Van der Waag, 'The Union Defence Force Between the World Wars', pp. 200-203.

²⁰³ Van der Waag, 'The Union Defence Force Between the World Wars', pp. 203-206.

the UDF. The post of the Officer Commanding SANS disappeared in November 1932, and the command and administration of the SANS reverted to the Commander-in-Chief (C-in-C) of the RN Africa Station headquartered in Simon's Town. In the course of 1933, the HMSAS *Protea* was returned to the Admiralty, whereafter the effective strength of the SANS fell to 64 men. The resultant domino effect also saw the laying up of HMSAS *Sonneblom* and HMSAS *Immortelle*, which were returned to the Admiralty in 1934. The SANS was virtually dissolved as a seagoing force, and with a complement of only four officers and twelve ratings, it could do little more than assist in the administration and training of the RNVR (SA).²⁰⁴

In 1933, however, a number of drastic changes occurred within the military and political spheres of South Africa, which had a decided influence on both the naval and coastal defence of the Union. The focus of Imperial defence also shifted, with attention concentrated on the rise of the Fascist Powers of Germany, Italy and Japan. In the same year, a coalition government, composed of the National Party and South African Party, came into power. With the new coalition government came the appointment of a new Minister of Defence – the controversial Oswald Pirow of German descent.²⁰⁵ In the months of 1934, the South African economy started recovering from the effects of the Great Depression. The defence budget also increased for the first time since 1924. The boost in defence expenditure held the promise of transforming the UDF into a modern military organisation.

Pirow, in turn, immediately set about reorganising the UDF. To start with, he initiated a process of transforming the South African General Staff into more specialised portfolios. The most drastic changes in the General Staff occurred in the office of the Chief of the General Staff (CGS). The former CGS, Maj Gen Andries Brink, now occupied the new position of Officer Commanding UDF, and concurrently held the position of Secretary of Defence. After the abolition of the post of Director Air Services, Pierre van Ryneveld became the new CGS of the UDF. Unfortunately neither Brink nor Van Ryneveld had any affinity or respect for one another. Additionally, with the establishment of five major sections under the control of the CGS, several changes occurred at the Defence Headquarters (DHQ) in Pretoria. The five new positions were Director Military Operations and Training, Adjutant General, Quartermaster General, Director Technical Services, and a Director Medical Services.²⁰⁶

Amid profound structural and financial changes, the need to expand the UDF soon became apparent. The shift in military threat perception in South Africa was the foremost driving factor of this expansion. While a direct attack on South Africa still seemed improbable, the continued threats of civil unrest, coupled with the persistent

²⁰⁴ Potgieter, 'Maritime Defence and the South African Navy', p. 168; Gordon-Cumming, *Official History of the South African Naval Forces*, p. 7.

²⁰⁵ Visser, 'Anglo-South African Relations and the Erebus Scheme', p. 68; Ellis, 'Oswald Pirow's Five-Year Plan', pp. 226-227.

²⁰⁶ Van der Waag, 'The Union Defence Force Between the World Wars', pp. 206-208.

impending commitments to Imperial defence in the event of a world war, remained ever-present. At the foundation of the expansion and reorganisation of the UDF, was Pirow's notorious five-year plan. This scheme would come to fruition between 1939 and 1941.²⁰⁷

It is also noteworthy that under Van Ryneveld's guidance, the South African Defence Policy accepted its continued reliance on the RN to safeguard the Union against all external maritime threats. As a precondition, South Africa was to provide adequate warning in the case of a maritime threat so as to allow for the necessary British countermeasures. In circumstances where early warning proved impossible, the UDF was relied on to delay the attacking navy long enough to enable the RN to mobilise and redeploy to South African waters. While the procurement of naval vessels still proved too costly, the UDF accepted the responsibility of protecting the Union's harbours and coast against external maritime aggression. Minesweepers were earmarked to protect the harbours, while the static defences of the Coastal Garrisons were to be supplemented by mobile artillery and infantry. The presence of the South African Air Force (SAAF) also bolstered the overall strength of forces available for coastal defence.²⁰⁸

In theory, the naval aspects of Pirow's five-year plan seemed progressive and somewhat unrealistic. They were therefore difficult to implement in practice. The reorganisation of the UDF in 1934 led to several changes in the naval sphere, especially in terms of coastal defence. The closure of the SANS in 1934 particularly disturbed the Admiralty, despite the rampant expansion of the RNVR (SA). While South Africa recognised its responsibility for Imperial defence and the continued protection of the maritime trade routes around the Cape of Good Hope, the primary focus of the UDF shifted towards the protection of the Union's harbours and extensive coast.²⁰⁹ As a result, the South African coastal defences expanded without delay. The establishment of the Coastal Artillery Brigade in Cape Town, with several units across South Africa, was at the heart of this increase. The rapid expansion of the SAAF, largely through the goodwill of Van Ryneveld, led to the establishment of SAAF bases in close proximity to the principal South African ports of Cape Town and Durban. These SAAF bases supported the fixed and movable coastal defences, and provided additional aerial support to the RN base in Simon's Town. The Admiralty were, however, sceptical of the South African insistence of defending its own coast, and regarded it as a strategic over-investment.²¹⁰

²⁰⁷ DOD Archives, UWH Civil, Box 1, File: *The Five-Year Defence Plan, 1947*.

²⁰⁸ Van der Waag, 'South African defence in the age of total war', pp. 223-225.

²⁰⁹ Visser, 'Anglo-South African Relations and the Erebus Scheme', pp. 70-71.

²¹⁰ Van der Waag, 'The Union Defence Force Between the World Wars', pp. 208-209. For more on the development of the air power in South Africa, see Dederig, 'Air Power in South Africa, 1914-1939', pp. 451-465; DOD Archives, UWH Civil, Box 1, File: *The Five-Year Defence Plan, 1947*.

During Pirow's tenure as Minister of Defence, the Cape Town coastal defences received particular attention. According to the military historian Deon Visser, Pirow considered a Japanese attack on Cape Town's fixed defences extremely likely in the event of war. This is rather surprising. As discussed in chapter one, the threat perception identified the *Kriegsmarine* as the primary naval menace to South Africa in the Atlantic Ocean, and only considered limited Japanese and Italian naval operations along the Union's Indian Ocean coastline.²¹¹ Nevertheless, Pirow called for the upgrading of the coastal defences around Cape Town. These would include a 15-inch gun battery on Robben Island and more 9.2-inch guns near Duiker Point to dominate and protect approaches to Table Bay. The British, however, regarded the request as excessive, as the anticipated scales of attack on Cape Town did not warrant the installation of such large calibre coastal defences batteries. The British maintained that 9.2-inch gun batteries were more than sufficient to ward off any attacks by surface raiders, especially when supported by the SAAF.

Despite Britain's apprehensions, Pirow insisted on the installation of the 15-inch guns to protect Cape Town. This action would place South Africa's security interest directly above that of the UK and of the shared Imperial defence. In order to appease Pirow, however, Britain acknowledged South Africa's important role in Imperial defence matters, and reluctantly agreed to the request. As completion of the proposed defences would take several years, an interim arrangement to temporarily augment the Cape Town coastal defences was decided on. The Admiralty agreed in June 1936 to loan the monitor HMS *Erebus* to the Union Government for this purpose. The HMS *Erebus* needed an overhaul before undertaking the voyage to South Africa, and a shortage of dockyard space in Britain forced the Admiralty to extend the intended overhaul to December 1938. Pirow accepted the offer amid much secrecy, and only informed the South African parliament in March 1939 of the so-called *Erebus* scheme. The *Erebus* scheme, however, never materialised. In contrast to Visser's view on the augmentation of the Cape Town coastal defences, Pirow's insistence on 15-inch guns for the defence of Table Bay was entirely far-fetched and unrealistic considering the proposed scales of attack and identified threat perception.²¹²

It is fortunate that the rest of the South African coastal defences also received attention during this period. The reformulation of the South African coastal defence policy occurred towards the end of the 1930s. This took place after the Admiralty, the Committee on Imperial Defence and the UDF agreed on the maximum scale of possible naval attacks on the Union. Among the defence measures recommended first and

²¹¹ DOD Archives, Diverse, Group 1, Box 126, File: Coastal appreciations general. *A Japanese attack on South Africa: An appreciation from the enemy point of view*, 29 Sept 1942; DOD Archives, CGS War, Box 122, File: Raiders. *Secret report on possible operation of Italian submarines in the Indian Ocean*, 3 Jul 1940.

²¹² Visser, 'Anglo-South African Relations and the Erebus Scheme', pp. 70-76. For more on the Erebus scheme see Visser, 'Mutiny' on HMS Erebus, September 1939', pp. 59-77.

foremost, were adequate local seaward defence which included M/S, submarine detection, and the installations of A/S defences.

The coast defence policy explicitly stated that 36 whalers and trawlers registered in South Africa be earmarked for conversion to auxiliary M/S vessels. The proposed allocation was: Durban – 6; Cape Town – 12; Port Elizabeth and East London – 6; Saldanha – 6 and Walvis Bay – 6. The UDF further proposed that 15 similar vessels be equipped for A/S duties. Their suggested allocation was: Durban – 3; Cape Town – 6; Saldanha – 3 and Walvis Bay – 3. The coast defence policy further proffered the erection of a series of double A/S nets at Cape Town harbour.²¹³ The next recommendation was the establishment of a ‘fortress’ at Cape Town, Durban and Simon’s Town. The word ‘fortress’ encompassed the complete defence organisation at each location including searchlights, anti-aircraft guns, and minor ordnance at harbour entrances. Under this proposal, a further 2 X 9.2-inch and 2 X 6-inch guns were earmarked for installation at Cape Town, Durban and Simon’s Town to augment the existing armament. The coastal defence policy called for further fixed batteries of 6-inch guns at East London, Port Elizabeth and Saldanha Bay. These artillery batteries would supplement the existing defences, which included a mobile battery of sixty pounders at Walvis Bay, as well as the Achilles Reserve in Table Bay comprising 2 X 6-inch naval guns, 2 X 6-inch fixed guns and 2 X 4.7-inch fixed guns.²¹⁴

In hindsight, one can see that the afore-mentioned coastal defence policy and proposals for modernisation thereof, in all their grandeur, had Pirow’s name written all over it. Moreover, such policy and proposals were entirely unrealistic and unnecessary with regard to South Africa’s defence needs. As van der Waag correctly points out, however, Pirow was a man to whom “the big things rather than the adequate and unspectacular” mattered.²¹⁵

At the strategic level, contact between the Admiralty, the Department of Defence and the UDF proved problematic. This connection continued to deteriorate as the geo-strategic position in Europe worsened. The South African defence leaders, and especially Andries Brink, Pierre van Ryneveld and Oswald Pirow became the scapegoats. The British views on Brink and Van Ryneveld in particular, especially their varied stances on naval matters in general, are particularly significant. The British, and especially the then C-in-C Africa Station VAdm (Sir) Edward Evans, regarded Andries Brink as “no lover of England or the Royal Navy”. He also stated that Van Ryneveld “knows and cares little about the navy... [and will press for the] expansion of the Air

²¹³ DOD Archives, CGS War, Box 38, File: Coast Defence Guns. *Secret Proposal for the Modernisation of Coast Defences, 22 Jun 1938*; The National Archives of the United Kingdom (TNA), ADM 1/10262. *Memorandum on the possible conversion of South Atlantic whalers for A/S duties, Mar 1939*.

²¹⁴ DOD Archives, CGS War, Box 38, File: Coast Defence Equipment. *Secret Policy on Coast Defence, 16 Sept 1939*; TNA, War Office (WO) 106/4934. *South African Coastal Defence, 24 Nov 1940*.

²¹⁵ Van der Waag, ‘The Union Defence Force Between the World Wars’, p. 209.

Force to the exclusion of all else.”²¹⁶ It is interesting to contrast these views to Evans’ opinion of Pirow, whom he regarded as his “greatest friend in the Southern Hemisphere” and who’s “company to me was like a glass of champagne after a successful Admiral’s inspection.”²¹⁷ These quotes, as van der Waag duly points out, only served to highlight the dire state of naval affairs in South Africa. The country had been severely hamstrung by dominion nationalism with a primary focus on land and air forces. The accompanying financial stringency of the 1930s also exacerbated the problem.²¹⁸



Fig 2.1: Admiral (Sir) Edward Evans – C-in-C Africa Station (1933-1935)²¹⁹

Throughout the latter half of the 1930s, Pirow and his libertine five-year plans for the reorganisation of the UDF received a considerable amount of criticism – especially from Gen Jan Smuts and his faithful supporters. The South African General Staff also became increasingly convinced that the UDF needed modernisation due to the continued deterioration of the geo-strategic situation in Europe. It was of the opinion that Pirow’s five-year plan was particularly ill-suited in this regard.²²⁰ Van Ryneveld, when commenting on Pirow’s coastal defence policy, went as far to say that the programme for the rejuvenation of the South African naval defences was far too extravagant. He stated that it could “only be justified on an assumption that South Africa

²¹⁶ Van der Waag, ‘Smuts’s Generals’, p. 52.

²¹⁷ Pound, *Evans of the Broke*, p. 219.

²¹⁸ Van der Waag, ‘The Thin Edge of the Wedge’, pp. 431-432.

²¹⁹ <https://artuk.org/discover/artworks/admiral-edward-evans-18801957-1st-lord-mountevans-of-chelsea-160849> (Accessed on 29 June 2018).

²²⁰ Van der Waag, ‘The Union Defence Force Between the World Wars’, pp. 211-215.

might be required to defend its neutrality against the rest of the commonwealth.”²²¹ Thus, on the eve of the Second World War, South Africa occupied a rather precarious position regarding its naval and coastal defences. The former remained virtually non-existent, while the latter was largely in a state of flux owing to the process of modernisation.

2.2 Naval ambition, Anglo-South African relations, and the Seaward Defence Force

Van der Waag maintains that both the structure and organisation of South Africa’s maritime defence changed considerably at the outbreak of the Second World War. He further argues that these changes had a profound effect on Anglo-South African naval relations. At the heart of the transformation of South Africa’s maritime defence, was the formation of the SDF in September 1939. The SDF was created through the merger of the remnants of the SANS and the SANS War Reserve, as well as through volunteers from the RNVR (SA). The British, however, viewed the establishment of the SDF with much concern and regarded it as altogether unnecessary. In fact, the formation of the SDF not only marked a low-point in Anglo-South African naval relations but revealed several cracks in South Africa’s coastal and naval defences.²²²

Anglo-South African naval relations remained uneasy when, on 6 September 1939, South Africa declared war on Germany. This tension persisted despite the general euphoria surrounding the declaration of war. There was little to no cooperation between DHQ in Pretoria and the staff of the RN Africa Station in Simon’s Town. The lack of collaboration abided despite the addition of an RN Officer, Cdr James Dalglish, to DHQ. Dalglish’s official designation was Staff Officer (SO) SANS, and he was tasked with acting as a liaison officer in Pretoria. To the Admiralty’s advantage, the Africa Station War Order (ASWO) offered the British two strategic resources in South Africa during the war. First, the South African coastal artillery would play a key role in defending South African ports. Second, the RNVR (SA) was crucial in the Admiralty’s planning for a naval war in South African waters. The RNVR (SA) men, along with several retired RN officers living in South Africa, would coordinate shipping control and examination services at South African ports. They would also provide signallers for shore stations, man 30 minesweepers, and provide crews for four armed merchant cruisers equipped in South Africa. Together they formed the first line of Britain’s naval defence in South Africa. The ASWO, redrafted as early as February 1939 by the office of the newly created C-in-C South Atlantic Station, VAdm George D’Oyly Lyon, furthermore guaranteed complete British control over all naval assets in South Africa in the event of war. These naval assets then reverted to the operational and administrative control of the C-in-C or the Senior Naval Officer South Atlantic. In addition, the ASWO undermined

²²¹ DOD Archives, CGS War, Box 38, File: Coast Defence Equipment. *Secret Policy on Coast Defence, 16 Sept 1939.*

²²² Van der Waag, ‘The Thin Edge of the Wedge’, pp. 427-429.

South Africa's role regarding naval and coastal defence. The SANS was thus left with the trivial task of overseeing administrative and liaison arrangements.²²³



Fig 2.2: Vice Admiral (Sir) George D'Oyly Lyon – C-in-C Africa Station (1938-1939)²²⁴

By mid-1939, the RN had started preparations for a possible naval war. In the event of war, only a few RN cruisers and armed merchant cruisers – chiefly manned by RNVR (SA) personnel – would operate in South African waters. When Lyon left to administer the South Atlantic Station in Freetown in June 1939, Capt Charles Stuart RN assumed complete responsibility for the activation of the ASWO when war broke out. As the Senior Naval Officer in Simon's Town, Stuart was at the centre of Anglo-South African relations. He was in a tricky position. He had to fulfil his wartime duties to the Admiralty, while staying in the good books of the South African General Staff.²²⁵

²²³ Van der Waag, 'The Thin Edge of the Wedge', pp. 432-434. Also see Spong, Osborne and Grover, *Armed Merchant Cruisers 1878-1945*.

²²⁴ <https://www.gettyimages.ca/detail/news-photo/vice-admiral-sir-george-hamilton-doyly-lyon-the-new-news-photo/825514940#/vice-admiral-sir-george-hamilton-doyly-lyon-the-new-commanderinchief-picture-id825514940> (Accessed on 29 June 2018).

²²⁵ Van der Waag, *A Military History of Modern South Africa*, p.187; DOD Archives, UWH Civil, Box 240, File 215: Union Coast Defences. *South African Naval Forces, 15 Aug 1940*.

Underpinning Stuart's precarious position were fears expressed by the Admiralty before the outbreak of war. First, the Admiralty remained concerned about Hertzog's and Pirow's anti-British, and increasingly pro-German, attitude in the years preceding the outbreak of the war. The South African government continued to remain indifferent to the requirements of the ASWO, leaving the British rather in doubt as to what might transpire in the event of naval mobilisation in South Africa. Nevertheless, Lyon chose to circumvent the South African authorities in the event of war and mobilise the RNVR (SA) regardless.

Second, the *Erebus* scheme had become a point of contention by March 1939 as matters over the control of the naval reserves had come to the fore. The key to the problem was the question of manning the monitor, especially since DHQ demanded that South Africans operate the vessel. The Admiralty Staff in Simon's Town were naturally concerned since they feared that if RNVR (SA) personnel would serve on board the HMS *Erebus*, its reserve pool of trained officers and men would dwindle.²²⁶

The third and most pressing concern on the British side was elicited by an announcement made by South Africa in August 1939. At the heart of this announcement – which was to re-establish a South African naval asset – was South Africa's insistence on controlling its maritime defences. The Director of Coast Defence, Col H.T. Newman, would assume complete control over all Local Seaward Defences, and develop a new South African naval organisation. By the end of August, DHQ decided to establish an Active Citizen Force unit called the South African Local Seaward Defence Corps. The Corps would materialise in addition to the RNVR (SA), and had the sole purpose of providing the required personnel for M/S and A/S duties as well as administering the local examination services. This signalled the re-birth of a South African-controlled naval force, and the Admiralty was naturally concerned, particularly since these duties were the responsibility of the RNVR (SA).

The effects of the reestablishment of a South African naval force were drastic. Within a week, Van Ryneveld ordered Newman to assume complete control over all South African coastal defence matters. These comprised of all of the military, air and naval measures crucial to the protection of the Union's harbours, as well as extensive coast and the vital shipping lanes rounding the Cape of Good Hope. The naval measures also included the provision and operation of M/S and A/S patrols, shipping control service, war and port signal stations, contraband control service, examination service and the provision of A/S defences.²²⁷

²²⁶ Van der Waag, 'The Thin Edge of the Wedge', pp. 434-436; Visser, 'Anglo-South African Relations and the Erebus Scheme', pp. 68-98.

²²⁷ DOD Archives, UWH Civil, Box 86, File: MS 11. *Coast Defence Policy, undated*; DOD Archives, CGS, Group 2, File: CGS/367/13/9. *DCGS to Director of Training and Operations, 3 Aug 1939*. Also see Bisset, 'Coast Artillery in South Africa', pp. 333-357.

Van der Waag accurately points out that a situation marked by duality arose at the outbreak of the war. While the RN had the use of Simon's Town from which to project offensive power, the UDF took complete control of the overall defence of the South African ports and territorial waters. The apparent duality held serious misgivings for the already tense Anglo-South African naval relations, particularly with regard to command and control. The crucial factor sustaining this conundrum was that Newman issued direct instructions to Dalgleish. He did so without any reference to Stuart in Simon's Town, even though Dalgleish was only detached to DHQ as an SO from the RN Africa Station. South African naval politics, it appears, were, certainly rather complex during the late 1930s.²²⁸

As a result of the dire state of naval affairs in the country, the outright implementation of the ASWO was recommended. The South African naval reserves were accordingly unofficially mobilised upon the British declaration of war on 3 September. The question over who actually controlled the naval forces soon came to the fore, and on 5 September, Stuart approached Van Ryneveld in this regard. The British had hoped that the timely departure of Pirow would ease defence relations. However, the status quo remained. Van Ryneveld duly informed Stuart that the Smuts Government demanded complete control over local seaward defences, since it was the only way in which South Africa could ensure the protection of her harbours. Unsurprisingly, DHQ realised it needed British cooperation in this regard, and Van Ryneveld immediately requested Stuart's assistance.²²⁹ Stuart promised his unwavering support in terms of naval matters. He did, however, remind the South Africans that though the RNVR (SA) had not been mobilised at the outbreak of war, the ASWO, once activated, placed the war organisation of all naval forces and harbour defence organisations on a war footing. In practise, this meant that these would revert to British control. In separate correspondence with the Admiralty, Stuart was somewhat more blunt. He warned that the naval mobilisation in South Africa was under threat. He maintained that Smuts was key to this debacle, as Smuts was highly unlikely to authorise the mobilisation of the RNVR (SA) or allow RN officers to exercise command over South African harbours.²³⁰

The South African naval forces were mobilised on 8 September, and RAdm Guy Halifax, a retired RN officer, assumed command of the defunct SANS and the RNVR (SA) in his capacity as Deputy Director Coast Defence. Newman next met with Stuart to convey a South African compromise proposal regarding naval and coastal defence. The Union Government, in an effort to avoid a political backlash from the nationalists, and for Smuts to be able to go to war as intended, suggested that the naval mobilising officers at each of the South African ports be appointed as officers in the SANS.²³¹ These

²²⁸ Van der Waag, 'The Thin Edge of the Wedge', pp. 434-436.

²²⁹ TNA, Admiralty Papers (ADM) 116/4344. *SNO to Admiralty, 3 Sept 1939*; TNA, ADM 116/4344. *SNO to Admiralty, 6-7 Sept 1939*.

²³⁰ Van der Waag, 'The Thin Edge of the Wedge', pp. 436-437.

²³¹ Potgieter, 'Maritime Defence and the South African Navy', p. 169; DOD Archives, UWH Civil, Box 240, File 215: Union Coast Defences. *South African Naval Forces, 15 Aug 1940*.

officers were, however, still under the effective command of Stuart, and DHQ instructed Halifax to cooperate closely with Stuart on all matters relating to naval defence. For Stuart the situation proved problematic, especially relating to the division of command and considering the overall inexperience of the South African General Staff. Nevertheless, Stuart agreed to cooperate with the South Africans despite his reservations, and in principle agreed with Halifax on the suggested compromise.²³²

The compromise, however, needed Admiralty approval, and had serious ramifications. One of the main consequences was that RNVR (SA) personnel could no longer serve outside South African territorial waters, as the South African Defence Act specifically precluded it. The immediate effect was that no RNVR (SA) personnel could serve on RN armed merchant cruisers unless they volunteered for such service. Surprisingly, the Admiralty yielded. They did so despite the fact that Van Ryneveld created a new dilemma by ordering the amendment of the Regulations of the RNVR (SA) on 12 September to provide for complete South African control.²³³

Despite the South African insistence on taking control over its own naval and coastal defences, the mobilising of the RNVR (SA) proved problematic. Since the South African Defence Act bound the RNVR (SA) to the RN, it needed amendment. Such an amendment could only be authorised by the Union Parliament, though Smuts and his cabinet wished to keep the matter *sub rosa*. As a result, the mobilisation of the RNVR (SA) stalled, and South Africa was made to rely on volunteers to help operate its naval and coastal defences.

Stuart, regarded the state of affairs as chaotic, and throughout September, relations between DHQ and Simon's Town continued to deteriorate alarmingly.²³⁴ While Stuart's frustration at the status quo is understandable, he made matters worse by appointing several sea transport officers at Cape Town and Durban without consulting Pretoria. By October, matters had still not improved, and despite Newman's and Halifax's visits to DHQ to rectify matters, the compromise system was yet to be officially implemented. Politically, the situation remained fraught. Even though the Dominion Office and the British High Commissioner, Sir William Clark intervened, the Admiralty had to remind Stuart of the importance of fully cooperating with the South African authorities and maintaining the status quo.²³⁵

On 19 October, a fresh set of proposals for cooperation were discussed. The discussions took place between Halifax, the South African Director General of

²³² TNA, ADM 116/4344. *SNO to Admiralty, 9 Sept 1939.*

²³³ Van der Waag, 'The Thin Edge of the Wedge', pp. 438-439.

²³⁴ TNA, ADM 116/4344. *SNO to Admiralty, 21 Sept 1939*; TNA, ADM 116/4344. *SNO to Admiralty, 13 Sept 1939*; DOD Archives, Secretary for Defence (DC), Box 1973, File: DC 396/38. *SNO to Secretary for Defence, 28 Sept 1939*; DOD Archives, DC, Box 1973, File: DC 396/38. *Secretary for Defence to SNO, 30 Sept 1939.*

²³⁵ Van der Waag, 'The Thin Edge of the Wedge', pp. 439-441.

Operations, Col Pieter de Waal, and Stuart. Following this meeting, Smuts informed Clark that South Africa would take complete ownership of the defence of its harbours and coastline. He also stated that the SDF had been created for the specific purpose of operating and manning the M/S and A/S vessels, the examination service, the coast watching service, as well as the boom and other harbour defences.

The SDF was then formed as a new Active Citizen Force unit. This occurred when the SA Local Defence Corps, the remnants of the SANS, the SANS War Reserve and volunteers from the RNVR were absorbed into it. As noted earlier, Halifax was assigned to command the SDF and carried the official designation of Director of Seaward Defence.²³⁶ According to Stuart, this appointment signalled the effective end of the RNVR in South Africa. The SANS and SANS War Reserve were thus integrated into the SDF without the cancellation of existing arrangements with the RN. This meant that Stuart, somewhat contentiously, would be obliged to find staff from the Africa Station and avail them to train the new force. Stuart regarded the whole undertaking as a waste of time, especially in view of the lack of cooperation from and inactivity within the UDF. The Admiralty, however, continued to stress the importance of cooperation with the South Africans in the naval sphere. As a result, the Admiralty had no other option but to recall Stuart, as he was the single most decisive obstacle standing in the way of the naval compromise.²³⁷

In December 1939, the Admiralty evinced their formal readiness to cooperate with the functioning and training of the SDF. The only caveat was that the seaward defence of Simon's Town remained firmly under British control. According to van der Waag, the Admiralty had reason to be satisfied. This was because the RNVR (SA) continued as before and personnel from the RNVR would only be seconded to the SDF on a temporary basis for training purposes. Moreover, the Admiralty maintained complete control over all M/S and A/S work and the shipping control service at Simon's Town.

The SDF formally commenced its duties with regard to the coastal and naval defence of South Africa on 15 January 1940, though the retroactive establishment of the unit dated back to 1 September 1939.²³⁸ South Africa could claim something of a political victory in the whole matter. It hence assumed far greater responsibility regarding its own naval and coastal defence. These newfound responsibilities would severely tax, and test, the nascent SDF throughout the naval war in South African waters.

2.3 The development of a comprehensive South African coastal defence system

During the month of January 1940, the SDF formally took over the operational responsibilities of the RN. These responsibilities entailed the operation of M/S and A/S

²³⁶ Potgieter, 'Maritime Defence and the South African Navy', p. 169.

²³⁷ DOD Archives, UWH Civil, Box 240, File 215: Union Coast Defences. *South African Naval Forces, 15 Aug 1940*; Van der Waag, 'The Thin Edge of the Wedge', pp. 441-443.

²³⁸ Van der Waag, 'The Thin Edge of the Wedge', p. 443.

duties, the Port War Signal Stations, and the Examination Services at South African ports. An administrative 'shakedown' characterised this period when matters of uniform, discipline, command and control were arranged. Before January 1940, the RNVR (SA) had played a crucial role in manning the various South African naval and coastal defence services at the ports of the Union. Also, 82 South African naval ratings from the RNVR had been drafted to the four RN armed merchant cruisers fitted out in South Africa after the declaration of war. They were HMS *Carnarvon Castle*, HMS *Bulolo*, HMS *Comorin* and HMS *Esperance Bay*. Concurrently, the Department of Railways and Harbours (SAR&H) workshops started with the conversion of trawlers and whalers for M/S and A/S duties, with private firms taking over the task by February 1940.²³⁹

From March 1940, the ranks of the SDF rapidly expanded and continued to enlarge well into 1945. By October 1940 the strength of the SDF stood at 183 officers and 1,049 ratings, though the training of recruits took a considerable time due to a lack of suitable instructors and equipment. This naturally affected the ability of the SDF to contribute to the Union's war effort early on. There was, however, somewhat of an operational respite as the exigencies of the naval war were yet to take full effect in South African waters. The RNVR training establishment, moreover, continued to provide the agreed-upon quota of South African recruits for service in the RN.²⁴⁰

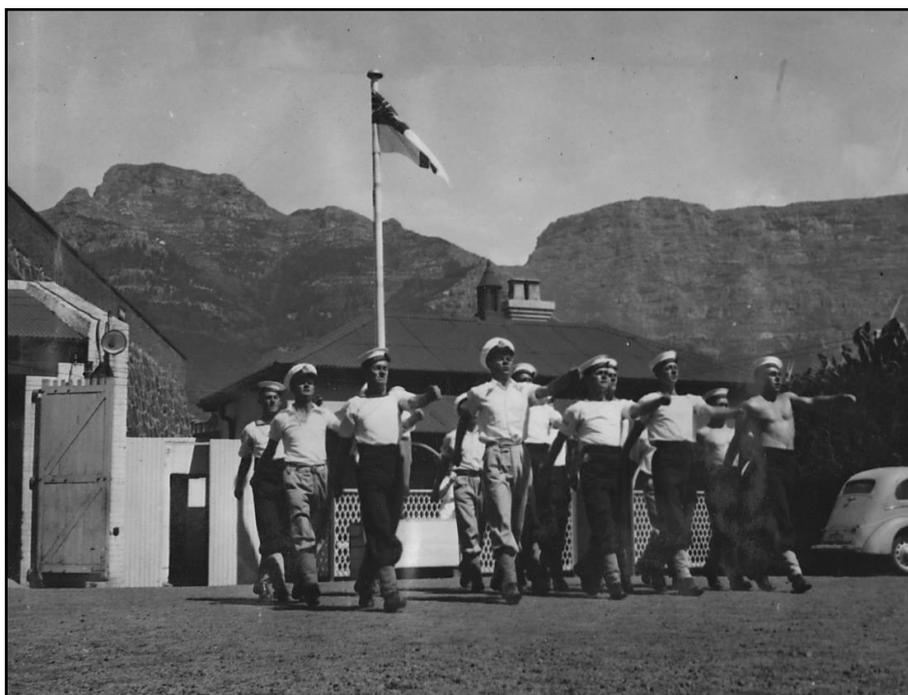


Fig 2.3 Seaward Defence Force officers in training at Cape Town Castle, circa 1940²⁴¹

²³⁹ Turner *et al*, *War in the Southern Oceans*, pp. 17-19; TNA, ADM 1/10262. *Memorandum on the possible conversion of South Atlantic whalers for A/S duties, Mar 1939.*

²⁴⁰ Gordon-Cumming, *Official History of the South African Naval Forces*, p. 39.

²⁴¹ South African National Museum of Military History, Masondo Reference Library. *SA Navy Photo Collection, S.A. 1651.*

On 28 March 1941, Halifax succumbed in an aircraft accident north of Saldanha. He was returning from a routine inspection of the SDF detachment in Walvis Bay. Halifax was instrumental in the formative years of the SDF, especially in dealing with some administrative difficulties during the inaugural period of the force. The next Director of the SDF was the newly promoted Capt Dalgleish, who took command of a force numbering 216 officers and 1,472 men. The ranks of the SDF also opened for non-Europeans in April of that year. Men from the coloured fishing communities along the Cape coast were earmarked for service in the SDF in various non-specialist capacities. By October, this number had increased to 830 men. The SDF also continued to provide personnel for the RNVR (SA) – which by July 1941 numbered 66 officers and 1,702 ratings. Among these, about 1,200 were serving aboard RN warships and defensively equipped merchant ships.²⁴²

In 1941, however, several naysayers within the ranks of the RNVR (SA) speculated that the Union Government intended to close down the organisation completely. Underpinning their fears, were the definite successes of the SDF since its inception, particularly the fact the some of its vessels were serving with RN forces in the Mediterranean.²⁴³ They felt that the SDF was only formed for the local naval defence of South Africa, and that naval service abroad remained the responsibility of the RNVR (SA). The large increase in the strength of the SDF also did little to stem their fears, as this had an inherent effect on the recruitment of the RNVR (SA). The drastic wartime requirements placed on the South African workforce for service with the UDF, was indeed the deciding factor in this matter. It was Smuts who correctly pointed this out.

The RN authorities, however, remained suspicious of South Africa's actual intentions. They were particularly concerned that the SDF would soon take over RNVR bases, due to the rapid increase in their numbers. The crisis came to a head at the port of Alexandria in Egypt, where SDF and RNVR (SA) personnel, due to no fault of their own, served on the same South African vessels. The men of the RNVR (SA) had become increasingly dissatisfied over issues of pay, leave and general service conditions. They were particularly angered by the fact that their fellow countrymen serving in the SDF were better off with respect to these matters. For this reason, RNVR recruiting in South Africa had waned considerably by June 1942, with several of the serving men reconsidering their service within the RNVR (SA).²⁴⁴

In February 1942, Smuts laid the cornerstone of the South African Naval Training Base, designated HMSAS *Unitie* for administrative purposes. He hinted that the event signalled the start of the amalgamation of the SDF and RNVR (SA) into a single naval service. By the middle of the year it became clear that the RNVR (SA) and SDF would

²⁴² DOD Archives, UWH Civil, Box 240, File 215: Union Coast Defences. *South African Naval Forces, 15 Aug 1940*; Turner *et al*, *War in the Southern Oceans*, pp. 87-89; Gordon-Cumming, *Official History of the South African Naval Forces*, p. 55.

²⁴³ Potgieter, 'Maritime Defence and the South African Navy', pp. 170-172.

²⁴⁴ Gordon-Cumming, *Official History of the South African Naval Forces*, pp. 55-60.

merge. At a conference held at DHQ on 20 July, representatives of the Adjutant General, the SDF, RNVR (SA), Admiralty and the Secretary of Defence had a meeting. They discussed and fixed a host of administrative arrangements supporting the creation of a new unified South African naval service. The meeting came to a favourable understanding, and the South African Naval Forces (SANF) was officially established on 1 August 1942. Except for the change in name, as well as in the conditions of service of ex-RNVR (SA) men, there were no drastic amendments of practical importance. During the remainder of the war, SANF personnel, along with the Women's Auxiliary Naval Service, continued to render valuable service in the naval and coastal defence of South Africa.²⁴⁵

In order to fully comprehend the development, functioning and effectiveness of the South African coastal defence system during the Second World War, it is necessary to discuss a number of further matters in detail. These include command, control and combined operations; coastal radar stations; coastal batteries; the examination services; A/S duties; other fixed naval and harbour defences; M/S duties, and coastal air patrols.



Fig 2.4: Semaphore signals pass between South African minesweepers, circa 1940²⁴⁶

On 26 March 1942, the headquarters of the South Atlantic Station moved to Cape Town. Soon thereafter, Smuts decided to establish a Coastal Area Command to centralise control over South Africa's coastal defences. An additional Inland Area Command would be responsible for the defence of the rest of the Union. By July, Maj Gen

²⁴⁵ Potgieter, 'Maritime Defence and the South African Navy', p. 169; Gordon-Cumming, *Official History of the South African Naval Forces*, pp. 60-64, 199-202.

²⁴⁶ South African National Museum of Military History, Masondo Reference Library. *SA Navy Photo Collection, S.A. 410*.

George Brink and Maj Gen Isaac de Villiers took charge of the Inland Area Command and Coastal Area Command respectively. These officers controlled all military operations and security-related matters within their respective areas and were also responsible for the training and discipline of their respective troops. DHQ, however, continued to determine the direction of training, and took control over all matters affecting the provision of equipment, depots and stores.²⁴⁷ The Coastal Area Command was responsible for the defence of an area roughly 100 miles wide along the entire South African coast. This portion of land was divided into several smaller commands, each with its own commanders, commonly referred to as 'Fortresses'. These 'Fortresses' were established to correspond with the principal South African ports. As such, there were six such commands at the Cape, Walvis Bay, Outeniqua, Port Elizabeth, East London and Durban. Each so-called Fortress had a Combined Operations Room, which collated all local information on the movement of shipping, reports from coastal air patrols, radar plots, troop locations, and the position of patrol vessels. All the A/S measures and fixed defences were also linked to them. The combination of this information allowed for accurate military decision making, which resulted in minimum delays when dealing with emergencies or false alarms. As a rule, the various operation rooms passed all of their information to Coastal Area Command, which could then allocate the necessary military forces to the various 'Fortresses' when necessary.²⁴⁸

The formation of the Coastal Area Command coincided with the formal establishment of the Combined Operations Room in Cape Town on 1 July 1942. The Combined Operations Room collated all the relevant information regarding the movement of shipping, intelligence and reconnaissance, troop dispositions and A/S matters. It also provided joint control over all South African and British military forces operational along the South African coast. The Coastal Area Command, along with the Combined Operations Room in Cape Town, not only proved paramount in the coastal defence of South Africa, but allowed for closer Anglo-South African naval relations at the operational level during the war.²⁴⁹

The Special Signal Services, under the command of Dr Basil Schonland, a professor of geophysics, provided radar cover along the South African coastline. At the outbreak of war, the Allies realised that radar could be used to provide early warning against seaborne attack through the use of coast defensive radars as well as airborne equipment.²⁵⁰ The UDF initially sent several individuals to undergo the required radar training at Bawdsey Manor near Ipswich in the UK. These included its Director of

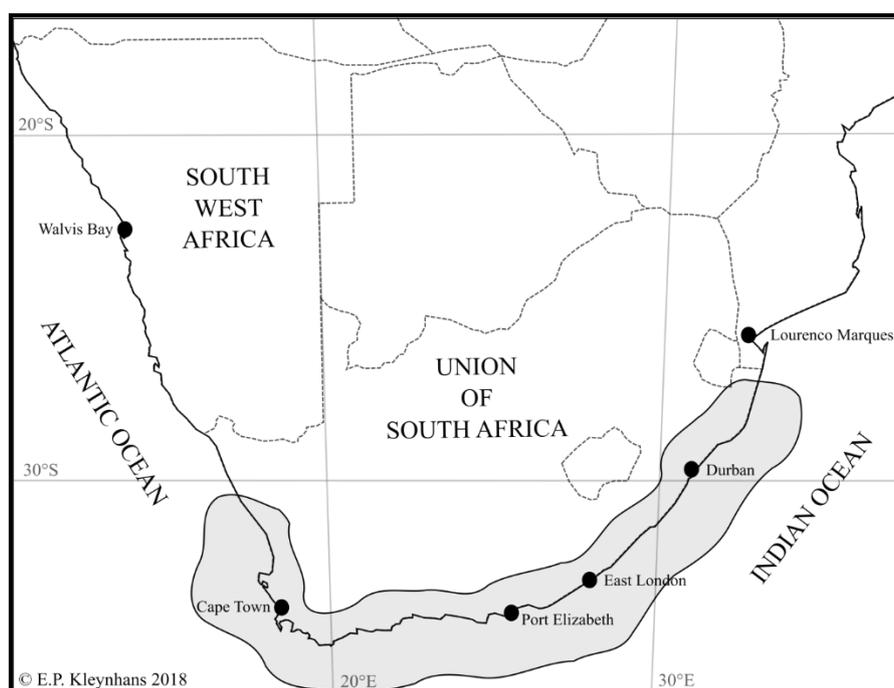
²⁴⁷ Turner *et al*, *War in the Southern Oceans*, pp. 152-153; Gordon-Cumming, *Official History of the South African Naval Forces*, p. 199.

²⁴⁸ DOD Archives, Diverse, Group 1, Box 127, File: Coastal area organisation. *Correspondence between headquarters coastal area and Trigonometrical Survey Office Mowbray re maps, 13 August 1942*. Note that Saldanha was a sub-fortress of the Cape Fortress throughout the war.

²⁴⁹ Van der Waag, *A Military History of Modern South Africa*, p. 188.

²⁵⁰ Turner *et al*, *War in the Southern Oceans*, pp. 110, 215; TNA, ADM 1/13288. *South Atlantic R.D.F. Instructions, 1 May 1943*.

Technical Services, Brig F.R.G. Hoare, Maj H.G. Wilmott and other Dominion representatives. These men were, however, out of their technical depth. The British Air Ministry subsequently dispatched a New Zealand Scientist, Dr Ernest Marsden, to South Africa to train the necessary technical personnel on the workings of radar. In due course, Schonland also met with Marsden. After this, Schonland turned the Bernard Price Laboratory at the University of the Witwatersrand into a rudimentary factory for producing local radar sets. These radar sets followed the so-called searchlight principle. This is where a radar beam from a transmitting antenna would be regularly swept across a section of space and then receive a signal from the same antenna when switched to 'receive'. This process facilitated the procedure of direction finding, which held immense promise for use during A/S operations.



Map 2.1: Predicted radar coverage along the South African coast, 1939-1945

The first of this locally produced radar equipment, the JB1 radar, was installed on Signal Hill in Cape Town on 22 May 1941. Schonland and his team of engineers and scientists formed the core of the Special Signal Services, who fell under the command of the South African Corps of Signals. Schonland travelled to the UK in March 1941 in an attempt to speed up the delivery of suitable British radar equipment. His visit paid dividends, and several new radar sets arrived in the Union. These radar sets supplemented the locally produced units, and by the end of the war, there were at least 30 radar stations operational along the entire South African coast (see Map 2.1). These radar stations were instrumental in providing accurate information of enemy contacts

to the South African coastal defence organisation, as well as the SAAF, and could quite reliably provide accurate enemy positions through direction finding.²⁵¹



Fig 2.5: A coastal gun defending Cape Town Harbour, circa 1940²⁵²

Several coastal batteries defended the South African ports, and volunteers from the South African Garrison Artillery operated the batteries. The local defence of South African ports was initially the responsibility of the part-time Naval Volunteer Brigade. By February 1941 the Naval Volunteer Brigade was reorganised, and hence became known as the Coast Defence Corps with garrisons at Durban, East London, Port Elizabeth and Cape Town. The Coast Defence Corps came under the charge of the individual Fortress Commanders. Following the meeting of the British War Cabinet Sub-Committee on Defence Arrangements for the Indian Ocean in February 1942, the South African threat perception was reassessed.²⁵³ The South African coastal defence policy was accordingly amended. The new establishment called for the installation of an additional number of naval and AA guns at South African ports. The Commander Coastal Air Defences assumed complete control over the coastal anti-aircraft defences in South

²⁵¹ Austin, 'On the Development of Radar in South Africa', pp. 69-80. Also see Gomm, 'South Africa's Electronic Shield' (<http://www.samilitaryhistory.org/vol023go.html>); Austin, 'The South African Corps of Scientists' (<http://samilitaryhistory.org/vol141ba.html>); Hewitt, 'South Africa's role in the development and use of Radar' (<http://www.samilitaryhistory.org/vol033fh.html>); Hewitt, 'Basil Schonland: Memories of the man at work', pp. 11-13; Mangin, and Lloyd, 'The Special Signal Services' (<http://www.samilitaryhistory.org/vol112ml.html>). All internet articles accessed on 23 February 2018. Also see Austin, *Schonland: Scientist and Soldier* and Brown, *A History of Scientific Endeavour in South Africa*; Jacobs et al, *South African Corps of Signals*.

²⁵² South African National Museum of Military History, Masondo Reference Library. *SA Navy Photo Collection, S.A. 987*.

²⁵³ TNA, WO 106/4934. *South African Coast Defence, 24 Nov 1940*; TNA, ADM 116/4499. *Defence Plan for Ports in the Union of South Africa, 23 Feb 1942*.

Africa, which included six anti-aircraft regiments comprising both heavy and light batteries, as well as searchlights at Saldanha, Cape Town, Simon's Town, Port Elizabeth, East London and Durban. While the fixed coastal defence and anti-aircraft batteries at South African harbours never fired in anger during the entire course of the war, they nevertheless rendered excellent service. Their deterrent value was also immense since no direct attacks by enemy surface raiders or warships on South African harbours occurred.²⁵⁴



Fig 2.6: A South African examination officer boarding a merchant ship, circa 1940²⁵⁵

Since the outbreak of the war, provision was made for Examination Services at Walvis Bay, Saldanha, Cape Town, Port Elizabeth and Durban. The Examination Services at each of these ports helped to identify merchant shipping and, along with the fixed coastal defence, controlled their movements. Saldanha Bay was furthermore identified as a Contraband Control Base where suspicious merchant shipping could be searched.²⁵⁶ The Services were initially centralised under the Senior Naval Officer in Simon's Town. The SDF took over these services in January 1940, with Cdr Dalglish, Lt Cdr G.V. Thomas, Lt C.S. Peers and Lt Cdr H.B. Stocken appointed as the Commanding Officers of the naval forces at each of the principal ports. The SDF personnel at each port averaged about 30 and included five officers for the Examination Services and a further two Extended Defence Officers.

There were four months of operational inactivity following the formation of the SDF. This allowed for several misunderstandings, operational friction, and a general

²⁵⁴ Turner *et al*, *War in the Southern Oceans*, pp. 4, 109-111. Also see Bisset, 'Coast Artillery in South Africa', pp. 333-357.

²⁵⁵ South African National Museum of Military History, Masondo Reference Library. *SA Navy Photo Collection, S.A. 470*.

²⁵⁶ Roskill, *The War at Sea: Volume I – The Defensive*, pp. 43-44.

lack of efficiency to be resolved between the Examination Services, the Extended Defence Officers and the coastal defence batteries. The result was a high standard of cooperation. There was a palpable increase in the work of the Examination Services at Cape Town and Durban in 1942, and by August the SANF assumed complete responsibility for this work. By 1944 the addition of several Harbour Defence Motor Launches at the principal ports further facilitated the work of the Examination Services and the Extended Defence Officers. The Examination Services at all South African ports ceased in September 1945, shortly after the defeat of Japan.²⁵⁷

The development of suitable A/S protection at South African harbours proved rather slow. The majority of the merchant traffic passed through Cape Town and Durban, and shipping rarely had to anchor outside the other harbours while awaiting berths. Regular A/S patrols were therefore only necessary at these two ports. At Cape Town, these vessels patrolled the northern approaches between Robben Island and Bloubergstrand, as well as the main approaches between Robben Island and Green Point. At Durban, the A/S patrol line was approximately six miles from the shore and continued for a length of nearly six miles.

By June 1940 the SDF establishment made provision for fifteen A/S vessels through the conversion of whalers and trawlers.²⁵⁸ Initially, the only fully operational A/S vessels were the HMSAS *Rondevlei* and HMSAS *Smalvlei*. After additional asdic sets arrived, however, the conversion of the following vessels neared completion: HMSAS *Mooivlei*, HMSAS *Blomvlei*, HMSAS *Odberg*, HMSAS *Blaauwberg*, HMSAS *Cedarberg* and HMSAS *Sydostlandet*. The conversion of HMSAS *Tordonn*, HMSAS *Sonneblom* and HMSAS *Immortelle* was completed by the end of 1941. These vessels, along with those deployed in the Mediterranean, brought the numbers of the A/S Flotilla up to fifteen. Between May and October 1942 a further four A/S vessels, HMSAS *Pretoria*, HMSAS *Vereeniging*, HMSAS *Turffontein* and HMSAS *Standerton* were commissioned, which allowed for the provision of further A/S protection at Saldanha.

In 1941, HMSAS *Rondevlei*, HMSAS *Smalvlei* and HMSAS *Odberg* were deployed to Durban where they carried out regular A/S patrols, with either one or two vessels continuously on patrol. By February 1942 the addition of HMSAS *Cedarberg*, HMSAS *Blaauwberg* and HMSAS *Sydostlandet* brought the Durban A/S Flotilla up to full strength, allowing for three ships to conduct patrols at any one time. The Cape Town A/S Flotilla at this stage consisted of HMSAS *Mooivlei*, HMSAS *Blomvlei*, HMSAS *Sonneblom*, HMSAS *Immortelle* and HMSAS *Tordonn*. The Durban A/S Flotilla suffered its first operational loss in April 1942 when HMSAS *Sydostlandet* ran ashore near the Umgeni River mouth during rough weather. By May 1942 the arrival of HMSAS *Tordonn* brought the Durban A/S Flotilla back up to strength, while the Cape Town A/S Flotilla

²⁵⁷ Gordon-Cumming, *Official History of the South African Naval Forces*, pp. 25, 33, 185, 245.

²⁵⁸ TNA, ADM 1/10262. *Memorandum on the possible conversion of South Atlantic whalers for A/S duties, Mar 1939*; Gordon-Cumming, *Official History of the South African Naval Forces*, pp. 73-74.

was increased to nine vessels after the addition of HMSAS *Pretoria*, HMSAS *Vereeniging*, HMSAS *Turffontein* and HMSAS *Standerton*. For the remainder of the war, the strength of the South African A/S Flotilla was plateaued at fourteen vessels (see Table 2.1). These vessels, apart from their A/S patrols, assisted the M/S Flotillas in carrying out patrols within the anchorages, ready to drop depth-charges at a moment's notice or engage small enemy surface craft with its naval guns.²⁵⁹

When the German and Japanese submarine attacks along the South African coastline started from the latter half of 1941 through 1942, the A/S Flotillas were increasingly called on to provide intensive patrols and help search for survivors. These operations were, however, difficult to say the least, as the South Atlantic Command had no A/S vessels, while the Eastern Fleet only comprised three corvettes and five destroyers at Mombasa. Moreover, the lack of suitable vessels also negatively affected the escort of merchants travelling along the South African coast.²⁶⁰ By December 1942, group sailings were introduced for the slower merchant traffic travelling between South African ports and along its coastline.

Name	Type	Fuel	Gross Tonnage	First Came into Service
HMSAS <i>Blomvlei</i>	Trawler	Coal	252 tons	11 October 1939
HMSAS <i>Mooivlei</i>	Trawler	Coal	252 tons	13 November 1939
HMSAS <i>Rondevlei</i>	Whaler	Oil	247 tons	8 June 1940
HMSAS <i>Smalvlei</i>	Whaler	Oil	233 tons	8 June 1940
HMSAS <i>Blaauwberg</i>	Whaler	Oil	307 tons	27 December 1940
HMSAS <i>Sydostrandet</i>	Whaler	Oil	258 tons	4 January 1941
HMSAS <i>Cedarberg</i>	Whaler	Oil	307 tons	14 March 1941
HMSAS <i>Odberg</i>	Whaler	Oil	351 tons	1 May 1941
HMSAS <i>Sonneblom</i>	Whaler	Oil	335 tons	14 August 1941
HMSAS <i>Immortelle</i>	Whaler	Oil	335 tons	5 November 1941
HMSAS <i>Tordonn</i>	Whaler	Oil	314 tons	25 November 1941
HMSAS <i>Pretoria</i>	Whaler	Oil	374 tons	8 May 1942
HMSAS <i>Vereeniging</i>	Whaler	Oil	355 tons	27 June 1942
HMSAS <i>Turffontein</i>	Whaler	Oil	355 tons	17 August 1942
HMSAS <i>Standerton</i>	Whaler	Oil	357 tons	26 October 1942

Table 2.1: South African A/S vessels operational in South African waters, 1939-1945²⁶¹

The Coastal Area Command approached the C-in-C South Atlantic in December 1942, and proposed that the larger A/S vessels assist in escort work, as they were faster than the RN assets currently employed. The Coastal Area Command also argued that the introduction of larger vessels would be a welcome change to the monotony of A/S duties, and that escort work would be beneficial for both training purposes and the

²⁵⁹ Gordon-Cumming, *Official History of the South African Naval Forces*, pp. 75-76.

²⁶⁰ Gordon-Cumming, *Official History of the South African Naval Forces*, pp. 85-91.

²⁶¹ Turner *et al*, *War in the Southern Oceans*, pp. 263-264.

morale of the men. The C-in-C South Atlantic and DHQ agreed to the proposal. When the group sailing scheme commenced on 20 January 1943, one of the five escort groups was entirely allocated to SANF vessels. The SANF A/S vessels rendered valuable service in this regard while employed on escort work between Cape Town and Durban where they mainly functioned under RN operational control. HMSAS *Vereeniging* was also the only SANF vessel to be present during two separate attacks on convoys in South African waters, during which it handled itself well.



Fig 2.7: Two South African anti-submarine vessels out on patrol, circa 1942²⁶²

Group sailings between Durban and Mombasa came into effect when independent sailings between Union ports were reintroduced in September 1943. Owing to a shortage of coal for the RN coal-burning A/S trawlers of the Eastern Fleet, the C-in-C South Atlantic approached the SANF with a request for the secondment of the best South African A/S vessels for escort work along the East African coastline. For the next eighteen months, the South African A/S vessels formed part of the 3rd and 4th Escort Groups. They rendered sterling work throughout, and did not encounter any enemy contacts.²⁶³ These vessels temporarily returned to South African waters between March and August 1944 after renewed U-boat attacks. Throughout 1943 and 1944 the

²⁶² South African National Museum of Military History, Masondo Reference Library. *SA Navy Photo Collection, S.A. 5044.*

²⁶³ DOD Archives, Commander Seaward Defences (CSD), Box 15, File: Group sailing operations Union waters. *Note on commencement and ceasing of group sailings, 1944*; DOD Archives, CSD, Box 15, File: Policy (escort groups). *Note on commencement and ceasing of group sailings, 1944.* DOD Archives, CSD, Box 15, File: Policy (escort groups). *CSD Approval of exchange with RN of A/S vessels, 15 Nov 1943*; DOD Archives, CSD, Box 15, File: Policy (escort groups). *Personal correspondence between CSD and GOC coastal area re SANF vessels and A/S warfare, 30 Oct 1942*; DOD Archives, CSD, Box 15, File: Policy (escort groups). *Correspondence between CSD and SANOi/c Durban re SANF A/S vessels on escort duties, 28 Apr 1943*; DOD Archives, CSD, Box 15, File: Policy (escort groups). *Correspondence between CSD and SANOi/c Durban re participation of SANF vessels in convoy escorts from SA ports, 23 Jan 1943.*

SANF A/S vessels took part in several operations against German and Japanese submarine blockade-runners, particularly as part of Operations Barrage, Throttle, Steadfast, Tricolour and Wicketkeeper.²⁶⁴ The A/S vessels continued operations well into 1945, regularly conducting A/S patrols and undertaking escort duties.

The provision of boom defences as a means of harbour protection was the only fixed naval defence considered, and partly prepared for, by South Africa before the outbreak of war. During the interwar period, the South African government already accepted complete responsibility for this form of protection at its harbours, including Simon's Town. By March 1938 Dalgleish, while still the SO SANS, warned DHQ that no one in particular was responsible for the installation of anti-torpedo (A/T) and anti-ship booms (A/B) at South African ports, after which the SAR&H would assume responsibility for their assembly and maintenance. Incidentally, however, only the Assistant Port Captain of Cape Town received the necessary training at the Boom Defence School at Rosyth in the UK in 1938. Upon his return, he visited each South African port to plan its respective boom defence system. While his suggestions were accepted outright by DHQ, the Director General of Operations only authorised A/T and A/B booms at the two entrances to Cape Town harbour. The boom defence at the harbours of Port Elizabeth, East London and Durban would only comprise the A/B type. Once war broke out, the proposed scales of attack on the ports – and the availability of material – largely influenced the provision and installation of boom defences at the various South African ports. It is rather disturbing to note that South Africa had no facilities for the production of boom gear or A/T nets at its disposal. Moreover, the available gear was insufficient, with the majority on order from Britain. Only at harbours where shipping lying inside the booms was exposed to attack by torpedoes, were A/T nets considered. The A/T nets, however, only guaranteed 60% protection. The cost of double boom systems proved far too expensive and was thus at first not even considered.²⁶⁵

The installation of the boom defence system at Cape Town proceeded immediately after the outbreak of war. By 1939, the two A/B booms were operational with a further two A/T nets covering the New Basin and Victoria Basin. Initially, the Cape Town booms were not functioning, but once the SDF took over local naval defence, the operation improved. The construction of boom defences across the entrance to the Durban channel was only authorised in June 1940 and became operational by mid-July. A series of fixed A/B extensions also covered the shallow waters between the north and

²⁶⁴ DOD Archives, Diverse, Group 1, Box 126, File: Operation "Throttle". *Operation Throttle ops order*, 30 May 1944; DOD Archives, Diverse, Group 1, Box 126, File: Operation "Steadfast". *Operation Steadfast ops order*, 12 Jun 1944; DOD Archives, Diverse, Group 1, Box 125, File: Woodcutter. *Operation Woodcutter ops order*, 1 Jan 1944; DOD Archives, Diverse, Group 1, Box 125, File: Operation Wicketkeeper. *Operation Wicketkeeper*, 8 March 1944.

²⁶⁵ Gordon-Cumming, *Official History of the South African Naval Forces*, pp. 225-226; TNA, ADM 1/10262. *Remarks on the Underwater Defence of Cape Town, Simonstown, East London, Port Elizabeth, Durban and Saldanha Bay, 14 Feb 1942.*

south shores. These boom defences, like those in Cape Town, were initially only regularly employed. By 1942 the South African government authorised extensive additions to the Durban boom defences. These included the provision of A/T nets, an A/T boom in the Graving Dock Basin, as well as a combined A/B and A/T boom across the harbour entrance which became operational by November 1943. As a matter of routine, the booms closed at night, but this practice came to an end when the threat of surprise attack subsided in the latter half of 1943. By June 1943, it was decided to also install a catenary net at Durban, which was completed by mid-November 1944. The net only became operational in February 1945.²⁶⁶

The installation of an A/B boom at the East London harbour was authorised in mid-1940, with an additional A/T net also installed. This boom, as at other ports, was not closed at night until May 1942. By the end of that year, a renovated boom had been installed. At Port Elizabeth, an A/B was also considered in mid-1940, but the plan was shelved because of the large size of the harbour entrance. By 1942 the scheme was revived to include A/T nets as well. After the Admiralty agreed to help provide the necessary materials, the A/B and A/T boom became operational in April 1943. In April 1942, the Union authorities decided to provide an A/T boom for the defence of Saldanha, but once again due to the considerable size of the entrance to the bay, the Admiralty had to provide the materials and help install the boom. The A/T boom was completed on 29 May 1943, nearly eight months later.²⁶⁷

Following the significant expansion of boom defences during the course of 1942, the SDF established a special Boom Defence Branch of its own with trained personnel, storage depots and repair facilities. By September, Lt Cdr A.G. Jones was appointed as the first Boom Defence Officer in the SANF. The main storage depot of the Boom Defence Branch was established at Saldanha, with headquarters and workshops in Cape Town. Work parties were then dispatched from Cape Town to the ports when needed, though a shortage of trained personnel severely affected its performance. This state of affairs was only remedied by mid-1943, once a sufficient number of trained personnel became available. After the Admiralty requested South Africa to start producing its own A/T nets in 1943, Jones and his men set about expanding their organisation and produced approximately 20 A/T nets per month. The majority of the A/B and A/T booms at South African ports remained operational until June 1945, whereafter they were lifted.²⁶⁸

²⁶⁶ TNA, ADM 1/10262. *Circular by Director of Local Defences re South African Boom Defences, 23 Mar 1942*; TNA, ADM 1/10262. *Remarks on the Underwater Defence of Cape Town, Simonstown, East London, Port Elizabeth, Durban and Saldanha Bay, 14 Feb 1942*; TNA, ADM 1/10262. *Naval Cypher from F.O.i.c. Simonstown to C-in-C South Atlantic re Shipment of Boom Defences to Union, Mar 1942*.

²⁶⁷ TNA, ADM 1/10262. *Remarks on the Underwater Defence of Cape Town, Simonstown, East London, Port Elizabeth, Durban and Saldanha Bay, 14 Feb 1942*; TNA, ADM 1/10262. *Naval Cypher from F.O.i.c. Simonstown to Admiralty re Union Government commitment to Boom Defences, 13 May 1942*; TNA, ADM 1/10262. *Naval Cypher from Admiralty to F.O.i.c. Simonstown re Importance of the Development of Saldanha Bay, 16 Mar 1942*.

²⁶⁸ Gordon-Cumming, *Official History of the South African Naval Forces*, pp. 231-233.

The Axis use of magnetic mines in European waters prompted the Admiralty to request the establishment and operation of degaussing ranges at some Dominion ports. Cape Town and Durban were included among these. Degaussing was a method used to neutralise the magnetic field of a ship, where special circuits were installed through which electric currents of alternating strength could travel. Due to the alteration of these magnetic fields over time, the magnetic field of vessels was then measured occasionally and the neutralising currents adjusted when ships steered over a line of submerged units connected to a shore station. The Union government accepted the cost of this commitment on 31 July 1940. According to Gordon-Cumming, this decision was South Africa's first external contribution to the Allied war effort. It was agreed that the SDF would lay and operate these ranges, while the Admiralty provided the technical equipment and some initial assistance.

Professor B.L. Goodlet of the University of Cape Town was nominated to attend specialised training on the supervision of the laying of these ranges. The instruction would take place at Portsmouth in the UK that August. On his return in November, Goodlet became the head of the SDF Electrical Branch and oversaw a number of key tasks. This branch expanded considerably, especially during the installation of A/S fixed defences between 1942 and 1943.

In December 1941, Goodlet received his commission as an Electrical Cdr in the SDF. The degaussing range at Cape Town, established on the eastern shore of Robben Island, became operational on 6 June 1941. By the end of that year, it was dealing with an average of 100 ships per month. The increased volume of shipping around the South African coast prompted the Admiralty to request the installation of both deep and shallow degaussing ranges at Durban during February 1942. Only a deep degaussing range could be laid immediately South of the Umgeni River mouth, which only became operational on 20 February 1943. By the end of the year, the Durban degaussing range dealt with 80 ships per month on average. A unit for the deperming of small ships was also installed at Durban in 1942, to help magnetise vessels and reset their fore-and-aft magnetic polarity. By 1945 at least 3034 ships had been ranged at Cape Town, with a further 1292 ranged at Durban. This was the third largest output during the war according to Gordon-Cumming, next only to that of the degaussing ranges at the Thames and Clyde Rivers.²⁶⁹

A host of other fixed naval defences were also installed at South African ports throughout the war. While the Union Government committed to the establishment of such defences, the Admiralty agreed to provide the necessary materiel and personnel free of charge. As a result, all technical equipment came from the UK, and had to be installed by RN specialists seconded to the SANF. South African personnel were then trained to operate the equipment and took over the installations as soon as they became functional.

²⁶⁹ Gordon-Cumming, *Official History of the South African Naval Forces*, pp. 215-216, 271.

During June of 1942 the British War Cabinet Sub-Committee on Defence Arrangements for the Indian Ocean Area made a series of recommendations for further underwater fixed defences at South African ports.²⁷⁰ The constant fear of attack by midget-submarines, especially after the Japanese attack on the harbour of Diego Suarez in Madagascar, prompted South African authorities to provide for the detection thereof. As no suitable Admiralty apparatus was available, Goodlet devised a makeshift device that consisted of two loops of electric cable that were connected to a small control station. Each of these circuits passed through a flux meter, which upon crossing by a vessel would ring an electric bell. The 'Goodlet Loops' acted in unison, with the outer loop providing the first warning, and the second loop confirming the presence of any midget-submarine. In such an event, the appropriate A/S defensive measures could be activated. By 1943 the 'Goodlet Loops' at Durban were supplemented by the installation Type 135 Harbour Defence Asdic (HDA) units, while the installation of similar units at Cape Town, Port Elizabeth and East London occurred up until 1944.²⁷¹

The South African government decided in 1942 to provide A/S fixed defences at Cape Town, Durban and Saldanha. After observing the prevailing local conditions and carefully investigating each intended installation site, Goodlet drew up a proposed layout for each location. In July, Goodlet received Admiralty approval to continue. At Cape Town four indicator loops, with an average length of four miles each, were fitted in an arc from Clifton Beach to Melkbosstrand passing outside of Robben Island. These indicator loops were supported by a further four Type 131 HDA units situated to the north-east and south-east of Robben Island. The electronic circuit was broken when any vessel crossed that particular loop. The system became operational on 20 November 1942, shortly after the first sustained U-boat offensive in South African waters.

The installation of the rest of the South African loop systems proceeded slowly due to cable-laying difficulties and for want of suitable craft. By June 1943 the Durban indicator loops became active and were positioned in an area between the Bluff and the control station at Umhlanga Rocks. By the end of October, a further five Type 131 HDA units had been fitted. The establishment of indicator loops at Saldanha, Walvis Bay and Simon's Town were soon shelved due to the changing war situation. Instead, Port Elizabeth became the final South African harbour to receive a comprehensive scheme of A/S fixed defences.

²⁷⁰ TNA, ADM 116/4499. *Defence Plan for Ports in the Union of South Africa*, 23 Feb 1942.

²⁷¹ TNA, ADM 1/15276. *Secret Correspondence between C-in-C South Atlantic and SANF re the manning of A/S Fixed Defences in South Africa*, 22 Jun 1943; TNA, ADM 1/15276. *Naval Cypher from Admiralty to C-in-C South Atlantic re A/S Fixed Defences in South Africa*, 8 Oct 1943; TNA, ADM 1/15276. *Memorandum on the Axis use of Midget Submarines*, 19 Jan 1943; Gordon-Cumming, *Official History of the South African Naval Forces*, pp. 217-219.

This system only came into operation on 27 March 1944.²⁷² The loop systems, once completed, were linked up to the other harbour defences through the local Fortress Command Operation Room. In the event of a loop crossing, the appropriate vessels were dispatched to investigate. Such a crossing also provided a further early warning to shore batteries and searchlights at night. The British submarines HMS *P614* and HMS *Otus* also carried out a practical test on the Cape Town and Durban A/S fixed defences during 1943. The results were positive. While the South African A/S fixed defences proved extremely elaborate, they naturally served as an excellent deterrent throughout the war despite their costly installation. For the duration of the war, there was no definite instance of an enemy submarine crossing the indicator loops at any South African harbour, despite two unconfirmed instances in February and May 1943, where an enemy U-boat may have entered the Cape Town Harbour.²⁷³

The so called 'Goodlet Loops', HDAs and Indicator Loops assisted the coastal depth-charge throwers in obtaining a fix.²⁷⁴ After this, depth-charges were dropped as near as possible to the position of the A/S contact or loop crossing. The depth-charge throwers were installed at Simon's Town and Durban in July 1942, and at other Union ports towards the end of the year. They only became operational in November, however. These throwers were manned by artillerymen when in close vicinity to coastal batteries, and by SANF personnel in all other instances. A number of controlled minefields were contemplated for several of the South Africa ports. Be that as it may, only one was laid at Saldanha due to its use as a convoy assembly port.

Saldanha Bay was also the largest natural harbour in Southern Africa, where a relatively small and sheltered minefield could accomplish the protection of a large number of naval vessels.²⁷⁵ The decision to lay the minefield was taken in August 1942. By September, several RN Coastal Mining specialists had arrived to oversee the positioning and installation of the Saldanha minefield. Two separate minefields were proposed, one minefield with three loops covering the northern entrance between Hoedjies Point and Marcus Island, and another with five loops guarding the southern entrance between Marcus Island and Eland Point. Each mine loop contained 12 mines, and each loop was on average 600 yards long. These loops naturally overlapped one another to form a formidable series of defences.

²⁷² TNA, ADM 1/15276. *Secret Correspondence between C-in-C South Atlantic and SANF re the manning of A/S Fixed Defences in South Africa, 22 Jun 1943*; TNA, ADM 1/15276. *Naval Cypher from Admiralty to C-in-C South Atlantic re A/S Fixed Defences in South Africa, 8 Oct 1943*; TNA, ADM 1/15276. *Circular from Director of Anti-Submarine Warfare re HDAs in South Africa, 5 May 1943*.

²⁷³ Gordon-Cumming, *Official History of the South African Naval Forces*, pp. 218-219, 271.

²⁷⁴ An A/S fix refer to the act of determining the position of objects by lines of bearing from different locations at about the same time. Once such a fix is established, the appropriate A/S countermeasures are activated.

²⁷⁵ TNA, ADM 1/10262. *Naval Cypher from Admiralty to F.O.i.c. Simonstown re Importance of the Development of Saldanha Bay, 16 Mar 1942*.

The minefield was completed between January and August 1943 through the assistance of the SANF who gradually took over the responsibility from the RN. By the end of 1943, however, Saldanha ceased to be used by merchant shipping, though the minefield remained in operation until March 1945. On the night of 1 June 1944, parts of the minefield were blown when it was thought that a submarine had been detected in the bay. The Examination Service, however, found no evidence upon closer investigation. The Saldanha minefield was blown up in its entirety on 6 April 1945, as its recovery would prove too time-consuming and costly to justify.²⁷⁶



Fig 2.8: A South African minesweeping vessel conducting a regular sweep, circa 1942²⁷⁷

The SDF assumed operational control for M/S duties at the principal South African ports from January 1940. By December 1939, fifteen M/S vessels were available to the SDF, after the conversion of some former commercial whalers and trawlers. The

²⁷⁶ Gordon-Cumming, *Official History of the South African Naval Forces*, pp. 221-223.

²⁷⁷ South African National Museum of Military History, Masondo Reference Library. *SA Navy Photo Collection, S.A. 1628.*

process of conversion was, however, extremely time consuming, especially since the UK and South Africa agreed not to initially commission the Antarctic whalers for this purpose.²⁷⁸ These vessels were originally manned by RNVR personnel, but SDF personnel formally assumed this responsibility in 1940. The initial disposition of M/S vessels was as follows: seven at Cape Town, and two each at Durban, East London, Port Elizabeth and Simon's Town. The M/S vessels were tasked with sweeping a number of predetermined channels, two miles in width, covering the approaches to the various ports from a point on the 100-fathom line. After the channels had been swept, they were declared clear of mines. The M/S vessels were furthermore armed with a 12-pounder gun, one or two Lewis guns and some depth-charges, though the vessels carried no asdic equipment. By April 1941 the M/S complement of the SDF rose to 37 vessels, with the planned requisition and conversion of additional whalers. The maximum number of South African M/S vessels, however, peaked at 37 vessels during the war (see Table 2.2).²⁷⁹



Fig 2.9: Naval men inspecting a German magnetic mine beached off Agulhas, 1940²⁸⁰

²⁷⁸ TNA, ADM 1/10262. *Memorandum on the possible conversion of South Atlantic whalers for A/S duties, Mar 1939*; TNA, ADM 1/10262. *Treasury Inter-Service Committee – Proposal to requisition Whalers, 18 Mar 1940.*

²⁷⁹ Turner *et al*, *War in the Southern Oceans*, pp. 5, 17-19, 265-268.

²⁸⁰ South African National Museum of Military History, Masondo Reference Library. *SA Navy Photo Collection, S.A. 659.*

Name	Type	Fuel	Gross Tonnage	First Came into Service
<i>HMSAS Africana</i>	Special	Coal	313 tons	September 1939
<i>HMSAS Disa</i>	Trawler	Coal	197 tons	15 September 1939
<i>HMSAS Richard Bennett</i>	Trawler	Coal	227 tons	15 September 1939
<i>HMSAS Bluff</i>	Trawler	Coal	262 tons	15 September 1939
<i>HMSAS David Haigh</i>	Trawler	Coal	276 tons	19 September 1939
<i>HMSAS Babiana</i>	Trawler	Coal	262 tons	23 September 1939
<i>HMSAS Oostewal</i>	Trawler	Oil	179 tons	4 October 1939
<i>HMSAS Swartberg</i>	Trawler	Oil	219 tons	4 October 1939
<i>HMSAS Crassula</i>	Trawler	Coal	261 tons	25 October 1939
<i>HMSAS Algoa Bay</i>	Trawler	Coal	270 tons	16 November 1939
<i>HMSAS Arum</i>	Trawler	Coal	194 tons	12 December 1939
<i>HMSAS Nerine</i>	Trawler	Coal	197 tons	16 December 1939
<i>HMSAS Aristea</i>	Trawler	Coal	261 tons	23 December 1939
<i>HMSAS Natalia</i>	Whaler	Coal	238 tons	4 April 1940
<i>HMSAS Grimwood</i>	Whaler	Coal	219 tons	25 May 1940
<i>HMSAS Robinson</i>	Whaler	Coal	196 tons	7 June 1940
<i>HMSAS Goulding</i>	Whaler	Coal	224 tons	11 June 1940
<i>HMSAS Larsen</i>	Whaler	Coal	162 tons	17 June 1940
<i>HMSAS Whytock</i>	Whaler	Coal	166 tons	27 June 1940
<i>HMSAS Hektor</i>	Whaler	Oil	247 tons	19 July 1940
<i>HMSAS Soetvlei</i>	Whaler	Oil	234 tons	26 July 1940
<i>HMSAS Brakvlei</i>	Whaler	Oil	233 tons	August 1940
<i>HMSAS Southern Barrier</i>	Whaler	Oil	344 tons	5 October 1940
<i>HMSAS Steenberg</i>	Whaler	Oil	250 tons	6 November 1940
<i>HMSAS Stellenberg</i>	Whaler	Oil	250 tons	8 November 1940
<i>HMSAS Kommetje</i>	Whaler	Oil	252 tons	1 December 1940
<i>HMSAS Florida</i>	Whaler	Oil	256 tons	12 December 1940
<i>HMSAS Nigel</i>	Whaler	Oil	250 tons	10 March 1941
<i>HMSAS Springs</i>	Whaler	Oil	249 tons	20 March 1941
<i>HMSAS Brakpan</i>	Whaler	Oil	335 tons	10 April 1941
<i>HMSAS Krugersdorp</i>	Whaler	Oil	198 tons	21 June 1941
<i>HMSAS Germiston</i>	Whaler	Oil	197 tons	22 August 1941
<i>HMSAS Randfontein</i>	Whaler	Oil	205 tons	7 October 1941
<i>HMSAS Parktown</i>	Whaler	Oil	220 tons	November 1941
<i>HMSAS Roodepoort</i>	Whaler	Oil	315 tons	24 January 1942
<i>HMSAS Benoni</i>	Whaler	Oil	221 tons	9 March 1942
<i>HMSAS Johannesburg</i>	Whaler	Oil	228 tons	20 August 1942

Table 2.2: South African M/S vessels operational in South African waters, 1939-1945²⁸¹

By December 1940, the M/S strength of the SDF stood at 24 vessels. The best six formed the core of a new Mine Clearance Flotilla, a tactical unit created for deployment at a moment's notice to search areas outside the ports and to clear known minefields.

²⁸¹ Turner *et al*, *War in the Southern Oceans*, pp. 265-268.

The Mine Clearance Flotilla was formed because of the discovery of a magnetic minefield near Agulhas in May 1940. During May, six M/S vessels were ordered to sweep the area off Agulhas after the discovery of the minefield. By that December, the Mine Clearance Flotilla was still busy clearing the minefield due to inclement weather and the continued reappearance of mines. In spite of this, most of the mines were destroyed by natural causes and rough seas. The sweeping of this minefield continued until March 1941.

On the discovery of new minefields off Cape Town and Cape Agulhas in March 1942, the Mine Clearance Flotilla was once more dispatched. As the approaches to Cape Town harbour were threatened by the presence of these mines, the Mine Clearance Flotilla was ordered to sweep and search the approaches and their various channels. The Mine Clearance Flotilla once more encountered great difficulty while conducting its sweep, and only accounted for the destruction of a few mines. Inclement weather also affected the work of the M/S vessels, and by April, only parts of the minefield had been effectively cleared. For the remainder of the war, no further minefields were discovered around South Africa's coastline. The M/S vessels settled into the monotonous task of conducting regular sweeps of the approaches to South African harbours. This task was successfully executed as no Allied or neutral vessels were lost to mines in Union ports during the war.²⁸² On a number of occasions during the war, the M/S vessels also took part in combined operations aimed at the interception of Vichy convoys – most notably Operations Kedgerree and Bellringer in 1941. The last sweep by SANF M/S vessels in South African waters occurred at Durban and Cape Town on 31 August 1945, after which all M/S duties were suspended.²⁸³

At the outbreak of the war, the SAAF only possessed six modern aircraft and a fleet of sixty-three general purpose aeroplanes. Initially, there were five so-called fighter-bomber squadrons established at South African ports. The use of obsolete Furies and Hartebeest aircraft for this purpose, however, rendered them meaningless due to their unserviceability. Soon after the outbreak of the war, the SAAF took over eighteen Junker 86 aircraft from the South African Airways, which were all modified for use on coastal patrols.²⁸⁴ Each aircraft was armed with a complement of machine-guns, four 250lb and eight 20lb bombs, and had an average operational range of 980 miles. By September, a further four Torpedo Bomber Reconnaissance (TBR) squadrons – consisting of Marylands, Blenheims and Beauforts – that were established at Durban (No. 13 Sqn SAAF), Port Elizabeth (No. 14 Sqn SAAF), Cape Town (No. 15 Sqn SAAF) and Walvis Bay (No. 16 Sqn SAAF). The SAAF instituted a series of regular coastal patrols from October 1940, with naval officers acting as observers on these flights. The

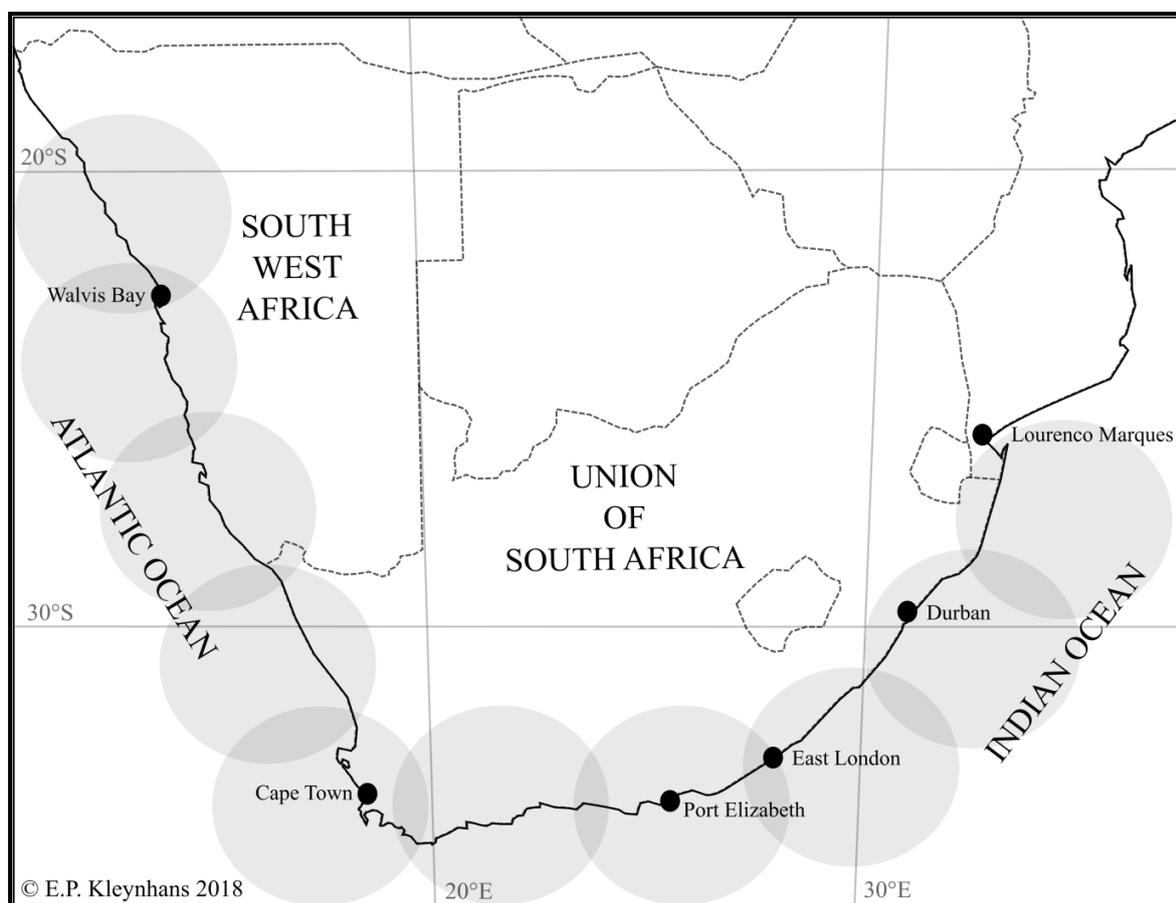
²⁸² Turner *et al*, *War in the Southern Oceans*, pp.27-28, 35-36, 48, 87-88, 126-127, 91-95; Gordon-Cumming, *Official History of the South African Naval Forces*, p. 245.

²⁸³ TNA, ADM 223/530. *Naval Cypher from S.O.I. Simonstown to C-in-C South Atlantic re Bellringer, 13 Nov 1941*; Van der Waag, *A Military History of Modern South Africa*, p. 190.

²⁸⁴ Van der Waag, *A Military History of Modern South Africa*, p. 189.

reconnaissance flights furthermore helped to investigate unidentified ships and submarine sightings, while escorting warships and troop transports into port.

A general reorganisation in December resulted in the amalgamation of several flights. No. 13 Squadron and No. 14 Squadron became A and B Flights of No. 31 (Coastal) Squadron SAAF, while No. 15 Squadron and No. 16 Squadron were merged as A and B Flights of No. 32 (Coastal) Squadron SAAF. For operational purposes, these new squadrons were under the command of the Natal, Eastern Province and Cape Military Commands. In September 1940, a further reorganisation followed, and No. 33 (Coastal) Squadron SAAF was established at Port Elizabeth. By December, the operational control of all coastal flights had been centralised after the establishment of an SAAF Operational Command under the direction of Col H.G. Wilmott. During the first two years, the SAAF Coastal patrols undertook regular flights, and in June 1940, a system of twice-daily patrols was instituted along the South African coastline at a depth of 60-100 miles. This also included four regular patrols over the approaches to the ports.²⁸⁵



Map 2.2: Approximate air cover over the South African coast, 1943

²⁸⁵ Turner *et al*, *War in the Southern Oceans*, pp. 4, 5-16, 35-36, 47, 86-87; Van der Waag, *A Military History of Modern South Africa*, p. 189.

Centralised control over SAAF coastal patrols was achieved after the establishment of Coastal Area Command. Each Fortress Command also had a measure of control over localised air patrols. The SAAF coastal patrols were only intensified once the Japanese and German submarine offensives started in 1942. During the months of June and July, several aircraft helped to patrol the southern extremities of the Mozambique Channel in order to assist with the location and attack of the Japanese submarines. Several Ansons and Venturas from the SAAF also provided increased coastal safeguarding following the start of the German submarine offensive off Cape Town in October.²⁸⁶ Both the UDF and South Atlantic Command were, however, acutely aware of the insufficient air cover available over the South African coastline. This was particularly problematic since most of the SAAF pilots were not trained in A/S work and coastal reconnaissance, and because of a general lack of aircraft.

Squadrons	Ansons	Catalina's	Venturas	Total
22 Sqn SAAF	4	0	23	27
23 Sqn SAAF	4	0	25	29
25 Sqn SAAF	6	0	25	31
27 Sqn SAAF	0	0	19	19
29 Sqn SAAF	1	0	18	19
259 Sqn RAF	0	7	0	7
262 Sqn RAF	0	5	0	5
265 Sqn RAF	0	7	0	7
321 Sqn RAF	0	1	0	1
Total	15	20	110	145

Table 2.3: Strength returns of SAAF and RAF coastal squadrons, 1943²⁸⁷

By mid-1942, Smuts had made an appeal to the British Prime Minister Winston Churchill for greater assistance. Britain thereafter provided several suitable aircraft – including Ansons, Beauforts and Venturas. A number of SAAF TBR squadrons were hence established across South Africa, which further strengthened the Union's coastal patrols for the remainder of the war (see Table 2.3).

After the introduction of group sailings from Cape Town to Durban in October 1942, SAAF aircraft were increasingly employed to protect vessels travelling in a convoy. The addition, at various times during the war, of aircraft from the Royal Air Force (RAF) greatly increased the capacity and effectiveness of the SAAF coastal air patrol service, as well as its A/S capacity during combined operations. Up until 1945, several detachments from No. 209 Squadron RAF, No. 262 Squadron RAF, No. 265 Squadron RAF and No. 321 Squadron RAF served in South Africa. Several dedicated flying-boat bases were established along the South African coastline – most notably at

²⁸⁶ Gordon-Cumming, *Official History of the South African Naval Forces*, pp. 25, 77, 79, 196.

²⁸⁷ TNA, ADM 1/12643, *Report by Captain C D Howard-Johnston on anti-submarine operations in the South Atlantic, 1943*.

Langebaan and St Lucia. By the end of the war, SAAF aircraft increasingly formed a key component of combined A/S operations, and provided effective air cover along the entire South African coastline.²⁸⁸



Fig 2.10: A SAAF Anson returning from a dawn coastal patrol, circa 1940²⁸⁹

Conclusion

The aspiration of South Africa to gain complete control over its naval and coastal defences coincided with the outbreak of the Second World War. South Africa was determined to manifest this desire on both political and military levels. The practical realities of this naval determinism, nonetheless, only came into effect after the establishment of the SDF in January 1940. The war, however, created an opportunity for the Union to once and for all successfully address the question of control over its naval and coastal defences. The war in effect served as the catalyst for this change.

Despite the fact that the SDF and SANF served with exception with regard to South Africa's naval and coastal defence during the war, the Union never truly exercised complete maritime control over its territorial waters. Throughout the war, South Africa was forced to rely on the Admiralty for operational, technical, administrative and logistic support and expertise in order to materialise and maintain the continued defence of South African waters. Moreover, it was principally the RN, with support from

²⁸⁸ Turner *et al*, *War in the Southern Oceans*, pp. 185, 109-110, 153-154, 203, 221, 283.

²⁸⁹ South African National Museum of Military History, Masondo Reference Library. *SA Navy Photo Collection*, S.A. 429.

the nascent SDF and SANF, which conducted the majority of offensive and defensive naval operations in South African waters.

The South African willingness and ability to adapt to each particular circumstance, and learn the appropriate lessons, outweighed any deficiencies in terms of expertise, personnel or equipment. By the end of the war, South Africa had in effect created a comprehensive system of naval and coastal defences, which helped the Allied forces to realise command at sea in the Southern Oceans. Chapter three looks at the ways in which the South African coastal defence systems were tested during the Axis maritime operations along its coastline, and especially during the sustained attacks between October 1942 and August 1943. As will be seen, the South African naval and coastal defences were able to deal with these attacks to a large degree, and the necessary countermeasures were activated to deal with each individual naval threat.

Chapter 3

Axis raiders, mines and submarines off the South African coast, 1939-1945

Introduction

At the outbreak of the Second World War, the German High Command reached an important conclusion. It understood that the survival of Britain and the success of the Allied war effort were entirely dependent on the hauling of key logistical supplies by merchant shipping from across the British Empire over vast, often unprotected, sea lanes. If the Axis naval forces simply controlled the oceans and further ensured that the sinking of Allied commercial shipping outnumbered the capacity to replace them, the Allied war effort could effectively be crippled.

During the war itself, the German naval focal point was the North Atlantic, while the Japanese naval focus was on the Indian and Pacific oceans. At times, sporadic naval operations were launched in more remote waters in the hope of achieving good sinking results and dividing Allied naval forces. When the sinking results in the North Atlantic area decreased due to effective Allied anti-submarine (A/S) measures, the Axis leadership strategically decided to launch a series of concentrated maritime operations in the South Atlantic and the western Indian Ocean. South African waters would become a particular target of this activity. The ensuing Axis naval operations thereupon managed to throw merchant shipping off the South African coast into disarray. It forced the Allies to focus their naval attention on the remote area off southern Africa to safeguard its merchant shipping.

This chapter has three specific objectives. First, it will investigate the operational successes of the Axis raiders and mines off the South African coast between 1939 and 1942. The second objective is to critically discuss the limited Japanese submarine operations in the Mozambican Channel in 1942. This discussion will take place in the context of the strategic German-Japanese Naval cooperation in the western Indian Ocean. Finally, the Axis submarine operations in South African waters – particularly the sustained U-boat operations from 1942 to 1943 – will be evaluated from a strategic point of view. This chapter thus provides fresh perspectives on the Axis maritime operations in South African waters during the war.

3.1 Raiders, mines and opportunistic attacks

In August 1939, GAdm Erich Raeder, the Commander-in-Chief of the German Navy (*Oberbefehlshaber der Marine*) anticipated the looming outbreak of war. He thus instructed his pocket-battleships to focus their operational efforts on the disruption and destruction of Allied merchant shipping. This was to be done according to the Prize

Regulations²⁹⁰ of the *Kriegsmarine*. Raeder further warned his officers to avoid an engagement with Allied naval forces except when it would further their key task of economic warfare. He emphasised that the pocket-battleships extend their operations to distant waters. This would mislead their opponents and create a general state of uncertainty.



Fig 3.1: Grand Admiral Erich Raeder²⁹¹

Raeder was, however, certain to caution that the principal aim of their deployment was not the mere destruction of merchant tonnage. If the operations could force the Allied navies to protect their merchant shipping with superior forces, the sheer restriction of merchant shipping would greatly impair the Allied supply situation. Both the *Graf Spee* (Langsdorff) and *Deutschland* (von Fischel) left Wilhelmshaven towards the end of August and journeyed to the mid-Atlantic where they awaited further instructions.

²⁹⁰ The German Prize Regulations were based on the London Submarine Protocol of 1930, to which Germany subscribed in 1936. In brief, the Prize Regulations stated that German U-boats had to carry on the same stop-and-search procedure of merchant ships that surface warships had to observe. For a more detailed discussion see Keegan, *Battle at sea: From man-of-war to submarine*, pp. 223–224; Raeder, *Grand Admiral*, pp. 191, 293–295. Also see Bird, *Erich Raeder*.

²⁹¹ [https://upload.wikimedia.org/wikipedia/commons/a/a5/Langhammer - Erich Raeder 1936.jpg](https://upload.wikimedia.org/wikipedia/commons/a/a5/Langhammer_-_Erich_Raeder_1936.jpg) (Accessed on 29 June 2018).

After the war broke out, Raeder ordered the pocket-battleships to withdraw from their operational areas in light of France and Britain's initial military and political restraint during the first month of the war. The *Graf Spee* subsequently travelled to the South Atlantic, where it remained most of September. On 23 September, however, Raeder informed Adolf Hitler that he would soon need to commit the pocket-battleships to active operations. This was because the inactivity affected both the supplies and the morale of the men. Hitler conceded, and on 26 September the *Graf Spee* and *Deutschland* were ordered to attack British shipping. The *Deutschland*, however, soon returned to Germany without any real operational accomplishments.²⁹²

In the first week of October, the *Graf Spee* sank the *Clement* (5,501 tons) off the coast of Brazil. It then journeyed nearly 2,000 miles eastwards to operate in the mid-South Atlantic and off the west coast of Africa. Between October and December, the *Graf Spee* frequently relocated between the South Atlantic and Indian Oceans when the Allied naval pressure became too strong in either. It did, however, manage to sink five merchantmen in South African waters. They were the *Ashlea* (4,222 tons), *Trevanion* (5,299 tons), *Africa Shell* (706 tons), *Doric Star* (10,086 tons) and the *Tairoa* (7,983 tons). Over a period of ten weeks, the *Graf Spee* effected the sinking of a total of nine British ships that sailed independently, totalling 50,089 tons lost. Of this figure nearly 56% was sunk in South African waters, constituting 28,296 tons.²⁹³

On 14 December, however, the *Graf Spee* was shadowed by the British cruiser HMS *Exeter*, supported by the cruisers HMS *Ajax* and HMS *Achilles*, near the River Plate off Argentina in the South Atlantic. Although Raeder initially discouraged his pocket-battleships from engaging Allied warships, Langsdorff opted to attack and soon opened fire on his pursuers. A fierce naval engagement followed, during which HMS *Exeter* was severely damaged. After several critical hits from HMS *Exeter*, specifically to its oil filter system, the *Graf Spee* soon broke off contact and made for neutral waters and the relative safety of Montevideo harbour in Uruguay. During the next few days, carefully, planted British reports – especially the fictitious arrival of the carrier HMS *Ark Royal* and the battlecruiser HMS *Renown* – convinced Langsdorff that escape into the open sea from Montevideo was infeasible. Hitler and Raeder subsequently agreed that Langsdorff should attempt to break through the blockade, but Hitler was not eager for Langsdorff to scuttle the battleship. The final decision was, however, left to Langsdorff. On the afternoon of 17 December, he decided to scuttle the *Graf Spee* soon after leaving port.²⁹⁴

²⁹² Turner *et al*, *War in the Southern Oceans*, pp. 7-9; Raeder, *Grand Admiral*, p. 283-288.

²⁹³ Gordon-Cumming, *Official History of the South African Naval Forces*, pp. 287-299; DOD Archives, Map Collection, File: War in the Southern Oceans maps. *Chart and List of Ships Sunk Captured or Damaged in the Waters off Southern Africa, 1939-1945*.

²⁹⁴ Turner *et al*, *War in the Southern Oceans*, pp. 9-14; Raeder, *Grand Admiral*, p. 288-290.

The *Oberkommando der Marine* further deployed approximately 26 disguised raiders,²⁹⁵ officially termed 'auxiliary cruisers' during the Second World War (see Table 3.1). The *Seekriegsleitung* (SKL) adopted a specific policy with regard to the initial operational employment of the disguised raiders. Their chief aim was to divert Allied naval forces from their home waters and to inflict damage to shipping. This would be executed by forcing the Allies to adopt convoys and to deploy strong naval forces along trade routes in remote waters. They would also coerce the Allies into constantly employing their naval forces; scare away neutral shipping, and create a situation harmful to the Allies from an economic and financial point of view. Raeder hence gave the captains of the disguised raiders three instructions. They were to change their operational areas continually so as to surprise Allied shipping where least expected, not to attack escorted convoys, and to avoid any inevitable action with Allied naval forces. The disguised raiders were also ordered to wage their war against merchant shipping strictly according to the established Prize Regulations.²⁹⁶

Name	Atlantis	Thor	Pinguin	Michel	Komet
Ops Number	Schiff 16	Schiff 10	Schiff 33	Schiff 28	Schiff 45
Displacement	7,860 GRT	3,862 GRT	7,766 GRT	8,000 GRT	3,200 GRT
Surface Speed	16 knots (29.6 km/h)	18 knots (33.3 km/h)	17 knots (31.5km/h)	14.8 knots (27.4 km/h)	14.8 knots (27.4 km/h)
Crew	349-351 men	349 men	401 men	395 men	274 men
Armament	6 x 15 cm ; 1x 7,5 cm; 2 x 3,7 cm; 4x 2 cm AA; 4 x torpedo tubes	6 x 15 cm; 1x 6 cm; 2 x 3,7 cm; 4x 2 cm AA; 4 x torpedo tubes	6 x 15 cm; 1x 7,5 cm; 2 x 3,7 cm; 4x 2 cm; 2 x torpedo tubes	6 x 15 cm; 1x 10,5 cm; 4 x 3,7 cm; 4 x 2 cm; 6 x torpedo tubes	6 x 15 cm; 1x 6 cm; 2 x 3,7 cm; 4 x 2 cm; 6 x torpedo tubes
Miscellaneous	2 x Heinkel He 114 float planes; 92 mines	1 x Arado Ar 196 float planes	2 x Heinkel He 114 float planes; 300 mines	2 x Arado Ar 196 float planes; 1 x LS4 boat	2 x Arado Ar 196 float planes; 1 x LS2 boat; 30 Mines

Table 3.1: Statistical data of German raiders operational in South African waters²⁹⁷

The first operational disguised raider, the *Atlantis* (Rogge), left for the Cape and the Indian Ocean at the end of March 1940. The *Thor* (Kähler) followed in June, and also headed for the South Atlantic.

²⁹⁵ Throughout the war the disguised raiders bore certain operational numbers, and were referred to as such by the *Kriegsmarine*. The names by which they were known were, however, chosen by their respective captains. Those operational in the southern oceans were the *Atlantis* (Schiff 16); *Orion* (Schiff 36), *Widder* (Schiff 21), *Thor* (Schiff 10), *Pinguin* (Schiff 33), *Komet* (Schiff 45), *Kormoran* (Schiff 41), *Michel* (Schiff 28), *Stier* (Schiff 23) and *Togo* (Schiff 14). Turner *et al*, *War in the Southern Oceans*, p. 22.

²⁹⁶ Turner *et al*, *War in the Southern Oceans*, pp. 21-23

²⁹⁷ Statistical data collated from the website *German Naval History*, especially the individual pages dealing with the German Auxiliary Cruisers during the Second World War (<http://www.german-navy.de/kriegsmarine/ships/auxcruiser/index.html>). Website accessed on 5 June 2017; Data verified where possible with Turner *et al*, *War in the Southern Oceans*, pp. 260-261.

The operational area of the *Atlantis* comprised of the western Indian Ocean as far as 80° East. It was also allowed free reign in the eastern Indian Ocean, the South Atlantic and Australian waters as alternative operative areas. Its priority, however, was to mine the waters off Cape Agulhas and Cape St Francis on the South African coast. After that, it was instructed to mine the waters off Madagascar, especially near Fort Dauphin and Cape Ste Marie. During his voyage south, Rogge was not allowed to attack merchant shipping until he reached the trade route between Freetown in Sierra Leone, and the strategic maritime nodal point at the Cape of Good Hope. At this stage, Freetown served as an assembly point for all merchant shipping travelling to and from Europe, South America, the Middle East and the Far East. At Freetown, the slower merchantmen formed into convoys for their onwards journey, while the faster ships sailed independently.²⁹⁸

On 3 May, *Atlantis* sank the *Scientist* (6,199 tons), but not before its wireless operator dispatched a 'QQQQ' signal.²⁹⁹ This signal was not picked up. The *Atlantis* arrived off Cape Agulhas on 10 May after doubling back along the shipping route from Australia. Throughout the night, the *Atlantis* dropped mines at six-minute intervals all along the coast of Cape Agulhas following a zig-zag course. During the evening, 92 mines were dropped in an area 5-20 miles off shore. The minefield was discovered by the keeper of the Agulhas lighthouse on 13 May after he witnessed a heavy explosion out to sea. This minefield, however, failed to damage any ships during the war.³⁰⁰

After the first successful mining operation off Cape Agulhas, *Atlantis* moved further north-east to operate along the Durban-Australia route. After a report that a raider disguised as a Japanese merchant ship was active in the Indian Ocean, the *Atlantis* changed her appearance to that of a Dutch merchantman. By the end of May, she relocated to the north to operate off the Durban-Batavia and Fremantle-Mauritius routes. Here she had some operational successes.³⁰¹

The Italians entered into the war on 10 June. This held grave consequences for Allied shipping through the strategic Suez Canal. British seaborne communication between the two vital campaign areas at the time – the Middle East and the Far East – was essentially severed. As a result, all vessels travelling to and from Britain and the Far East now had to traverse the longer route around the Cape of Good Hope. This added an

²⁹⁸ Gordon-Cumming, *Official History of the South African Naval Forces*, pp. 154-155; DOD Archives, UWH Civil, Box 342, File: Newspaper Articles Naval War. R. Littell, 'The Cruise of the Raider ATLANTIS' in *Readers Digest*, Nov 1953, pp. 69-73.

²⁹⁹ The British Admiralty introduced a number of predetermined signals to indicate when shipping was attacked. The QQQQ signal signified 'Armed merchantman wishes to stop me', while RRRR and SSSS signals were used to report warships and U-boats respectively. See. Turner *et al*, *War in the Southern Oceans*, p. 24.

³⁰⁰ Turner *et al*, *War in the Southern Oceans*, pp. 22-27; DOD Archives, UWH Civil, Box 342, File: Translations of Extracts from German Books. *Schiff 16 (Atlantis) by Frank and Rogge*.

³⁰¹ Turner *et al*, *War in the Southern Oceans*, p. 29; Gordon-Cumming, *Official History of the South African Naval Forces*, p. 155.

estimated 10,000 sea miles to a voyage. Shipping was also more prone to attack by German and Italian raiders and submarines along these vast trade routes.³⁰² By July, the *Pinguin* (Krüder) arrived in the South Atlantic, disguised as a Greek merchant vessel. The *Pinguin* was initially designated to operate in the Indian Ocean and Australian and Antarctic waters, with the Pacific and South Atlantic as alternatives. It was further instructed to lay mines off the coasts of Australia, India, South Africa and Madagascar.

By the end of July, the SKL authorised Krüder to operate in the Cape waters while en route to his allotted area of assignment.³⁰³ On 26 August, *Atlantis* successfully attacked and captured the Norwegian merchantman *Filefjell* (7,616 tons) 300 miles to the south of Madagascar. Shortly after that, it sank the *British Commander* (6,901 tons) and the *Morviken* (5,008 tons). After these successes, Krüder was forced to exit the area after intercepting a radio message from Durban which revealed his presence. In an over-hasty decision, he decided to sink the *Filefjell*.³⁰⁴ The *Pinguin* subsequently relocated to an area 900 miles east-south-east of Madagascar to lie low. Unknown to Krüder, the *Atlantis* was also operational throughout August and September. Both Rogge and Krüder received a stern dressing down from SKL; Rogge for encroaching on Krüder's operational areas, and Krüder for not relocating to a new operational area quickly enough. Both the *Atlantis* and *Pinguin* subsequently relocated to the Sunda Straits, where they continued offensive operations independently. The *Pinguin* afterwards journeyed to Australian waters where it and one of her captured prizes, the *Passat*, successfully mined the Bass Strait.³⁰⁵

In October, the pocket-battleship *Admiral Scheer* (Krancke) journeyed towards the South Atlantic. Here she rendezvoused with *Thor* on Christmas Day approximately 600 miles to the north of the island of Tristan de Cunha. The codename for this secret rendezvous area was 'Andalusien'.³⁰⁶ On 17 January 1941 Krancke captured the tanker *Sandefjord* (8,038 tons), whereafter it sank the *Stanpark* (5,103 tons) and *Barneveld* (5,597 tons) on 20 January. After replenishing from the tanker *Nordmark* at Andalusien, Krancke decided to exploit the lucrative waters of the Indian Ocean. After successfully rounding the Cape of Good Hope, the *Scheer* reached the Durban-Australia route in early February. After meeting up with the *Atlantis* on 14 February to the north-east of Mauritius, the *Scheer* journeyed further north-west and extended its patrols towards the east coast of Africa. Her presence in the Indian Ocean was reported on 21 February,

³⁰² Turner *et al*, *War in the Southern Oceans*, p. 34

³⁰³ Gordon-Cumming, *Official History of the South African Naval Forces*, pp. 161-163.

³⁰⁴ DOD Archives, UWH Civil, Box 342, File: Newspaper Articles Naval War. R. Littell, 'The Cruise of the Raider ATLANTIS' in *Readers Digest*, Nov 1953, pp. 69-73; DOD Archives, UWH Civil, Box 342, File: Translations of Extracts from German Books. *Schiff 16 (Atlantis)* by Frank and Rogge.

³⁰⁵ DOD Archives, UWH Civil, Box 342, File: "Pinguin". *Die Kaperfahrt des Hilfskreuzers "Pinguin" 1940/41* by Dr Hans Ulrich Roll – Meteorological officer of *Pinguin*; Turner *et al*, *War in the Southern Oceans*, pp. 37-44

³⁰⁶ Raeder, *Grand Admiral*, p. 349; Gordon-Cumming, *Official History of the South African Naval Forces*, p. 153.

when the British merchant vessel *Canadian Cruiser* signalled an 'RRRR' report to the Headquarters of the East Indies Station.

The arrival of the *Scheer* in the waters to the north of Madagascar had caught the East Indies Headquarters by surprise. Most of its close protection vessels were deployed off Kismayu in support of the East African Campaign. With the important convoy WS.5B off the coast of Mombasa, the East Indies Headquarters immediately dispatched HMS *Glasgow*, HMS *Enterprise*, HMS *Hermes*, HMS *Capetown* and HMS *Emerald* to investigate the reports. The *Glasgow*, *Emerald*, *Hermes* and *Capetown* were constituted as Force V – the hunting group, while *Enterprise* covered convoy WS.5B. A further distress signal was received from the Dutch *Rantau Pandjang* on 22 February at a position 280 miles from the scene of the first attack. After this report, a Walrus aircraft from HMS *Glasgow* spotted the *Scheer* travelling east-south-east. The *Scheer*, however, picked up the Allied radio intercepts about itself, and Krancke decided to quit the Indian Ocean promptly. By changing his course to south-south-east, Krancke was able to escape the clutches of the British warships. After rounding Cape Agulhas far to the south, the *Scheer* met the *Kormoran* (Detmers) and *Nordmark* at Andalusien, the secret rendezvous area. After successfully replenishing her supplies, *Scheer* travelled onwards to the North Atlantic and safely arrived in Bergen on 30 March 1941.³⁰⁷

Krüder left Andalusien in February. The *SKL* then ordered him to meet with the *Komet* (Eyssen) near Kerguelen Island. After coming together, the captains conferred to allocate new operational areas. The *Penguin* would be active in the Arabian Strait, while the *Komet* would operate to the west of Australia. After the two ships had parted, the *Penguin* travelled towards the Seychelles. On 24 April, it cut the trade route from India through the Mozambique Channel. The attack on the *Empire Light* (6,828 tons) and the *Clan Buchanan* (7,266 tons) exposed its presence in the area. The Headquarters of the East Indies Station forthwith dispatched the cruisers HMS *Glasgow*, HMS *Leander* and HMS *Cornwall* to pursue the *Penguin*.

On 7 May, *Penguin* attacked the tanker *British Emperor* (3,633 tons) to the north-east of Mombasa, which managed to successfully transmit a distress signal before sinking. This distress signal was picked up by HMS *Cornwall* which altered course towards the tanker's last known location without delay. On the morning of 8 May, aircraft from HMS *Cornwall* sighted the *Penguin* and pursued the raider. Late that afternoon, HMS *Cornwall* closed to within firing range of the raider. A short engagement followed. The *Penguin* sank after receiving a direct hit which exploded amongst her

³⁰⁷ DOD Archives, UWH Civil, Box 342, File: Translations of Extracts from German Books. *Das glückhafte Schiff Kreuzerfahrten des ADMIRAL SCHEER*; Turner *et al*, *War in the Southern Oceans*, pp. 63-69.

complement of sea mines.³⁰⁸ The remainder of the surface raiders hence relocated to the South Atlantic where the merchantmen pickings were superior.

In May, the *Atlantis* headed for the Cape-Freetown route as the *SKL* believed that there were only weak Allied naval forces in the area. On 14 May it sank the British *Rabaul* (6,809 tons). After a close shave with both the battleship *HMS Nelson* and the carrier *HMS Eagle* close to St. Helena, *Atlantis* sank the British *Trafalgar* (4,530 tons) on 24 May. Hereafter, the *Atlantis* operated off the South American coast. Throughout the remainder of 1941, the risks to the German raiders increased exponentially while the potential returns continued to diminish. In November during a conference with Hitler, Raeder explained that greater Allied countermeasures and the adoption of convoys had a detrimental impact on the effectiveness of German raiders. Despite this, Raeder planned to deploy a further four auxiliary cruisers in 1942 to operate against Allied shipping.³⁰⁹

In January 1942, *Thor* (Gumprich) sailed from Bordeaux. After unsuccessful confrontations with the South Atlantic whaling fleets, it succeeded in sinking the Greek *Pagasitikos* (3,942 tons) on 23 March. The episode took place approximately 1000 miles west of the Orange River mouth. *Thor* was then active in the South Atlantic and the Indian Ocean where she had some successes, albeit not in South African waters. In November, *Thor* was destroyed in the dockyard at Yokohama, Japan. Along with the tanker *Uckermark* and prize *Leuthen*, it was destroyed in an accidental explosion while being refitted.³¹⁰

#	Date Attacked On/By	Ship	Tonnage	Country	Lat/Long
1	16 Mar 1942 (Doggerbank)	Alcyone	4,534	Dutch	33° 59'S; 18° 03'E
2	2 May 1942 (Doggerbank)	Soudan	6,677	Brit.	36° 10'S; 20° 22'E
Total Merchants Sunk		2			
Total Tonnage Lost		11,211 tons			

Table 3.2: Merchant shipping lost to sea-mines in South African waters, 1942³¹¹

The *Doggerbank* (Schneidewind) left Bordeaux in January with orders to lay mines off the South African coast. Between March and April the *Doggerbank* laid 155 mines off Cape Town, Cape Agulhas and in the area 60 miles south-south-east of Agulhas. These minefields claimed five victims between March and May. The *Alcyone*

³⁰⁸ DOD Archives, UWH Civil, Box 342, File: "Pinguin". *Die Kaperfahrt des Hilfskreuzers "Pinguin" 1940/41 by Dr Hans Ulrich Roll – Meteorological officer of Pinguin*; Dimbleby, *Hostilities Only*, pp. 35-41.

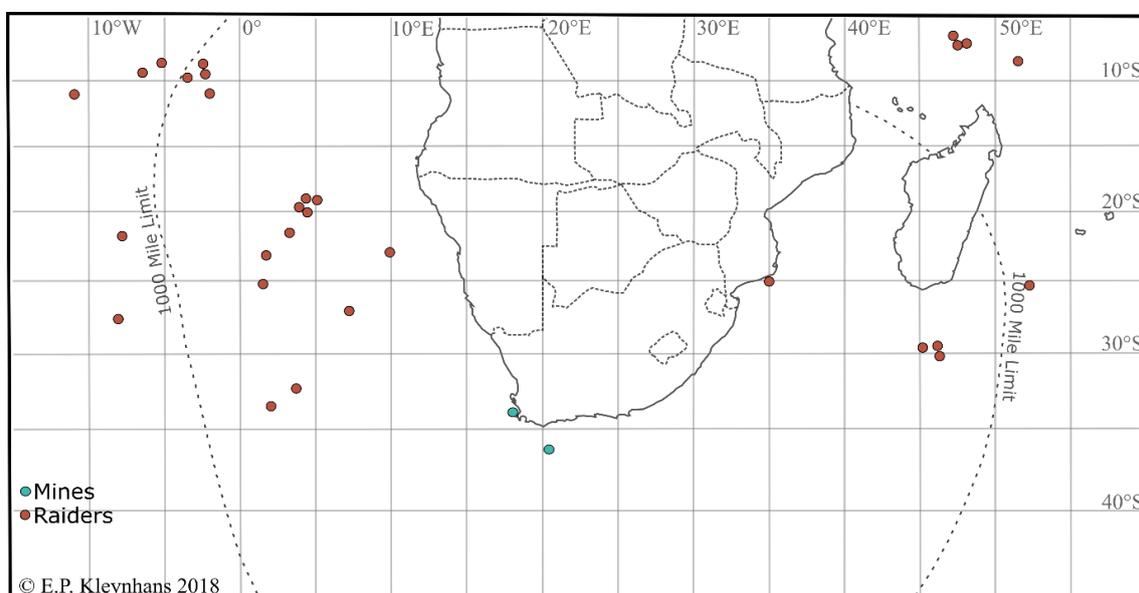
³⁰⁹ Raeder, *Grand Admiral*, pp. 344-367; DOD Archives, UWH Civil, Box 342, File: Translations of Extracts from German Books. *Schiff 16 (Atlantis) by Frank and Rogge*.

³¹⁰ Gordon-Cumming, *Official History of the South African Naval Forces*, pp. 163-166.

³¹¹ Gordon-Cumming, *Official History of the South African Naval Forces*, pp. 287-299; DOD Archives, Map Collection, File: War in the Southern Oceans maps. *Chart and List of Ships Sunk Captured or Damaged in the Waters off Southern Africa, 1939-1945*.

(4,534 tons) and *Soudan* (6,677 tons) were lost after striking these mines (see Table 3.2), while the *Dalfram* (4,558 tons), *Mangkalihat* (8,457 tons) and destroyer depot-ship HMS *Hecla* (10,850 tons) received some damage. In total, 11,211 tons of shipping were lost to German mines in South African waters, which amounts to a mere 0.79% of the nearly 1,406,192 tons lost to Axis mines throughout the war. The *Doggerbank* remained in the South Atlantic for another two months, whereafter she travelled onwards to Japan.³¹²

On 13 March, the *Michel* (Von Ruckteschell) left Germany with orders to operate in the South Atlantic and the western Indian Ocean. It was not, however, to attack Allied shipping south of Ascension Island. After several successes off St. Helena during May, Von Ruckteschell decided to relocate to Tristan da Cunha in June where the merchant shipping pickings proved negligible. After relocating towards the Gulf of Guinea, *Michel* sank the Union Castle liner *Gloucester Castle* (8,006 tons) on 15 July. The liner had been travelling from Birkenhead to Cape Town. The following day, *Michel* scored a further success after sinking the tanker *William F. Humphrey* (7,982 tons). On 10 September she sank the *American Leader* (6,778 tons) 900 miles to the west of Cape Town. Two days later, the *Empire Dawn* (7,241 tons) was its next victim 840 miles west of Saldanha.³¹³ By February 1943 only *Michel* remained operational at sea. While en route to Japan in October, however, she was sunk by the American submarine *USS Tarpon*. After the sinking of the *Michel*, German raiders ceased to be considered a viable threat to Allied shipping for the rest of the war.



Map 3.1: Shipping lost to German raiders and mines, 1939-1942

³¹² Turner *et al*, *War in the Southern Oceans*, pp. 22, 118-128; Gordon-Cumming, *Official History of the South African Naval Forces*, pp. 171-172.

³¹³ Turner *et al*, *War in the Southern Oceans*, pp. 144-148.

During the war, Axis raiders accounted for 133 Allied merchantmen sunk, which amounted to an estimated 829,644 tons lost. In South African waters alone, the German raiders sunk 11 ships worth 71,012 tons – nearly 8.5% of the total tonnage lost to Axis raiders during the war (see Table 3.3). The two pocket-battleships sank a further eight merchantmen worth 47,034 tons – which constitutes 6.35% of the total tonnage lost to Axis warships during the war. During the first four years of the war, the German raiders, including warships, caused a good deal of strife and angst for the Allies, particularly in South African waters. They certainly achieved their principal objectives – that of destroying shipping, forcing the adoption of convoys, creating a harmful economic and financial situation for the Allies, and compelling the deployment of strong naval forces to protect vast sea routes.³¹⁴

#	Date Attacked On/By	Ship	Tonnage	Country	Lat/Long
1	7 Oct 1939 (Graf Spee)	Ashlea	4,222	Brit.	09° 52'S; 03° 28'W
2	22 Oct 1939 (Graf Spee)	Trevanion	5,299	Brit.	19° 40'S; 04° 02'E
3	15 Nov 1939 (Graf Spee)	Africa Shell	706	Brit.	24° 48'S; 35° 01'E
4	2 Dec 1939 (Graf Spee)	Doric Star	10,086	Brit.	19° 10'S; 05° 05'E
5	3 Dec 1939 (Graf Spee)	Tairoa	7,983	Brit.	21° 38'S; 03° 13'E
6	3 May 1940 (Atlantis)	Scientist	6,199	Brit.	19°55'S; 04°20'E
7	26 Aug 1940 (Pinguin)	Filefjell	7,616	Norw.	29°38'S; 45°11'E
8	27 Aug 1940 (Pinguin)	British Commander	6,901	Brit.	29°30'S; 46°06'E
9	27 Aug 1940 (Pinguin)	Morviken	5,008	Norw.	30°08'S; 46°15'E
10	18 Jan 1941 (Scheer)	Sandefjord	8,038	Norw.	11°S; 02°W
11	20 Jan 1941 (Scheer)	Stanpark	5,103	Brit.	09°00'S; 02°20'W
12	20 Jan 1941 (Scheer)	Barneveld	5,597	Dutch.	09°00'S; 02°20'W
13	14 May 1941 (Atlantis)	Rabaul	6,809	Brit.	19°26'S; 04°05'E
14	24 May 1941 (Atlantis)	Trafalgar	4,530	Brit.	25°17'S; 01°35'E
15	23 Mar 1942 (Thor)	Pagasitikos	3,942	Greek.	31°S; 01°W
16	15 Jul 1942 (Michel)	Gloucester City	8,006	Brit.	09°22'S; 01°38'E
17	16 Jul 1942 (Michel)	William F. Humphrey	7,982	Amer.	08°00'S; 01°00'E
18	10 Sept 1942 (Michel)	American Leader	6,778	Amer.	34°27'S; 02°00'E
19	11 Sept 1942 (Michel)	Empire Dawn	7,241	Brit.	32°27'S; 03°39'E
Total Merchants Sunk		19			
Total Tonnage Lost		118,046 tons			

Table 3.3: Shipping lost to German raiders in South African waters, 1940-1942³¹⁵

³¹⁴ Data collated and reworked from Gordon-Cumming, *Official History of the South African Naval Forces*, pp. 287-299; Turner *et al*, *War in the Southern Oceans*, pp. 22, 149

³¹⁵ Gordon-Cumming, *Official History of the South African Naval Forces*, pp. 287-299; DOD Archives, Map Collection, File: War in the Southern Oceans maps. *Chart and List of Ships Sunk Captured or Damaged in the Waters off Southern Africa, 1939-1945*.

3.2 The Japanese submarine offensive in the Mozambique Channel

In December 1941 VAdm Kurt Fricke, the Chief of Staff of the SKL, met with VAdm N. Nomura, the Japanese Naval Attaché in Berlin. The successful Japanese attack on Pearl Harbour on 7 December, which heralded Japan's entry into the war, meant that both the German and Japanese navies were eager to establish and delineate their respective operational areas around the globe. Influence in the Indian Ocean, however, held a particular appeal for both.

The Japanese authorities initially suggested that the operational boundary should be fixed at the 70° East line of longitude, though the Germans preferred a diagonal boundary line stretching from the Gulf of Aden to the northern coast of Australia. The German authorities correctly gauged that the Japanese insistence on the 70° East line of longitude was mainly connected with its territorial ambitions in Asia and the western Indian Ocean. The German proposal would have excluded Australia and Madagascar from the Japanese sphere of influence.³¹⁶ By 18 January 1942, however, Germany, Italy and Japan agreed that the 70° East line of longitude would delineate the respective operational areas. The added provision was that naval operations in the Indian Ocean may be carried out beyond the agreed boundary by all Axis forces when operational situations required it. However vague the agreement seemed at the time, it brought the promise of greater cooperation in the maritime sphere between the Axis navies, especially regarding offensive operations in the Indian Ocean and ipso facto South African waters.³¹⁷

On 10 February, Nomura met with Adm Otto Groos. Groos was Chief of Special-Staff for War Economics and Economic Combat Measures in the *Oberkommando der Wehrmacht*³¹⁸ (OKW) and the Chairman of the Military Commission of the Three Power Pact. Issues relating to direct cooperation between the Axis powers in the war were laid on the table. At the meeting, Nomura argued that rather than becoming too heavily committed in Russia, Germany should unite its efforts with Japan in trying to knock Britain out of the war altogether. The Japanese hoped that the Germans would launch an offensive in the Middle East. Such an assault would create favourable conditions for a Japanese offensive in the western parts of the Indian Ocean. Nomura argued that the

³¹⁶ DOD Archives, UWH Civil, Box 392, File: UWH Translations of Captured German Documents – German-Japanese High Level Documents on Strategy and Tactics. *Minutes of meeting Chief SKL-Nomura, 17 Dec 1941*; DOD Archives, UWH Civil, Box 392, File: UWH Translations of Captured German Documents – German-Japanese High Level Documents on Strategy and Tactics. German-Japanese High Level Documents on Strategy and Tactics. *1/SKL Appreciation of Situation, 18 Dec 1941*; DOD Archives, UWH Civil, Box 392, File: UWH Translations of Captured German Documents – German-Japanese High Level Documents on Strategy and Tactics. *Minutes Chief of Staff SKL to Chairman Military Commission of Tripartite Pact, 19 Dec 1941*.

³¹⁷ DOD Archives, UWH Civil, Box 392, File: UWH Translations of Captured German Documents – German-Japanese High Level Documents on Strategy and Tactics. *Copy of Military Agreement between Germany, Italy and Japan, 18 Jan 1942*; Turner *et al*, *War in the Southern Oceans*, p. 115.

³¹⁸ Supreme Command of the Armed Forces. The OKW had nominal oversight over the Army, Navy and Air Force.

Middle East was the only area where military cooperation between Japan and Germany was feasible. If the Germans were not eager, Japan might very well lose interest in military collaboration in this geographical area altogether.³¹⁹

At a meeting held on 13 February, Raeder discussed the rapid Japanese advance in Burma and Indonesia and the predicted capture of Ceylon with Hitler. The Germans realised that the Japanese offensives would have devastating effects on British seapower and shipping in the Indian Ocean, as well as on oil supplies originating in the Persian Gulf. More importantly, the Allies would be forced to adopt heavily escorted merchant convoys, which would be more prone to submarine attack. An attack on key British positions around Suez could furthermore have a decisive influence on the outcome of the war, partly because the only graving docks to remain operative for the repair of the major Allied warships would be at the harbours of Durban and Simon's Town.³²⁰ Later on in March, Raeder informed Hitler of the Japanese intentions to attack Madagascar after its planned capture of Ceylon. Raeder relayed that the Japanese wished to establish bases in Madagascar. From here, they could attack shipping in the Arabian Sea as well as the Indian Ocean seaboard stretching as far south as the Cape of Good Hope. For this plan to succeed, however, they needed German approval because it would have a unequivocal effect on Vichy France and its African colonies, as well as Portuguese East Africa. Notwithstanding, Hitler doubted that Vichy France would consent to the establishment of Japanese bases in Madagascar.³²¹

Towards the end of March Nomura and Fricke met once more. During the encounter, Fricke explicitly pronounced his wish that the Japanese should start operations against Allied shipping in the northern Indian Ocean. Fricke argued that the most important Allied sea routes traversed this area. The routes to India would strengthen the India/Burma front, those to Iran would stand in support of the Russian front and the oilfields, and those to the Red Sea and Egypt were crucial for the North African theatre. Nomura agreed to these wishes despite his uncertainty pertaining to the Japanese Supreme Command's strategic and operational intentions concerning this area. In addition, Fricke requested warning of any possible offensive operations in the Indian Ocean, especially those planned against Ceylon, the Seychelles and Madagascar.³²²

³¹⁹ DOD Archives, UWH Civil, Box 392, File: UWH Translations of Captured German Documents – German-Japanese High Level Documents on Strategy and Tactics. *Report on discussion with Admiral Nomura from Chair Military Commission Tripartite Pact to Chief OKW, 17 Feb 1942*; Turner *et al*, *War in the Southern Oceans*, p. 115.

³²⁰ Raeder, *Grand Admiral*, pp. 363-364; DOD Archives, UWH Civil, Box 312, File: Fuehrer Conferences on Naval Affairs 1942, *Report to the Fuehrer, made by the Commander-in-Chief, Navy the afternoon of 13 Feb 1942*.

³²¹ DOD Archives, UWH Civil, Box 312, File: Fuehrer Conferences on Naval Affairs 1942, *Report by the Commander-in-Chief Navy to the Fuehrer at Headquarters "Wolfsschanze" the evening of 12 Mar 1942*. Also see Thomas, 'Imperial backwater or strategic outpost?', pp. 1049-1074.

³²² DOD Archives, UWH Civil, Box 392, File: UWH Translations of Captured German Documents – German-Japanese High Level Documents on Strategy and Tactics. *Minutes of meeting between*

At a further meeting held on 8 April, Nomura made an announcement. He disclosed that the Japanese naval authorities had decided to launch offensive operations off the African coast. The attacks would take place between the Arabian Sea and the Cape of Good Hope between June and July 1942. The main purpose of these operations would be to destroy British and American naval forces in the Indian Ocean by a group of up to five submarines and two armed merchant cruisers. While Fricke welcomed the news, he remained sceptical of the true intentions of the Japanese operations in this area. His concern stemmed from Nomura's failure to provide any information on the timing of the attacks against Ceylon and Madagascar. Nomura did, however, once more, stress the importance of combined actions against the British in the Indian Ocean, and hoped for simultaneous German offensive pressure coming from a western direction. If this reinforcement was not forthcoming, Nomura deemed Japanese offensive pressure from the east futile. The Japanese wished for the desired operations to start as soon as possible. Fricke urged Nomura that their naval operations should begin at once, and without regard for the German operations. Time was, after all, needed for the British communications to be severed and for the resultant effects to materialise.³²³

On 14 April, Eugene Ott, the German Ambassador in Tokyo, informed the Reich Minister of Foreign Affairs, Joachim von Ribbentrop, of a probe directed at the Japanese Foreign Minister, Shigenori Togo. Ott had enquired as to whether the Japanese operations in the Indian Ocean were mere harassing measures, or part of a more general strategic plan. Togo intimated that the Japanese were indeed intent on harassing the British. He added that the provocation had a more general meaning "... [they] would also affect the western part of the Indian Ocean, so that Japanese conduct of the war would correspond with the German desire for a Japanese advance in the Indian Ocean in the direction of the Near East."³²⁴ The German Ambassador was further able to confirm from a number of authoritative sources that the main interest of the Japanese High Command remained with the conquest of Burma, Ceylon and the Indian Ocean.³²⁵

By the beginning of April, the Japanese High Command decided that the time had arrived to honour their promise and to send naval forces to operate off the east coast of Africa. The Japanese, unlike their German and Italian counterparts, did not favour attacking merchant shipping alone. The Imperial Japanese Navy (IJN) admitted that its forces were ill-suited for a protracted naval war, and that the early annihilation of the

Admiral Nomura and Chief of Staff SKL, 27 Mar 1942; DOD Archives, UWH Civil, Box 392, File: UWH Translations of Captured German Documents – German-Japanese High Level Documents on Strategy and Tactics. Notes on main point of discussion Nomura-Fricke, 27 Mar 1942.

³²³ DOD Archives, UWH Civil, Box 392, File: UWH Translations of Captured German Documents – German-Japanese High Level Documents on Strategy and Tactics. *Minutes of meeting between C/SKL and Japanese Naval Liaison Staff, 8 Apr 1942.*

³²⁴ DOD Archives, UWH Civil, Box 392, File: UWH Translations of Captured German Documents – German-Japanese High Level Documents on Strategy and Tactics. *Telegraphic report German Ambassador Tokyo to Reich Foreign Minister, 14 Apr 1942.*

³²⁵ Turner *et al*, *War in the Southern Oceans*, p. 116.

Allied fleets was thus paramount.³²⁶ As opposed to their German counterpart, the Japanese Submarine Fleet did not have a large number of 'general purpose' submarines. It entered the war with a limited submarine fleet of sixty vessels. Of these, forty-seven were of the I-class 'fleet submarines', which were developed to give the greatest strategic and tactical support to the capital ships of the IJN. The I-class submarines were known for their very high surface speeds, large fuel capacity, and their ability to carry either a midget submarine or small reconnaissance aircraft. All told, the I-class submarines displaced around 2000 tons, which adversely affected their manoeuvrability, diving and depth-keeping. This displacement prompted the Japanese High Command to restrict its deployment of submarines to operations which would have a definite impact on shortening the war.³²⁷ With respect to the overall strategy of the IJN during the war, the limited naval operations of its submarines against merchant shipping in the Mozambique Channel during mid-1942 should thus be seen as an isolated undertaking to appease an ever-demanding German ally.

The possibility of a Japanese occupation of Madagascar prompted the British defence planners to take action against the Vichy-controlled island in 1942. If the Japanese took over Madagascar, they would have ready access to the strategic harbour of Diego Suarez – situated roughly halfway along the strategic sea route between Colombo and Cape Town. This would have a detrimental effect on Allied shipping in the Indian Ocean as Japanese naval forces would then have a free hand to attack shipping along the entire east coast of Africa.³²⁸ In a letter to Franklin Roosevelt, Churchill stated that "A Japanese air, submarine, and/or cruiser base at Diego Suarez would paralyse our whole convoy route both to the Middle and Far East..."³²⁹ Smuts also considered Madagascar to be key to safety in the Indian Ocean especially regarding merchant shipping. He felt that a strategic decision about Madagascar's occupation was required sooner rather than later. He further stated that the occupation of Diego Suarez would alone not deter possible Japanese aggression against Madagascar. In his opinion, the entire island, including the ports of Majunga and Tamatave, needed to be taken over. Churchill subsequently decided to carry out the occupation of Madagascar. Force 121, under the command of Maj Gen Robert Sturges, successfully seized Diego Suarez on 7 May 1942. The occupation of Madagascar, however, took much longer, with the Vichy French forces only surrendering on 4 November after an armistice was signed.³³⁰

³²⁶ DOD Archives, UWH Civil, Box 392, File: UWH Translations of Captured German Documents – German-Japanese High Level Documents on Strategy and Tactics. *Minutes of meeting between C/SKL and Japanese Naval Liaison Staff, 8 Apr 1942.*

³²⁷ Batchelor and Batchelor, *The Complete Encyclopedia of Submarines 1578-2006*, pp. 258-263; DOD Archives, UWH Civil, Box 392, File: UWH Translations of Captured German Documents – German-Japanese High Level Documents on Strategy and Tactics. *1/SKL Appreciation of Situation, 18 Dec 1941.*

³²⁸ Van der Waag, *A Military History of Modern South Africa*, p. 202.

³²⁹ Churchill, *The Second World War, Vol. IV: The Hinge of Fate*, pp. 197-198.

³³⁰ Turner *et al*, *War in the Southern Oceans*, pp. 131-135, 142-143.

The Japanese defence planners detached the 1st Division of the 8th Submarine Flotilla, then based at Kwajalein in the Marshall Islands and under the command of Capt N. Ishizaki, for the intended operation in the Mozambique Channel. The 1st Division consisted of three submarines: *I-16* [Lt Cdr Y. Kaoryu]; *I-18* [Cdr O. Kiyonori] and *I-20* [Cdr Y. Takashi]. A further two submarines – Capt Ishizaki’s flagship *I-10* [Cdr K. Yasuchika] and *I-30* [Cdr E. Shinobu] – were attached for the operation (see Table 3.4). The accompanying supply ships were the two armed merchant cruisers from the 24th Raider Squadron, the *Aikoku Maru* [RAdm (ret) O. Masao] and *Hōkoku Maru* [Capt (ret) A. Aritaka] (see Table 3.5).³³¹

Class	Type A1	Type B1	Type C
Ship	I-10	I-30	I-16, I-18, I-20
Displacement	2,919 tons	2,584 tons	2,554 tons
Crew	100	94	101
Speed (Surface)	23.5 knots (43.5 km/h)	23.5 knots (43.5 km/h)	23.6 knots (43.7 km/h)
Speed (Submerged)	8 knots (15 km/h)	8 knots (15 km/h)	8.0 knots (14.8 km/h)
Surface Range	30,000 km @ 16 knots	26,000 km @ 16 knots	26,000 km @ 16 knots
Submerged Range	110 km @ 3 knots	178 km @ 3 knots	110 km @ 3 knots
Armament	6 × bow 533 mm torpedo tubes 18 × torpedoes 1 × 140 mm deck gun 2 × twin 25 mm Type 96 AA guns	6 × bow 533 mm torpedo tubes 17 × torpedoes 1 × 140 mm deck gun 2 × single 25 mm Type 96 AA guns	8 × 533 mm Torpedo tubes 20 × torpedoes 1 × 140 mm deck gun 2 × 25mm Type 96 AA guns
Miscellaneous	1 × Yokosuka E14Y seaplane	1 × Yokosuka E14Y seaplane	1 × Type A Ko-Hyoteki-class midget submarine

Table 3.4: Statistical data on the Japanese submarines³³²

³³¹ Turner *et al*, *War in the Southern Oceans*, pp. 135-136; Gordon-Cumming, *Official History of the South African Naval Forces*, p. 77; Hashimoto, *Sunk: The Story of the Japanese Submarine Fleet, 1942-1945*, pp. 24, 38. Note that these sources only gave a very general description of the 1st Division, 8th Submarine Flotilla, Imperial Japanese Navy and its operation against the harbour of Diego Suarez, Madagascar. Further data was gathered from the *Imperial Japanese Navy Page* website (<http://www.combinedfleet.com/>). The detailed statistics, including the tabular movement of individual armed merchant cruisers and submarines, were particularly helpful. The links to the individual pages dealing with each of the submarines and armed merchant cruiser are listed below, and they were accessed between 24-27 April 2017. (<http://www.combinedfleet.com/I-18.htm>, <http://www.combinedfleet.com/I-10.htm>, http://www.combinedfleet.com/Hokoku_t.htm, <http://www.combinedfleet.com/I-20.htm>, http://www.combinedfleet.com/Aikoku_t.htm, <http://www.combinedfleet.com/I-16.htm> and <http://www.combinedfleet.com/I-30.htm>).

³³² Batchelor and Batchelor, *The Complete Encyclopedia of Submarines*, pp. 258-263; Statistical data collated from the website *Imperial Japanese Navy Page*, especially the pages dealing with the different classes of Japanese submarines (http://www.combinedfleet.com/type_a1.htm).

By late April, the submarines had arrived at Penang. *I-30* was ordered to travel towards Aden, where it arrived on 7 May. After its arrival, its aircraft reconnoitred the harbour. Two days later, the French harbour at Djibouti was also inspected, followed by Zanzibar and Dar es Salaam on 19 May. These reconnaissance forays failed to find any suitable targets, and the remainder of the submarines followed a southerly course from Penang across the Indian Ocean.

In the wake of the submarines, the *Aikoku Maru* and *Hökoku Maru* captured the Dutch tanker *Genota* (7,897 tons) to the south-southeast of the Indian Ocean island of Diego Garcia. On 20 May, *I-10* launched its aircraft which reconnoitred Durban harbour and parts of the Natal coast. No protective measures were taken by the South African Air Force (SAAF) or the anti-aircraft defences situated around Durban. Despite a large number of merchantmen lying in the open roadstead of Durban – and the arrival of the battleship HMS *Resolution* – no attack on local merchant shipping followed. This was mainly due to the Japanese wishing to conceal their presence, as Ishizaki's main aim remained the destruction of Allied warships.³³³

Class	Hökoku Maru-class Ocean Liner	
Ship	Aikoku Maru	Hökoku Maru
Displacement	10,437 tons	10,438 tons
Surface Speed	20.9 knots (38.7 km/h)	21.1 knots (39.1 km/h)
Crew	133 men	150 men
Armament	8 × 140 mm L/50 deck guns 4 × 25 mm Type 96 AA guns 4 × 533 mm torpedo tubes	8 × 150 mm L/40 deck guns 2 × 76.2 mm L/40 AA guns 4 × 533 mm torpedo tubes
Miscellaneous	2 × Kawanishi E7K Floatplanes	2 × Kawanishi E7K Floatplanes

Table 3.5: Statistical data on the Japanese armed merchant cruisers³³⁴

By the end of May, the submarines had arrived off the coast of northern Madagascar. An aircraft from *I-10* investigated the anchorage of Diego Suarez on 29 May. Upon its return, the aircraft reported that the following vessels were at anchor in the bay: a British battleship, HMS *Ramillies*, as well as two destroyers, two corvettes, a troopship, a hospital ship, a tanker, a merchantman and ammunition ship. Ishizaki, acutely aware of the prize pickings, ordered *I-16*, *I-18* and *I-20* to launch their midget submarines and attack the unsuspecting ships in the Diego Suarez harbour the following night. During the night of 30 May only the midget submarine from *I-20*, commanded by Lt A. Saburo, managed to infiltrate the harbour. It successfully attacked

http://www.combinedfleet.com/type_b1.htm, http://www.combinedfleet.com/type_c1.htm,
<http://www.combinedfleet.com/ships/type%20a>. These webpages were accessed over the period 24-27 April 2017.

³³³ Turner *et al*, *War in the Southern Oceans*, pp. 136-137; Hashimoto, *Sunk*, p. 24.

³³⁴ Statistical data collated from the website *Imperial Japanese Navy Page*, especially the pages dealing with the *Aikoku Maru* (http://www.combinedfleet.com/Aikoku_t.htm) and the *Hökoku Maru* (http://www.combinedfleet.com/Hokoku_c.htm). These webpages were accessed over the period 24-27 April 2017.

and damaged HMS *Ramillies* and shortly thereafter sunk the tanker *British Loyalty* (6,993 tons). Despite precautionary depth charges dropped by the British corvettes thereafter, the midget submarine remained undetected throughout the attack. The *British Loyalty* was later refloated and sunk elsewhere, while HMS *Ramillies* travelled to Durban for repairs. Shortly after this daring incursion, Saburo was forced to ground his midget submarine on the outer reef at Diego Suarez. On 2 June, Saburo and his crewmate were engaged by a party of Royal Marine Commandos after being spotted by locals the day before. Both men were killed during the attack. A further midget submarine launched from *I-16* that night was declared missing in action soon afterwards.³³⁵

Following the relatively successful attack on Diego Suarez, Ishizaki divided his submarines into two groupings to attack merchant shipping at both ends of the Mozambique Channel. The first merchant vessel, the *Elysia* (6,757 tons), was lost on 5 June through the combined efforts of the *Aikoku Maru* and *Hōkoku Maru*. A further three merchantmen, the *Atlantic Gulf* (2,639 tons), *Melvin H. Baker* (4,998 tons) and the *Johnstown* (5,086 tons) were sunk by the submarines on the same day. This brought the total tonnage sunk for the day to nearly 20,000 tons.³³⁶ Following these attacks, the Commander-in-Chief (C-in-C) of the Eastern Fleet and South Atlantic Station, ordered all merchant shipping in the Mozambique Channel – as well as those sailing north from Durban – to hug the coastline. It was hoped that the nominal protection of the air and surface forces of the Eastern Fleet would further deter Japanese attacks on merchant shipping. The fleet was based at Kilindini in Kenya and controlled all merchant shipping between Durban and the equator. The Eastern Fleet was in a rather precarious position, however, as it had only three corvettes and five destroyers with which to counter the Japanese submarines in the Mozambique Channel. SAAF A/S patrols, on the other hand, only extended as far north as Delagoa Bay. This reaffirmed that the Mozambique Channel was a definite chink in the armour of the Allied defences.³³⁷

A further nine merchant vessels were sunk in the Mozambique Channel during the following week. They were the *Susak* (3,889 tons), *Wilford* (2,158 tons), *Christos Markettos* (5,209 tons), *Agios Georgios IV* (4,847 tons), *King Lud* (5,224 tons), *Mahronda* (7,926 tons), *Hellenic Trader* (2,052 tons), *Clifton Hall* (5,063 tons) and the *Supetar* (3,748 tons).³³⁸ The sinkings prompted the Deputy C-in-C of the Eastern Fleet, RAdm Victor Danckwerts, to redirect troop convoys and fast unescorted merchantmen to take the alternative route along the east coast of Madagascar. At the same time, a number of

³³⁵ Wessels, 'Die stryd teen Nippon'. pp. 222-241; Wessels, 'South Africa and the War against Japan' (<http://www.samilitaryhistory.org/vol103aw.html>); Turner *et al*, *War in the Southern Oceans*, p. 137.

³³⁶ DOD Archives, UWH Civil, Box 340, File: Long naval history. *Ships lost or damaged by enemy action in South African waters*.

³³⁷ Turner *et al*, *War in the Southern Oceans*, pp. 138-139.

³³⁸ DOD Archives, UWH Civil, Box 340, File: Long naval history. *Ships lost or damaged by enemy action in South African waters*.

warships were ordered to patrol off the two exits of the Mozambique Channel.³³⁹ At this point, Ishizaki's submarines withdrew from the area and rendezvoused with the *Aikoku Maru* and *Hōkoku Maru* on 17 June to refit and resupply. In the meanwhile, *I-30*, which did not take part in the above mentioned attacks, was ordered to France, where she arrived at Lorient on 2 August.³⁴⁰

#	Date Attacked On/By	Ship	Tonnage	Country	Lat/Long
1	5 Jun 1942 (Aikoku Maru)	Elysia	6,757	Brit.	27° 33'S; 37° 05'E
2	5 Jun 1942 (I-10)	Atlantic Gulf	2,639	Pan.	21° 03'S; 37° 36'E
3	5 Jun 1942 (I-10)	Melvin H. Baker	4,998	Amer.	21° 44'S; 36° 38'E
4	5 Jun 1942 (I-20)	Johnstown	5,086	Pan.	13° 12'S; 42° 06'E
5	6 Jun 1942 (I-16)	Susak	3,889	Yugoslav	15° 42'S; 40° 58'E
6	6 Jun 1942 (I-18)	Wilford	2,158	Norw.	20° 20'S; 36° 47'E
7	8 Jun 1942 (I-20)	Christos Markettos	5,209	Greek	05° 05'S; 40° 53'E
8	8 Jun 1942 (I-16)	Agios Georgios IV	4,847	Greek	16° 12'S; 41° 00'E
9	8 Jun 1942 (I-10)	King Lud	5,224	Brit.	20° S; 40° E
10	11 Jun 1942 (I-20)	Mahronda	7,926	Brit.	14° 37'S; 40° 58'E
11	11 Jun 1942 (I-20)	Hellenic Trader	2,052	Pan.	14° 40'S; 40° 53'E
12	12 Jun 1942 (I-20)	Clifton Hall	5,063	Brit.	16° 25'S; 40° 10'E
13	12 June 1942 (I-16)	Supetar	3,748	Yugoslav	21° 49'S; 35° 50'E
14	28 June 1942 (I-10)	Queen Victoria	4,937	Brit.	21° 15'S; 40° 30'E
15	29 June 1942 (I-20)	Goviken	4,854	Norw.	13° 25'S; 41° 13'E
16	30 June 1942 (I-20)	Steaua Romana	5,311	Brit.	09°S; 42°E
17	30 June 1942 (I-10)	Express	6,736	Amer.	23° 30'S; 37° 30'E
18	1 July 1942 (I-10)	Alchiba	4,427	Dutch	25° 25'S; 34° 49'E
19	1 July 1942 (I-18)	De Weert	1,805	Dutch	25° 12'S; 35° 36'E
20	1 July 1942 (I-16)	Eknenaren	5,243	Swed.	17°S; 40°E
21	6 July 1942 (I-18)	Mundra	7,341	Brit.	28° 45'S; 32° 20'E
22	6 July 1942 (I-10)	Nymphe	4,504	Greek	15° 48'S; 40° 42'E
23	8 July 1942 (I-10)	Hartismere	5,498	Brit.	18° 00'S; 01° 22'E
Total Merchants Sunk		23			
Total Tonnage Lost		110,252 tons			

Table 3.6: Merchantmen lost in the Mozambique Channel, Jun-Jul 1942³⁴¹

The Japanese submarines resumed their operations in the Mozambique Channel towards the end of June. This coincided with a renewed report of an unidentified aircraft spotted over Durban. Though *I-10* was operational off the Natal coastline at this stage, the aircraft incident remains mere speculation. In the following week, a further

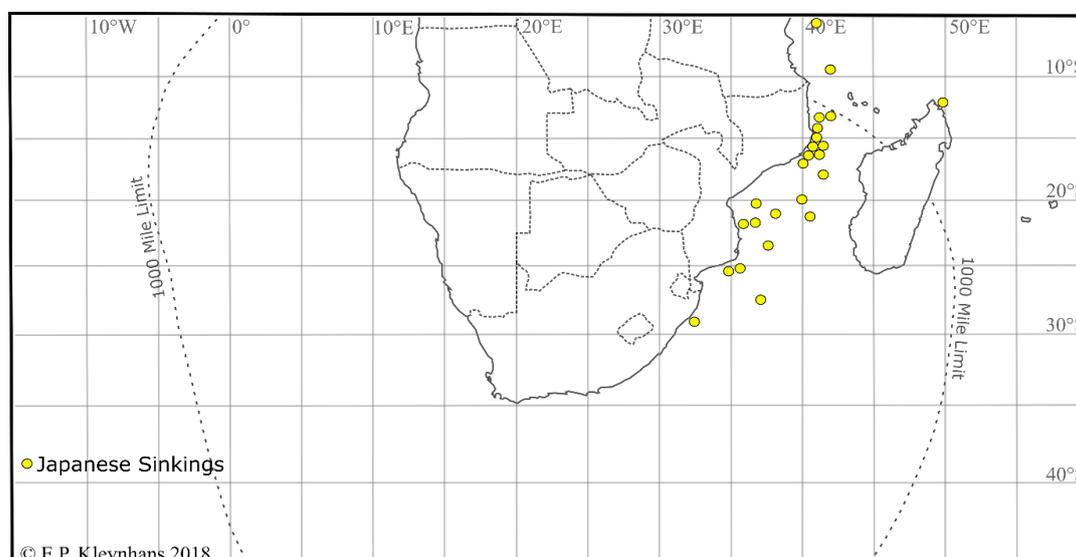
³³⁹ Turner *et al*, *War in the Southern Oceans*, pp. 137-140.

³⁴⁰ Statistical data collated from the website *Imperial Japanese Navy Page*, especially the pages dealing with the *Aikoku Maru* (http://www.combinedfleet.com/Aikoku_t.htm), the *Hōkoku Maru* (http://www.combinedfleet.com/Hokoku_c.htm) and *I-30* (<http://www.combinedfleet.com/I-30.htm>). These webpages were accessed over the period 24-27 April 2017.

³⁴¹ DOD Archives, UWH Civil, Box 340, File: Long naval history. *Ships lost or damaged by enemy action in South African waters*.

ten merchant vessels were sunk. Among them were the *Queen Victoria* (4,937 tons), *Goviken* (4,854 tons), *Steaua Romana* (5,311), *Express* (6,736 tons), *Alchiba* (4,427 tons), *De Weert* (1,805 tons), *Eknaren* (5,243 tons), *Mundra* (7,341 tons), *Nymphe* (4,504 tons) and the *Hartismere* (5,498 tons). By the second week of July, the Japanese submarines had left their operational area in the Mozambique Channel and had returned to their bases at Penang by the beginning of August.

The Japanese submarine offensive in the Mozambique Channel had been highly successful (see Table 3.6). For the loss of only two midget submarines, Ishizaki's force was able to cripple a British battleship and sink more than 100,000 tons of merchant shipping in the space of two months. The Japanese operation once more highlighted the vulnerability of the remote British lines of communication through the Mozambique Channel, which for the most part was protected by a few Allied air patrols and A/S vessels.³⁴²



Map 3.2: Shipping lost to the Japanese submarine offensive, 1942

By August, the promise of greater cooperation between the German and Japanese navies severely diminished, as Nomura informed Col Gen Alfred Jodl, the Chief of the Operations Staff of the *OKW*, that the IJN would no longer partake in remote operations. The Japanese withdrawal was partly the result of the arrival of the monsoon season, a dire need for an overhaul of some ships, as well as a direct increase in its operational losses throughout 1942.³⁴³ For the remainder of the war, the Japanese submarines did

³⁴² Turner *et al*, *War in the Southern Oceans*, pp. 140-143; DOD Archives, UWH Civil, Box 340, File: Long naval history. *Ships lost or damaged by enemy action in South African waters*.

³⁴³ DOD Archives, UWH Civil, Box 392, File: UWH Translations of Captured German Documents – German-Japanese High Level Documents on Strategy and Tactics. *Minutes of meeting between Jodl, Nomura, Bansai at Fuehrer HQ, 8 Aug 1942*; DOD Archives, UWH Civil, Box 392, File: UWH Translations of Captured German Documents – German-Japanese High Level Documents on Strategy and Tactics. *Minutes of meeting Chief SKL-Nomura, 11 Aug 1942*.

not undertake any further planned offensive operations in the western Indian Ocean and in particular the Mozambique Channel and South African waters.

All told, the limited Japanese submarine offensive was simply a means to an end for the German High Command. The promise of greater Japanese-German naval cooperation in the western Indian Ocean was conclusively all but theoretical.³⁴⁴ Instead, by convincing the Japanese to launch a submarine offensive in the Indian Ocean in mid-1942, the Germans had in fact created a definite diversionary effect that worked in their favour. The Allied attention was now split between the campaigns in North Africa and Madagascar, and the protection of shipping off the West African and American seaboard. The result was that an attack on merchant shipping off the coast of Cape Town would not be expected.

3.3 The German U-boat offensives off the South African coast

In February 1941, after the German sinking results in the North Atlantic diminished considerably, the *Befehlshaber der U-Boote (BdU)* decided that the time for sending a number of type IX U-boats to operate in the South Atlantic was opportune. These submarines were to operate predominantly off Freetown. At this stage of the war, Karl Dönitz argued that the *BdU* focus all of their energy on the prosecution of the U-boat war in the North Atlantic, and not on far-flung operations in the remote corners of the globe. In his memoirs, however, Dönitz categorically stated that Hitler and the political leadership of Germany failed to understand this strategy, and in essence, the basic fundamentals of U-boat warfare.³⁴⁵ The *BdU* also made use of secret replenishment points in the Central Atlantic, particularly 'Andalusien'. These secret replenishment points allowed for surface supply ships to rendezvous with U-boats and replenish their ammunition and logistical stores. In a greater sense, the replenishments enabled the U-boats to undertake two successive patrols in an operational area without returning to their bases in the Bay of Biscay, which could be as distant as 2,800 miles.

The system of double patrols proved extremely effective with some seven U-boats sinking more than seventy-four ship in the first half of 1941. During this period *U-69* (Metzler) travelled south along the African coast and mined the ports of Lagos and Takoradi in the Gulf of Guinea, after which the mines claimed several victims. This prompted the British Admiralty to close these ports temporarily. During the months of May and June, a total of 119 ships (635,635 tons) were sunk in the North Atlantic and the operational area off Freetown. Between July and August, the sinking results off Freetown dropped considerably, as there were only eight to twelve U-boats operational in this area at that time. The heavy losses of merchant vessels off Freetown persuaded the British Admiralty to reduce Allied shipping activity in the area to a minimum. The Admiralty would also redirect traffic to the relative safety of the Pan-American safety

³⁴⁴ Raeder, *Grand Admiral*, pp. 363-364.

³⁴⁵ Dönitz, *Memoirs: Ten Years and Twenty Days*, pp. 149,152.

zone, an area then still closed to U-boats for political reasons. The very dense American commercial shipping off Freetown further complicated U-boat operations in the area, as they were naturally not allowed to attack neutral shipping. Following the loss of a unidentified surface supply ship, Dönitz redeployed the mainstay of his U-boats to operations in the North and Eastern Atlantic. Here, the merchant sinking potential continued to be substantial.³⁴⁶



Fig 3.2: Grand Admiral Karl Dönitz³⁴⁷

By October, only two U-boats remained operational off Freetown with enough fuel left to continue operations until forced to resupply from the *Atlantis* and *Python* (Lüders). After first operating off the coast of Freetown, *U-126* (Bauer) subsequently sailed to the coast of Guinea, while *U-68* (Merten) proceeded to Walvis Bay via Ascension and St. Helena. On its way to South-West Africa, *U-68* sank the British tanker *Darkdale* (8,145 tons) off St. Helena, as well as a further two British merchantmen, the *Hazelside* (5,279 tons) and *Bradford City* (4,925 tons). The U-boat arrived off Walvis Bay on 11 November and observed no sea traffic. On 13 November, it sailed northwards and rendezvoused with the *Atlantis* south of St. Helena Island for replenishment. The *Atlantis* thereafter travelled northwards to resupply *U-126* to the north-west of Ascension Island. On 22 November, however, the *Atlantis* was surprised en route and subsequently sunk by the cruiser HMS *Devonshire*. The survivors from the *Atlantis* were rescued by *U-126*. The *Python*, along with *U-124* (Mohr) and *U-129* (Clausen) also

³⁴⁶ DOD Archives, UWH Civil, Box 220, File: Union War Histories Translations 14a. *U-boat Operations of the Axis Powers in S.A. Waters compiled, by Dr Jurgen Rohwer, 1954; Doenitz, Memoirs: Ten Years and Twenty Days*, pp. 176-177.

³⁴⁷ <https://www.awesomestories.com/images/user/26ccc15ca95b2329dae33452c36a6a27.jpg> (Accessed 6 March 2018).

received instructions to assist with transporting the survivors, despite all being initially earmarked for an operation in Cape Town waters. Two days previously, the *Python* had resupplied *U-124* and *U-129* near the Saint Peter and Saint Paul Archipelago in the central equatorial area of the Atlantic Ocean. On her way to the rendezvous, *U-124* also sank the cruiser HMS *Dunedin* (4,850 tons).³⁴⁸



Fig 3.3: German U-boat crew assisting the survivors of a sunken merchantman³⁴⁹

The survivors of *Atlantis* were transferred to the *Python* during the rendezvous with *U-126*. The *Python* was then ordered to remain in the South Atlantic as she had enough fuel and provisions to support the remaining four operational U-boats in the area. The *BdU* decided that *U-124*, *U-129*, *U-68* – all of the type IX class – and *U-A* (Eckermann) should launch a surprise operation in the waters off Cape Town, after replenishing their supplies from the *Python*. This operation, however, came to nothing. On the afternoon of 1 December, after having resupplied *U-68*, and while busy resupplying *U-A*, *Python* was surprised and successfully engaged by HMS *Dorsetshire* after Ultra intelligence had pinpointed her location. While *U-68* and *U-A* managed to escape the attack from HMS *Dorsetshire* by diving, the crew of the *Python* opted to scuttle the ship.

³⁴⁸ DOD Archives, UWH Civil, Box 220, File: Union War Histories Translations 14a. *U-boat Operations of the Axis Powers in S.A. Waters*, compiled by Dr Jürgen Rohwer, 1954; DOD Archives, UWH Civil, Box 341, File: U-boat matters. *Questions and answers submitted by UWH section to Fregattenkapitän Gunter Hessler re U-boat warfare in South African waters.*

³⁴⁹ <http://www.conspiracy-cafe.com/apps/blog/show/42936580-u-196-the-mystery-continues-gold-bullion-uranium-loot> (Accessed on 6 March 2018).

The attacks on the *Atlantis* and *Python*, both while they were resupplying U-boats, were a matter of grave concern to the *BdU* and the *SKL*. They were convinced that direction-finding alone could not have guided the British warship to the exact location of the German supply vessels, though the raider code was never broken by the Allies. The crews of the *Atlantis* and *Python* were subsequently transferred to the four U-boats, whereafter they started their return journeys to the Bay of Biscay. During the return trip, *U-124* managed to sink the American merchantman *Sagadahoc* (6,275 tons). The four U-boats then rendezvoused close to the Cape Verde Islands with four Italian submarines that had sailed from Bordeaux. These were the *Pietro Calvi* (Olivieri)³⁵⁰, *Giuseppe Finzi* (Giudice)³⁵¹, *Enrico Tazzoli* (di Cossato)³⁵² and *Luigi Torelli* (De Giacomo)³⁵³. The Italian submarines helped to transport the crews of the *Atlantis* and *Python* to their bases in the Bay of Biscay. All eight submarines had arrived at their respective bases by the end of December.

The destruction of the *Atlantis* and *Python* meant that surface vessels could no longer supply U-boats in the South Atlantic, which necessitated the temporary shelving of all plans for offensive operations in the waters off Cape Town. At this stage, it was also more economical to employ U-boats in operations off the American seaboard. The American entry into the war had incontrovertibly opened several new avenues of attack with the promise of rich merchant spoils and much shorter operational distances.³⁵⁴

The sinking results of the U-boats operating in the North Atlantic off the American seaboard, as well as the Caribbean, had, however, decreased somewhat substantially. The *BdU* concluded in July 1942 that the reduction had occurred to such an extent that it was no longer worthwhile considering these areas as the main theatre for sustained U-boat operations. This was mainly due to the introduction of Allied convoys and effective A/S measures in these waters. The *BdU* hence adopted a policy of pursuing U-boat operations in distant waters, provided that the sinking results and prospects of success in these areas justified the economic use of force in such operations. They had the added advantage of coercing the Allies into spreading their A/S forces across the globe to engage the U-boats wherever they appeared. The main weight of the U-boat operations thereupon shifted to the mid-Atlantic. The renewed focus was on attacking convoys to and from Britain, as these areas were devoid of good air cover.

³⁵⁰ Regia Marina Italiana – The Italian Navy in World War II (Website Accessed on 9 May 2017) http://www.regiamarina.net/detail_text_with_list.asp?nid=84&lid=1&cid=13.

³⁵¹ Regia Marina Italiana – The Italian Navy in World War II (Website Accessed on 9 May 2017) http://www.regiamarina.net/detail_text_with_list.asp?nid=84&lid=1&cid=21.

³⁵² Regia Marina Italiana – The Italian Navy in World War II (Website Accessed on 9 May 2017) http://www.regiamarina.net/detail_text_with_list.asp?nid=84&lid=1&cid=42.

³⁵³ Regia Marina Italiana – The Italian Navy in World War II (Website Accessed on 9 May 2017) http://www.regiamarina.net/detail_text_with_list.asp?nid=84&lid=1&cid=44.

³⁵⁴ DOD Archives, UWH Civil, Box 220, File: Union War Histories Translations 14a. *U-boat Operations of the Axis Powers in S.A. Waters, compiled by Dr Jürgen Rohwer, 1954*; DOD Archives, UWH Civil, Box 341, File: U-boat matters. *Questions and answers submitted by UWH section to Fregattenkapitän Gunter Hessler re U-boat warfare in South African waters.*

At least thirty new U-boats were delivered per month during July, August and September 1942, mainly due to the clearing of arrears in U-boat construction from the previous year. The arrival of these new U-boats enabled the *BdU* to promptly resume operations against Allied convoys in the North Atlantic. The increase in forces furthermore allowed for U-boats to deliver surprise attacks in distant waters. The first three areas selected for the sporadic subsidiary operations were the waters off Trinidad in the Caribbean, Freetown, and a sudden onslaught in the waters off Cape Town. Dönitz had hoped to cause a diversionary effect with these distant interventions, pressurising the Allies into splitting their defensive forces between protecting the North Atlantic, the Eastern American seaboard, the Caribbean and the extensive African coast bordering the Indian and Atlantic oceans. The Japanese submarine offensive in the Mozambican Channel had naturally also contributed to this diversionary effect.³⁵⁵



Fig 3.4: A German U-boat refuelling from a supply ship in the South Atlantic³⁵⁶

³⁵⁵ Doenitz, *Memoirs: Ten Years and Twenty Days*, pp. 237-238; DOD Archives, UWH Civil, Box 341, File: U-boat matters. *Questions and answers submitted by UWH section to Fregattenkapitän Gunter Hessler re U-boat warfare in South African waters.*

³⁵⁶ <https://za.pinterest.com/pin/36099234497206289/> (Accessed on 6 March 2018)

By July 1942 the waters off Cape Town were still considered virgin waters by the *BdU*. The area had remained devoid of any noteworthy submarine activity, apart from *U-68*'s brief foray to the coast of South West Africa in November 1941. Prior to 1942, the *BdU* also did not favour sending single U-boats to operate off the southern African coast as their independent actions would alert the Allies and force them to adopt stringent A/S measures in these waters. Moreover, a single submarine operating in the Cape Town waters would not reach satisfactory sinking results needed to justify its deployment in such distant reaches. The *BdU* further realised that an operation off Cape Town could only materialise once sufficient numbers of U-boats were available to launch a concentrated attack and sustain it for an indefinite period to allow for satisfactory sinking results. Dönitz and the *BdU*, however, maintained that the primary focus of the U-boat war remained the sinking of Allied merchant shipping, and not merely the tying down of Allied forces through diversionary U-boat attacks.³⁵⁷

Class	Type IXC	Type IXD ₂
Displacement	1,540 tons	2,150 tons
Crew	48-56 men	55-63 men
Speed (Surface)	18.3 knots (33.8 km/h)	19.2 knots (35.5 km/h)
Speed (Submerged)	7.3 knots (13.5 km/h)	6.9 knots (12.7 km/h)
Surface Range	13450 miles @ 10 knots	23700 miles @ 12 knots
Submerged Range	63 miles @ 4 knots	57 miles @ 4 knots
Armament	6 × Torpedo tubes 21 torpedoes 1 × 10.5 cm deck gun 1 × 3.7 cm AA gun 1 × 2.0 cm AA gun	6 × Torpedo tubes 24 torpedoes 1 × 10.5 cm deck gun 1 × 3.7 cm AA gun 1 × 2.0 cm AA gun

Table 3.7: Statistical data on German U-boats operational in South African waters³⁵⁸

Between October and November, the Allies committed the majority of their escort fleets to the protection of the North African and Mediterranean waters. This action was the result of the unfolding campaign in North Africa, which further enticed Dönitz to strike towards the proverbial 'soft underbelly' of South Africa. The *BdU*, however, appreciated the logistical complications associated with operations in such distant waters, especially after the loss of the *Atlantis* and *Python*. As early as 1941, it

³⁵⁷ DOD Archives, UWH Civil, Box 341, File: U-boat matters. *Questions and answers submitted by UWH section to Fregattenkapitän Gunter Hessler re U-boat warfare in South African waters.*

³⁵⁸ Statistical data collated from the website *Uboat.net*, especially the individual pages dealing with the various U-boats types used during the Second World War (<http://uboat.net/types/>). Website accessed on 5 June 2017; data verified where possible with Turner *et al*, *War in the Southern Oceans*, p. 257.

experimented with the use of supply U-boats (*milch cows*³⁵⁹) in provisioning submarines on remote operations. Furthermore, by August, the *BdU* had a large enough number of the type IXC U-boats at its disposal, which exponentially increased the duration of U-boat operations. Hence, when operating in conjunction with the *milch cows*, the offensive employment of U-boats now extended to areas previously devoid of any sustained U-boat operations. Dönitz furthermore hoped to extend U-boat operations to cover the African ports in the Indian Ocean, but accepted that this would only be possible by October when the new type IXD₂ U-boats came into service (see Table 3.7).³⁶⁰

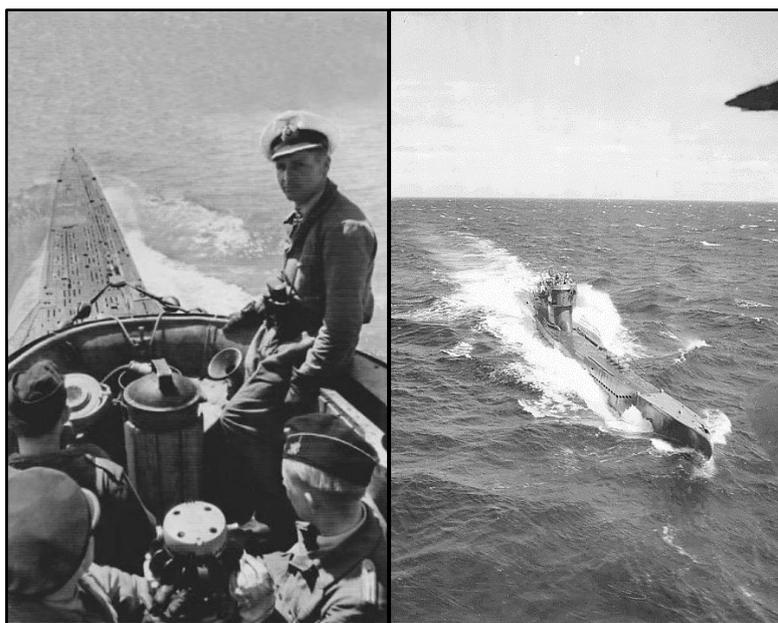


Fig 3.5: German U-boats operational in the Southern Oceans, circa 1941³⁶¹

By August, the *BdU* had earmarked four type IXC U-boats for the surprise onslaught in the Cape Town waters. The *Eisbär* group was ordered to strike a decisive blow at shipping in the waters off Cape Town during October. The wolf pack consisted of *U-68* (Merten), *U-172* (Emmermann), *U-504* (Poske) and *U-156* (Hartenstein), and was accompanied by the *milch cow* *U-459* (Wilamowitz-Möllendorf). Dönitz argued that the U-boats were to remain in the operational area off Cape Town until approximately

³⁵⁹ Also known as U-tankers, these boats were used to replenish wolf packs while operational. The U-tankers carried spare parts, a doctor, technicians, food stores, ammunition and extra fuel oil, which they used to replenish U-boats upon instruction from the *BdU*. See DOD Archives, UWH Civil, Box 341, File: U-boat matters. *Report on experience gained by U-459 refuelling 15 U-boats, 21 Mar – 15 May 1942*; Busch, *U-Boats at War*, pp. 144–145; Turner *et al*, *War in the Southern Oceans*, p. 158.

³⁶⁰ Dönitz, *Memoirs: Ten Years and Twenty Days*, pp. 276–283; DOD Archives, UWH Civil, Box 341, File: U-boat matters. *Questions and answers submitted by UWH section to Fregattenkapitän Gunter Hessler re U-boat warfare in South African waters*.

³⁶¹ <https://i.pinimg.com/originals/63/cb/4c/63cb4c85b064964801aedc05d462a4e1.jpg>; <https://i.pinimg.com/originals/e4/6b/57/e46b57467a65f1221dd4ec9fc3e2a04f.jpg> (Accessed on 6 March 2018).

the end of October. The aim was to disrupt and destroy merchant shipping and achieve the necessary sinking results required to make such a far-flung operation a success. A fresh batch of U-boats would then relieve the Eisbär group and continue operations in this area. After the Eisbär boats had sailed for Cape Town from their base at Lorient in late August, they had to cover approximately 6 000 sea miles before they reached the operational waters off Cape Town.³⁶²

To ensure maximum surprise, the SKL required the U-boats to remain undetected for their entire voyage to Cape Town. The SKL argued throughout September that the most important factor to consider was the strategic effect which the Eisbär group would achieve. This included throwing the traffic off the coast of South Africa into such a state of confusion that sea traffic around the Cape of Good Hope would halt. South African ports would then become clogged with ever-increasing numbers of merchant shipping seeking shelter. Be that as it may, only surprise could ensure this strategic effect. The *BdU* and Dönitz, however, argued that the most important factor to consider during the entire operation would be the actual sinking results achieved by the Eisbär pack. Dönitz thus argued that the Eisbär boats should attack shipping during their entire approach voyage to Cape Town. The ultimate goal of the operation, as Dönitz argued, was a short, sharp, U-boat offensive, which could yield the highest possible sinking results in the shortest possible time without incurring too many U-boat losses. The *SKL* and *BdU* eventually reached a compromise and decided that the U-boats could attack merchant shipping during their approach voyage to Cape Town, but only between the equator and 5° south.³⁶³ Dönitz's reply to this debacle was that the strategists were once again out to "tickle" the enemy. To this he added, "Unfortunately I do not know of a single case, when an enemy had been tickled to death."³⁶⁴

During their voyage south, the Eisbär boats attempted – albeit unsuccessfully – to attack convoy SL 119 which was making its way to Freetown. While each U-boat continued its journey south independently, the wolf pack travelled in an extended harrow bone formation spread out across a vast distance. In this way, it was able to remain undetected and able to increase the chances for opportunistic attacks against Allied shipping. The U-boats were to replenish their supplies from *U-459* on 20 September at a position approximately 20° south of the equator. While en route to rendezvous with *U-459*, *U-156* sank the British troopship *Laconia* (19,965 tons) on 12 September. This chapter does not deal with the sinking of the *Laconia*, but it is of

³⁶² DOD Archives, UWH Civil, Box 341, File: U-boat matters. *Questions and answers submitted by UWH section to Fregattenkapitän Gunter Hessler re U-boat warfare in South African waters*; DOD Archives, UWH Civil, Box 341, File: U-boat matters. *Operation Order "Eisbär", 1 Aug 1942*; DOD Archives, UWH Civil, Box 341, File: U-boat matters. *Report on experience gained by U-459 refuelling 15 U-boats, 21 Mar – 15 May 1942*; DOD Archives, UWH Civil, Box 341, File: U-boat material. *Report on U-boat policy & ops in South African waters by Walter Meyer*.

³⁶³ DOD Archives, UWH Civil, Box 341, File: U-boat material. *Report on U-boat policy & ops in South African waters by Walter Meyer*.

³⁶⁴ DOD Archives, UWH Civil, Box 341, File: U-boat matters. *Questions and answers submitted by UWH section to Fregattenkapitän Gunter Hessler re U-boat warfare in South African waters*.

interest to note that Dönitz ordered the remainder of the Eisbär boats to assist in rescuing the survivors. Only once two Vichy French boats were despatched to help assist with the rescue of survivors, were the U-boats recalled from the rescue operation.³⁶⁵



Fig 3.6: *U-156* and *U-507* assisting survivors from the *Laconia*, 15 Sept 1942³⁶⁶

On 16 September, an indiscriminate Allied bombing attack damaged *U-156* to such an extent that the *BdU* recalled it from the Eisbär group. The *BdU* rapidly replaced *U-156* with *U-159* (Witte) as the U-boat was then operational in the equatorial area off the mouth of the Congo River. The Eisbär boats rendezvoused with *U-459* between 22 and 24 September to the south of St Helena, where each U-boat successfully replenished its supplies. This included 100-110 tons of fuel, four tons of lubricating oil and enough food stocks and other essential supplies for 30 days. The remainder of the U-boats' journey south occurred without incident, and the Eisbär group arrived off the coast of Cape Town during the first week of October.³⁶⁷

On the night of 6/7 October 1942, Emmermann managed to infiltrate his U-boat successfully into Cape Town harbour's roadstead. After conducting a reconnaissance, he found it to be empty of Allied merchant vessels. The *BdU* had initially ordered the Eisbär group to commence their attack on the shipping off Cape Town on the night of 8/9

³⁶⁵ Turner *et al*, *War in the Southern Oceans*, pp. 161-167.

³⁶⁶ https://commons.wikimedia.org/wiki/File:U-156_37-35_Laconia_1942_09_15.jpg (Accessed on 6 March 2018).

³⁶⁷ DOD Archives, UWH Civil, Box 220, File: Union War Histories Translations 14a. *U-boat Operations of the Axis Powers in S.A. Waters compiled by Dr Jürgen Rohwer, 1954.*

October, but after receiving Emmermann's report, it was decided to postpone the attack to the night of 10/11 October. In the meantime *U-68* trailed several steamers while steadily approaching Cape Town harbour. During the evening of 7/8 October, Merten received Emmermann's report stating that the roadstead was empty. Merten forthwith informed the *BdU* of the changing tactical situation in the waters off Cape Town. At that point, the U-boats were authorised to launch their attacks at midnight on 8 October. Local intelligence sources indicated that Cape Town harbour retained up to 50 ships anchored at any time, and the *BdU* believed that a surprise attack by two U-boats could achieve more than the desired results, after which the remaining U-boats were free to take offensive action. The U-boat commanders and the *BdU* were furthermore convinced that the South African defences would be caught totally unaware, for it seemed that neither their wireless transmissions nor their presence was detected.³⁶⁸



Fig 3.7: A U-boat watching its target sink in the Southern Oceans³⁶⁹

³⁶⁸ DOD Archives, UWH Civil, Box 341, File: U-boat material. *Extracts from war diary U-159 (Helmut Witte), 24 Aug 1942 – 5 Jan 1943*; DOD Archives, UWH Civil, Box 341, File: U-boat material. *Comments on war diary U 159 (Helmut Witte)*; DOD Archives, UWH Civil, Box 341, File: U-boat material. *Report on my experiences on board U-68 on voyage to Cape Town from middle of August to middle of December 1942 by Walter Meyer.*

³⁶⁹ <https://za.pinterest.com/pin/228839224799411632/> (Accessed on 6 March 2018).

The resulting U-boat offensive succeeded in sinking 13 merchantmen within the first three days of operations. They were the *Chikasaw City* (6,196 tons), *Firethorn* (4,700 tons), *Boringia* (5,821 tons), *City of Athens* (6,558 tons), *Clan Mactavish* (7,631 tons), *Sarthe* (5,271 tons), *Swiftsure* (8,206 tons), *Gaasterkerk* (8,679 tons), *Koumoundouros* (3,598 tons), *Examelia* (4,981 tons), *Coloradan* (6,557 tons), *Belgian Fighter* (5,403 tons) and *Orcades* (23,456 tons).³⁷⁰ The U-boat pickings were initially child's play. But as the surprise gained during the initial attack started to dwindle, and the South African and Allied counter-measures were activated, Dönitz ordered the Eisbär group to extend their operational area to as far afield as Port Elizabeth and Durban.

The initial attacks on the merchant shipping off Cape Town were facilitated by the fact that the majority of South African lighthouses were still functioning at full capacity, while most merchantmen sailed independently around the South African coast. Because of this complacency present in South Africa, very few A/S vessels and aircraft were operational off the coast of South Africa by October. Bad weather, however, set in on 13 October, which forced the submarines further afield, with *U-159* venturing as far as 40° south in search of merchant vessels.³⁷¹

Shortly after the commencement of Operation Eisbär, *U-68* and *U-172* were forced to commence their return voyage. This occurred even before they had managed to fire all of their torpedoes.³⁷² The *BdU* subsequently decided that *U-504* and *U-159* would move further south and south-east of Cape Town where they managed to sink several more vessels over the period of 13 October to 3 November.³⁷³ Its targets included the *Empire Nomad* (7,167 tons), *Empire Chaucer* (5,970 tons), *City of Johannesburg* (5,669 tons), *Anne Hutchinson* (7,176 tons), *Ross* (4,978 tons), *Laplace* (7,327 tons), *La Salle* (5,462 tons), *Empire Guidon* (7,041 tons), *Reynolds* (5,113 tons) and the *Porto Alegre* (5,187 tons). After these attacks, *U-504* and *U-159* also had to turn back to their bases in France. During their return voyages, the Eisbär boats succeeded in sinking a further

³⁷⁰ Gordon-Cumming, *Official History of the South African Naval Forces*, pp. 287-299; DOD Archives, Map Collection, File: War in the Southern Oceans maps. *Chart and List of Ships Sunk Captured or Damaged in the Waters off Southern Africa, 1939-1945*.

³⁷¹ DOD Archives, UWH Civil, Box 341, File: U-boat matters. *Questions and answers submitted by UWH section to Fregattenkapitän Gunter Hessler re U-boat warfare in South African waters*.

³⁷² DOD Archives, UWH Civil, Box 341, File: U-boat matters. *Emmermann (U-172) on Operation Eisbär*; DOD Archives, UWH Civil, Box 341, File: U-boat material. *Report on my experiences on board U-68 on voyage to Cape Town from middle of August to middle of December 1942 by Walter Meyer*.

³⁷³ DOD Archives, UWH Civil, Box 341, File: U-boat material. *Extracts from War Diary U-159 (Helmut Witte) - 24 Aug 1942-5 Jan 1943*; DOD Archives, UWH Civil, Box 341, File: U-boat material. *Comments on War Diary U-159 (Helmut Witte)*.

three merchantmen: the *Aldington Court* (4,891 tons), *Llandilo* (4,966 tons) and the *Star of Scotland* (2,290 tons) (see Table 3.8).³⁷⁴

#	Date Attacked On/By	Ship	Tonnage	Country	Lat/Long
1	7 Oct 1942 (U-172)	Chikasaw City	6,196	Amer.	34° 05'S; 17° 16'E
2	7 Oct 1942 (U-172)	Firethorn	4,700	Pan.	34° 10'S; 17° 07'E
3	7 Oct 1942 (U-172)	Koumoundouros	3,598	Greek	34° 00'S; 17° 30'E
4	7 Oct 1942 (U-159)	Boringia	5,821	Brit.	35° 09'S; 16° 32'E
5	8 Oct 1942 (U-159)	Clan Mactavish	7,631	Brit.	34° 53'S; 16° 45'E
6	8 Oct 1942 (U-68)	Sarthe	5,271	Brit.	34° 50'S; 18° 40'E
7	8 Oct 1942 (U-68)	Swiftsure	8,206	Amer.	34° 40'S; 18° 25'E
8	8 Oct 1942 (U-68)	Gaasterkerk	8,679	Dutch	34° 20'S; 18° 10'E
9	8 Oct 1942 (U-68)	Examelia	4,981	Amer.	34° 52'S; 18° 30'E
10	8 Oct 1942 (U-504)	City of Athens	6,558	Brit.	33° 40'S; 17° 03'E
11	9 Oct 1942 (U-159)	Coloradan	6,557	Amer.	35° 47'S; 14° 34'E
12	9 Oct 1942 (U-68)	Belgian Fighter	5,403	Belg.	35° 00'S; 18° 30'E
13	10 Oct 1942 (U-172)	Orcades	23,456	Brit.	35° 51'S; 14° 40'E
14	13 Oct 1942 (U-159)	Empire Nomad	7,167	Brit.	37° 50'S; 18° 16'E
15	17 Oct 1942 (U-504)	Empire Chaucer	5,970	Brit.	40° 20'S; 18° 30'E
16	23 Oct 1942 (U-504)	City of Johannesburg	5,669	Brit.	33° 20'S; 29° 30'E
17	26 Oct 1942 (U-504)	Anne Hutchinson	7,176	Amer.	33° 10'S; 28° 30'E
18	29 Oct 1942 (U-159)	Ross	4,978	Brit.	38° 51'S; 21° 40'E
19	29 Oct 1942 (U-159)	Laplace	7,327	Brit.	40° 33'S; 21° 35'E
20	29 Oct 1942 (U-159)	La Salle	5,462	Amer.	40° 00'S; 21° 30'E
21	31 Oct 1942 (U-504)	Empire Guidon	7,041	Brit.	30° 40'S; 34° 20'E
22	31 Oct 1942 (U-504)	Reynolds	5,113	Brit.	30° 00'S; 35° 10'E
23	3 Nov 1942 (U-504)	Porto Alegre	5,187	Braz.	35° 27'S; 28° 02'E
24	31 Oct 1942 (U-172)	Aldington Court	4,891	Brit.	30° 20'S; 02° 10'W
25	2 Nov 1942(U-172)	Llandilo	4,966	Brit.	27° 03'S; 02° 59'W
26	13 Nov 1942 (U-159)	Star of Scotland	2,290	Amer.	26° 30'S; 00° 20'W
Total Merchants Sunk		26			
Total Tonnage Lost		170,294 tons			

Table 3.8: Merchantmen lost to the Eisbär Group, Oct-Nov 1942³⁷⁵

A batch of the new type IXD₂ U-boats, captained by experienced commanders, was commissioned between August and September. This allowed Dönitz's hope for U-boat operations to extend to cover the African ports in the Indian Ocean, to be realised. The *BdU* decided that these boats relieve the Eisbär group to maintain constant pressure on the shipping off South Africa. The first of the U-boats, *U-179* (Sobe) sailed by mid-August, and without the knowledge of the *BdU*, it caught up to and joined the Eisbär

³⁷⁴ Gordon-Cumming, *Official History of the South African Naval Forces*, pp. 287-299; DOD Archives, Map Collection, File: War in the Southern Oceans maps. *Chart and List of Ships Sunk Captured or Damaged in the Waters off Southern Africa, 1939-1945*.

³⁷⁵ DOD Archives, UWH Civil, Box 341, File: Long naval history. *Ships lost or damaged by enemy action in South African waters*.

group in the waters off Cape Town. On 8 October, as the Eisbär boats launched their attacks, *U-179* sank the *Pantelis* (3,845 tons). The fate of *U-179* was, however, sealed. Shortly after, depth charges were dropped from the British destroyer HMS *Active* and sank the U-boat. For the remainder of the Second World War, the *BdU* believed that *U-179* had been sunk by Allied bombers off the coast of Ascension Island, while on her return voyage to Lorient. Three more type IXD₂ U-boats, *U-178* (Ibbeken), *U-181* (Lüth) and *U-177* (Gysae), left Lorient between 8 and 17 September and arrived in the waters off Cape Town at the end of October. During the following six weeks, they operated off the east coast of South Africa and travelled as far as Lourenço Marques in the Mozambique Channel.³⁷⁶

These type IXD₂ U-boats collectively formed part of the first U-cruiser operation in the Southern Oceans and were extremely successful during their deployment (see Table 3.9). They managed to sink 25 merchant ships: *Aegeus* (4,538 tons), *Mendoza* (8,233 tons), *East Indian* (8,159 tons), *Trekieve* (5,244 tons), *Hai Hing* (2,561 tons), *Plaudit* (5,060 tons), *K.G. Meldahl* (3,799 tons), *Excello* (4,969 tons), *Louise Moller* (3,764 tons), *Gunda* (2,241 tons), *Scottish Chief* (7,006 tons), *Corinthiakos* (3,562 tons), *Pierce Butler* (7,191 tons), *Alcoa Pathfinder* (6,797 tons), *Mount Helmos* (6,481 tons), *Dorington Court* (5,281 tons), *Jeremiah Wadsworth* (7,176 tons), *Evanthia* (3,551 tons), *Nova Scotia* (6,796 tons), *Cleanthis* (4,153 tons), *Llandaff Castle* (10,799), *Amarylis* (4,328 tons), *Saronikos* (3,548 tons), *Empire Gull* (6,408), and *Sawahloento* (3,085 tons).³⁷⁷ The British Auxiliary Cruiser *Nova Scotia* had transported 800 Italian civilian internees on board, and fearing a repeat of the *Laconia* incident, the *BdU* ordered the U-boats not to attempt a rescue operation. By mid-November, the *SKL* obligated all remaining German submarines off the South African coast to return to the North Atlantic and the Mediterranean. Here they would be expected to attack Allied shipping after the successful American landings in North Africa during Operation Torch.³⁷⁸

During October, the Italian submarine *Ammiraglio Cagni* (Liannazza)³⁷⁹ travelled from its Mediterranean base to its operational area to the south-west coast of Africa and the waters off Cape Town. On 29 November the *Ammiraglio Cagni* sank the *Argo* (5,550 tons), whereafter it had to start its return journey to Bordeaux. During this voyage, the submarine was successfully provisioned by *U-459*, after which it operated off the Saint Peter and Saint Paul Archipelago before returning to base in February 1943. During the period between 7 October and 14 December 1942, eight U-boats and one Italian

³⁷⁶ DOD Archives, UWH Civil, Box 341, File: U-boat matters. *Questions and answers submitted by UWH section to Fregattenkapitän Gunter Hessler re U-boat warfare in South African waters*; DOD Archives, UWH Civil, Box 220, File: Union War Histories Translations 14a. *U-boat Operations of the Axis Powers in S.A. Waters, compiled by Dr Jürgen Rohwer, 1954.*

³⁷⁷ Gordon-Cumming, *Official History of the South African Naval Forces*, pp. 287-299; DOD Archives, Map Collection, File: War in the Southern Oceans maps. *Chart and List of Ships Sunk Captured or Damaged in the Waters off Southern Africa, 1939-1945.*

³⁷⁸ Turner *et al*, *War in the Southern Oceans*, pp. 189-201.

³⁷⁹ Regia Marina Italiana – The Italian Navy in World War II (Website Accessed on 5 June 2017). http://www.regiamarina.net/detail_text_with_list.asp?nid=84&lid=1&cid=12

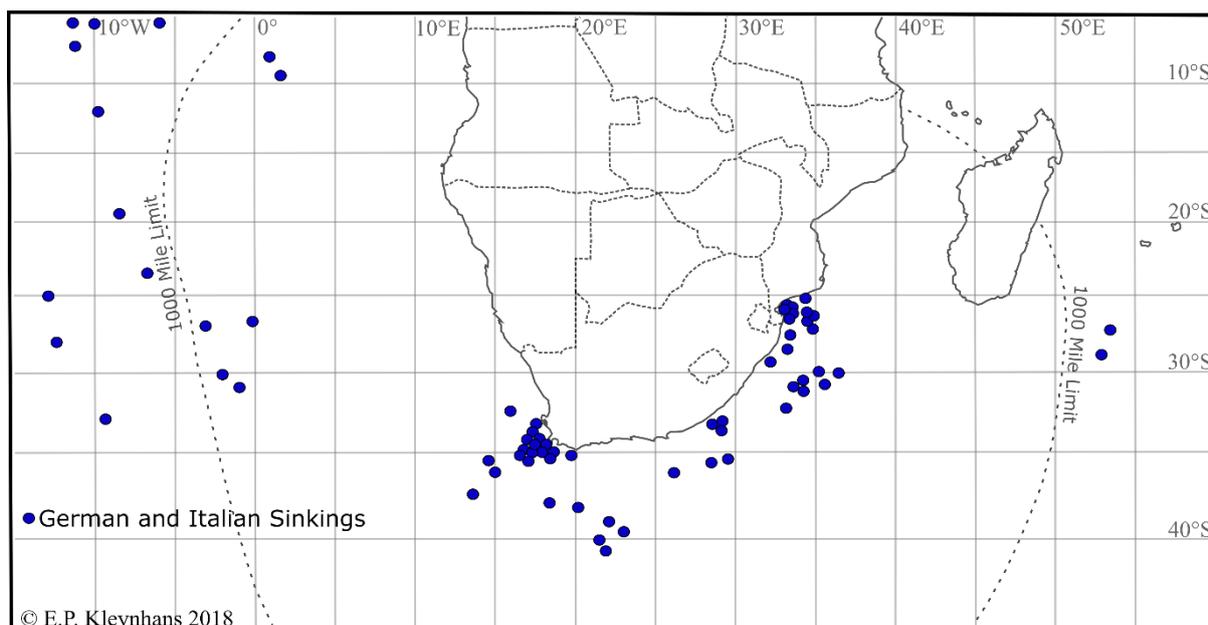
submarine sank 53 merchantmen, for the loss of only one U-boat. The sinking results were thus an approximate 5.88 merchant vessels sunk per U-boat, with a striking 314,419 tons of merchant shipping lost off the South African coast. The *BdU* was thus able to prove to the *SKL* that operations as far south as the waters off the South African coast were not only possible, but could yield good sinking results.³⁸⁰

#	Date Attacked On/By	Ship	Tonnage	Country	Lat/Long
1	8 Oct 1942 (U-179)	Pantelis	3,845	Greek	34° 20'S; 17° 50'E
2	31 Oct 1942 (U-177)	Aegeus	4,538	Greek	32° 30'S; 16° 00'E
3	1 Nov 1942 (U-178)	Mendoza	8,233	Brit.	29° 20'S; 32° 13'E
4	3 Nov 1942 (U-181)	East Indian	8,159	Amer.	37° 23'S; 13° 34'E
5	4 Nov 1942 (U-178)	Trekieve	5,244	Brit.	25° 46'S; 33° 48'E
6	4 Nov 1942 (U-178)	Hai Hing	2,561	Norw.	25° 55'S; 33° 10'E
7	8 Nov 1942 (U-181)	Plaudit	5,060	Pan.	36° 00'S; 26° 32'E
8	10 Nov 1942 (U-181)	K.G. Meldahl	3,799	Norw.	34° 59'S; 29° 45'E
9	13 Nov 1942 (U-178)	Louise Moller	3,764	Brit.	30° 50'S; 35° 54'E
10	13 Nov 1942 (U-181)	Excello	4,969	Amer.	32° 23'S; 30° 07'E
11	19 Nov 1942 (U-181)	Gunda	2,241	Norw.	25° 40'S; 33° 53'E
12	19 Nov 1942 (U-177)	Scottish Chief	7,006	Brit.	30° 39'S; 34° 41'E
13	20 Nov 1942 (U-181)	Corinthiakos	3,562	Greek	25° 42'S; 33° 27'E
14	20 Nov 1942 (U-177)	Pierce Butler	7,191	Amer.	29° 40'S; 36° 35'E
15	21 Nov 1942 (U-181)	Alcoa Pathfinder	6,797	Amer.	26° 45'S; 33° 10'E
16	24 Nov 1942 (U-181)	Dorington Court	5,281	Brit.	27° 00'S; 34° 45'E
17	24 Nov 1942 (U-181)	Mount Helmos	6,481	Greek	26° 38'S; 34° 58'E
18	27 Nov 1942 (U-178)	Jeremiah Wadsworth	7,176	Amer.	39° 25'S; 22° 23'E
19	28 Nov 1942 (U-181)	Evanthia	3,551	Greek	25° 13'S; 34° 00'E
20	28 Nov 1942 (U-177)	Nova Scotia	6,796	Brit.	28° 30'S; 33° 00'E
21	30 Nov 1942 (U-181)	Cleanthis	4,153	Greek	24° 29'S; 35° 44'E
22	30 Nov -1942 (U-177)	Llandaff Castle	10,799	Brit.	27° 20'S; 33° 40'E
23	2 Dec 1942 (U-181)	Amarylis	4,328	Pan.	28° 14'S; 33° 24'E
24	7 Dec 1942 (U-177)	Saronikos	3,548	Greek	24° 46'S; 35° 30'E
25	12 Dec 1942 (U-177)	Empire Gull	6,408	Brit.	26° S; 35° E
26	14 Dec 1942 (U-177)	Sawahloento	3,085	Dutch	31° 02'S; 34° 00'E
Total Merchants Sunk		26			
Total Tonnage Lost		138,575 tons			

Table 3.9: Merchantmen lost to the first U-cruiser operation, Oct-Dec 1942³⁸¹

³⁸⁰ Gordon-Cumming, *Official History of the South African Naval Forces*, pp. 287-299; DOD Archives, Map Collection, File: War in the Southern Oceans maps. *Chart and List of Ships Sunk Captured or Damaged in the Waters off Southern Africa, 1939-1945*.

³⁸¹ DOD Archives, UWH Civil, Box 340, File: Long naval history. *Ships lost or damaged by enemy action in South African waters*.



Map 3.3 Shipping lost to German and Italian submarines, 1942

In December, the *SKL* requested that the *BdU* maintain pressure along the South African coast. It also ordered a new U-boat operation to continue to harass the shipping along the extended Allied supply routes. The *BdU* appreciated that the type IXC U-boats, used by the *Eisbär* group, proved ill-suited for operations in distant waters. Their limited fuel capacity was insufficient even when refuelled along the way by a *milch cow*, and this significantly reduced their deployment to an operational area. Notwithstanding, the *BdU* was once more forced to despatch four type IXC U-boats for the operations off Cape Town as no type IXD₂ U-boats were available. The *BdU* assigned *U-506* (Würdemann), *U-516* (Wiebe), *U-509* (Witte) and *U-160* (Lassen), to form the core of the *Seehund* Group, with the *milch cow* *U-459* once more attached to the pack. The U-boats departed from their bases in the Bay of Biscay in December 1942 and January 1943, after which they replenished their supplies from *U-459* approximately 600 miles to the south of St Helena Island.

The *Seehund* group travelled south without incident and arrived in the operational area off Cape Town at the end of January and the beginning of February. The arrival of *U-182* (Clausen), the only available type IXD₂ U-boat, further bolstered the strength of the *Seehund* group. The operational conditions in the South African waters had, however, drastically changed since October 1942. The deterioration of these conditions was in part due to the heightened South African and Allied A/S measures, strong radar protection and the introduction of escorted convoys along the South African coast.³⁸²

³⁸² DOD Archives, UWH Civil, Box 341, File: U-boat matters. *Questions and answers submitted by UWH section to Fregattenkapitän Gunter Hessler re U-boat warfare in South African waters.*

The sinking results of the Seehund Group were, however, negligible for the entire time during which the U-boats were operational off the South African coast. During the initial deployment of the Seehund Group between Cape Town and Port Elizabeth, its sinking results were exceptionally poor. During this period, only five ships were sunk: the *Queen Anne* (4,937 tons), *Helmspey* (4,764 tons), *Deer Lodge* (6,187 tons), *Llanashe* (4,836 tons) and the Dutch submarine tender *Colombia* (10,782). By the beginning of March, the Seehund group were ordered further eastwards towards the waters off Durban and Lourenço Marques where there was more potential for merchant spoils. During the whole of March, only ten merchantmen were sunk: the *Nirpura* (5,961 tons), *Empire Mahseer* (5,087 tons), *Harvey W. Scott* (7,176 tons), *Marietta E.* (7,628 tons), *Sabor* (5,212 tons), *James B. Stephens* (7,176 tons), *Tabor* (4,768 tons), *Richard D. Spaight* (7,177 tons), *Aelybryn* (4,986 tons), and the *Nortun* (3,663 tons).

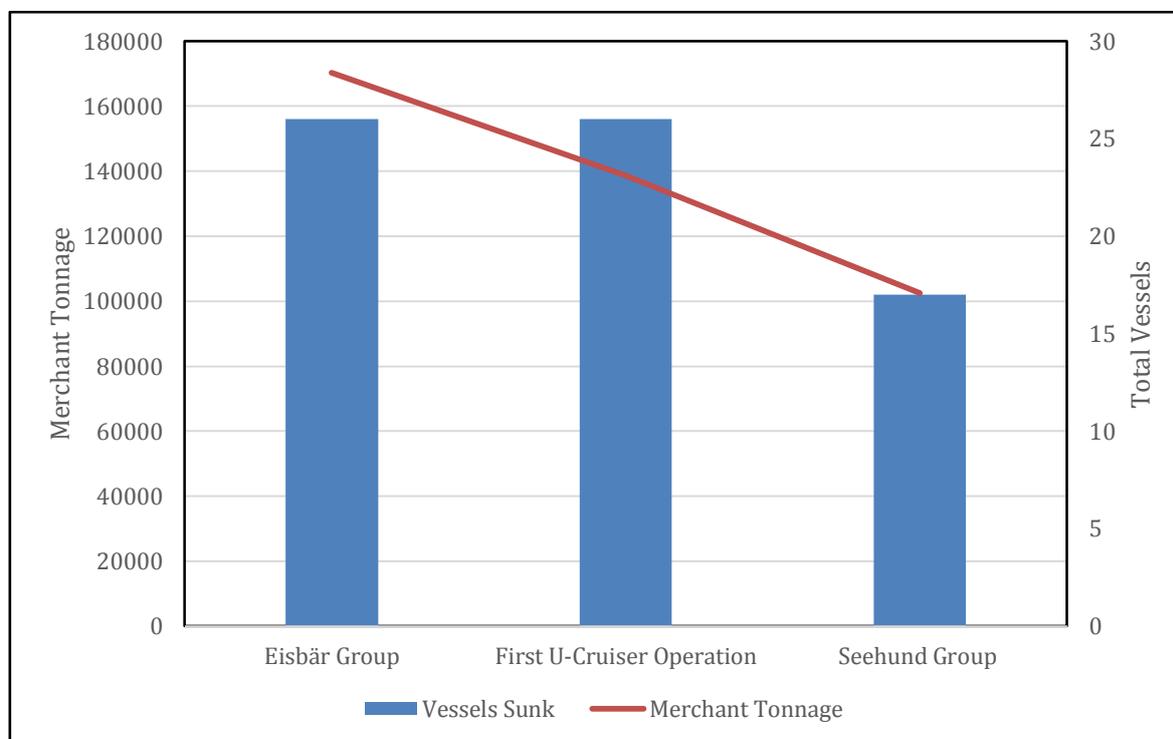
#	Date Attacked On/By	Ship	Tonnage	Country	Lat/Long
1	10-Feb-1943 (U-509)	Queen Anne	4,937	Brit.	34° 53'S; 19° 51'E
2	11-Feb-1943 (U-516)	Helmspey	4,764	Brit.	34° 22'S; 24° 54'E
3	17-Feb-1943 (U-516)	Deer Lodge	6,187	Amer.	33° 46'E; 26° 57'E
4	17-Feb-1943 (U-182)	Llanashe	4,836	Brit.	34° 00'S; 28° 30'E
5	27-Feb-1943 (U-516)	Colombia	10,782	Dutch	33° 36'S; 27° 29'E
6	3-Mar-1943 (U-160)	Nirpura	5,961	Brit.	32° 47'S; 29° 47'E
7	3-Mar-1943 (U-160)	Empire Mahseer	5,087	Brit.	32° 01'S; 30° 48'E
8	3-Mar-1943 (U-160)	Harvey W. Scott	7,176	Amer.	31° 54'S; 30° 37'E
9	4-Mar-1943 (U-160)	Marietta E.	7,628	Brit.	31° 49'S; 31° 11'E
10	7-Mar-1943 (U-506)	Sabor	5,212	Brit.	34° 30'S; 23° 10'E
11	8-Mar-1943 (U-160)	James B. Stephens	7,176	Amer.	28° 53'S; 33° 18'E
12	9-Mar-1943 (U-506)	Tabor	4,768	Norw.	37° 30'S; 23° 15'E
13	10-Mar-1943 (U-182)	Richard D. Spaight	7,177	Amer.	28° S; 37° E
14	11-Mar-1943 (U-160)	Aelybryn	4,986	Brit.	28° 30'S; 34° 00'E
15	20-Mar-1943 (U-516)	Nortun	3,663	Pan.	27° 35'S; 14° 22'E
16	2-Apr-1943 (U-509)	City of Baroda	7,129	Brit.	27° 56'S; 15° 21'E
17	5-Apr-1943 (U-182)	Aloe	5,047	Brit.	32° 37'S; 37° 50'E
Total Merchants Sunk		17			
Total Tonnage Lost		102,516 tons			

Table 3.10: Merchantmen lost to the Seehund Group, Feb-Apr 1943³⁸³

By the end of March, the Seehund Group was ordered back to the operational area to the west of Cape Town. On their onward journey towards Port Nolloth and Walvis Bay, only a further two merchant vessels were sunk. These were the *City of Baroda* (7,129 tons) and *Aloe* (5,047 tons). Hereafter the U-boats were forced to turn back to their bases as their supplies ran out. During the return voyage, *U-182* was sunk by the American destroyer *USS Mackenzie* on 16 May. The remainder of the U-boats, however,

³⁸³ DOD Archives, UWH Civil, Box 340, File: Long naval history. *Ships lost or damaged by enemy action in South African waters.*

safely reached their bases between 3 and 11 March. It is evident that the sinking results of the Seehund Group were less striking, and indeed convincing, than the results obtained by the Eisbär Group and the first U-cruiser operation during 1942 (see Graph 3.1). Between February and April, the Seehund Group and *U-182* sunk a total of only 17 merchantmen, a mere 102,516 tons of shipping (see Table 3.10).³⁸⁴



Graph 3.1: Comparative successes of the Eisbär Group, the first U-cruiser operation, and the Seehund Group

By 1943, the main Italian submarine operations were directed against shipping off the Brazilian coast. On 20 February, however, an Italian submarine, the *Leonardo da Vinci* (Gazzana), left Bordeaux and arrived in South African waters at the beginning of April. During its operational deployment, the *Leonardo da Vinci* succeeded in sinking five merchantmen: the *Lulworth Hill* (7,628 tons), *Sembilan* (6,566 tons), *Manaar* (8,007 tons), *John Drayton* (7,177 tons) and the *Doryssa* (8,078 tons). The Italian submarine was, however, lost during its return voyage through the combined efforts of the British destroyer HMS *Active* and the frigate HMS *Ness* (see Table 3.11).³⁸⁵

³⁸⁴ Gordon-Cumming, *Official History of the South African Naval Forces*, pp. 287-299; DOD Archives, Map Collection, File: War in the Southern Oceans maps. *Chart and List of Ships Sunk Captured or Damaged in the Waters off Southern Africa, 1939-1945*.

³⁸⁵ Gordon-Cumming, *Official History of the South African Naval Forces*, pp. 287-299; DOD Archives, Map Collection, File: War in the Southern Oceans maps. *Chart and List of Ships Sunk Captured or Damaged in the Waters off Southern Africa, 1939-1945*; DOD Archives, UWH Civil, Box 220, File: Union War Histories Translations 14a. *U-boat Operations of the Axis Powers in S.A. Waters, compiled by Dr Jürgen Rohwer, 1954*.

#	Date Attacked On/By	Ship	Tonnage	Country	Lat/Long
1	19 Mar 1943 (L. Da Vinci)	Lulworth Hill	7,628	Brit.	10° 10'S; 01° 00'E
2	17 Apr 1943 (L. Da Vinci)	Sembilan	6,566	Dutch	31° 30'S; 33° 30'E
3	18 Apr 1943 (L. Da Vinci)	Manaar	8,007	Brit.	30° 59'S; 33° 00'E
4	21 Apr 1943 (L. Da Vinci)	John Drayton	7,177	Amer.	32° 10'S; 34° 50'E
5	25 Apr 1943 (L. Da Vinci)	Doryssa	8,078	Brit.	37° 03'S; 24° 03'E
Total Merchants Sunk		5			
Total Tonnage Lost		37,456 tons			

Table 3.11: Merchantmen lost to Italian submarine operations, Mar-Apr 1943³⁸⁶

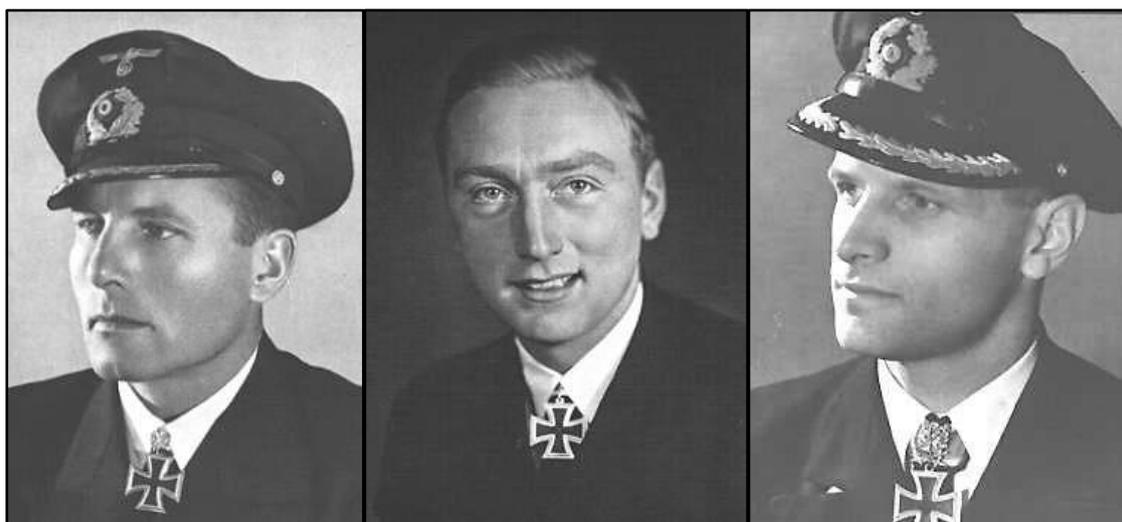


Fig 3.8: The top U-boat aces in South African waters during the war
– Karl-Friedrich Merten, Wolfgang Lüth, Helmut Witte³⁸⁷

By April, only *U-182* remained operational off the South African coast. The *BdU* decided that a large number of IXD U-boats, which had become available during February and March, would be despatched to relieve the *Seehund* group, and collectively formed part of the second U-cruiser operation in the Southern Oceans. The extended fuel capacity of these U-boats allowed for greater operational freedom in distant waters. On 9 February, *U-180* (Musenberg) – one of only two experimental type IXD₁ U-boats – left the Bay of Biscay destined for Madagascar. Musenberg was ordered to rendezvous with the Japanese submarine, *I-29* (Kinashi) off Madagascar and deliver the Indian dissident Subhas Bose. During her voyage to the rendezvous, *U-180* sank the *Corbis* (8,132 tons) on 18 April. After the successful delivery of Bose on 26 April, *U-180*

³⁸⁶ DOD Archives, UWH Civil, Box 340, File: Long naval history. *Ships lost or damaged by enemy action in South African waters.*

³⁸⁷ <https://uboat.net/men/merten.htm>; <https://uboat.net/men/luth.htm>; <https://uboat.net/men/witte.htm> (Accessed on 6 March 2018).

remained operational off the South African coast until 26 May without any further results.³⁸⁸

Over the period of 9 April to 3 May, a further nine type IXD₂ U-boats made for the operational area in the South African waters. They included *U-177* (Gysae), *U-178* (Dommes), *U-181* (Lüth), *U-195* (Buchholz), *U-196* (Kentrat), *U-197* (Bartels), *U-198* (Hartmann), *U-402* (Freiherr von Forstner) and *U-511* (Schneewind). The first of these U-boats arrived in the operational area towards the end of April, with *U-177*, *U-181*, *U-198* and *U-402* sinking a number of merchant vessels between Cape Town and the Mozambique Channel. During May alone, seven merchantmen were sunk by these U-boats. They were the *Nailsea Meadow* (4,962 tons), *Tinhow* (5,232 tons), *Northmoor* (4,392 tons), *Sicilia* (1,633 tons), *Storaas* (7,886 tons), *Agwimonte* (6,697 tons) and the *Hopetarn* (5,231 tons). The main reason behind the sudden successes appears to have been the greater speed which could be reached by the type IXD₂ U-boats. In June, a further five merchantmen were sunk: the *Salabangka* (6,586), *Dumra* (2,304 tons), *William King* (7,176 tons), *Harrier* (193 tons), and the *Sebastian Cermeno* (7,194 tons). By the end of that month, the U-boats had replenished their stores from the German surface tanker, the *Charlotte Schliemann*, well to the south of the island of Mauritius.³⁸⁹

After restocking, the U-boats relocated to new operational areas, which saw the submarines working towards the east coast of South Africa in a quadrant between Durban, Lourenço Marques, the Mozambique Channel, Mauritius and Madagascar. This new operational area at once proved more profitable, with the U-boats sinking a further 14 merchantmen.³⁹⁰ Included were the *Michael Livanos* (4,774 tons), *Breiviken* (2,669 tons), *Hydraios* (4,476 tons), *Jasper Park* (7,129 tons), *Leana* (4,743 tons), *Alice F. Palmer* (7,176 tons), *Mary Livanos* (4,771 tons), *Robert Bacon* (7,191 tons), *City of Canton* (6,692 tons), *Pegasus* (9,583 tons), *Mangkalihat* (8,457 tons), *City of Oran* (7,323), *Efthalia Mari* (4,195 tons) and the *Empire Stanley* (6,921 tons) (see Table 3.12).³⁹¹

³⁸⁸ DOD Archives, UWH Civil, Box 342, File: Newspaper Articles Naval War. 'Gold gab für man Bose' in *Muenchner Illustrierte*, 13 Mar 1954; DOD Archives, UWH Civil, Box 220, File: Union War Histories Translations 14a. *U-boat Operations of the Axis Powers in S.A. Waters compiled by Dr Jürgen Rohwer, 1954.*

³⁸⁹ Gordon-Cumming, *Official History of the South African Naval Forces*, pp. 287-299; DOD Archives, Map Collection, File: War in the Southern Oceans maps. *Chart and List of Ships Sunk Captured or Damaged in the Waters off Southern Africa, 1939-1945.*

³⁹⁰ Turner *et al*, *War in the Southern Oceans*, pp. 219-237; DOD Archives, UWH Civil, Box 220, File: Union War Histories Translations 14a. *U-boat Operations of the Axis Powers in S.A. Waters compiled by Dr Jürgen Rohwer, 1954.*

³⁹¹ Gordon-Cumming, *Official History of the South African Naval Forces*, pp. 287-299; DOD Archives, Map Collection, File: War in the Southern Oceans maps. *Chart and List of Ships Sunk Captured or Damaged in the Waters off Southern Africa, 1939-1945.*

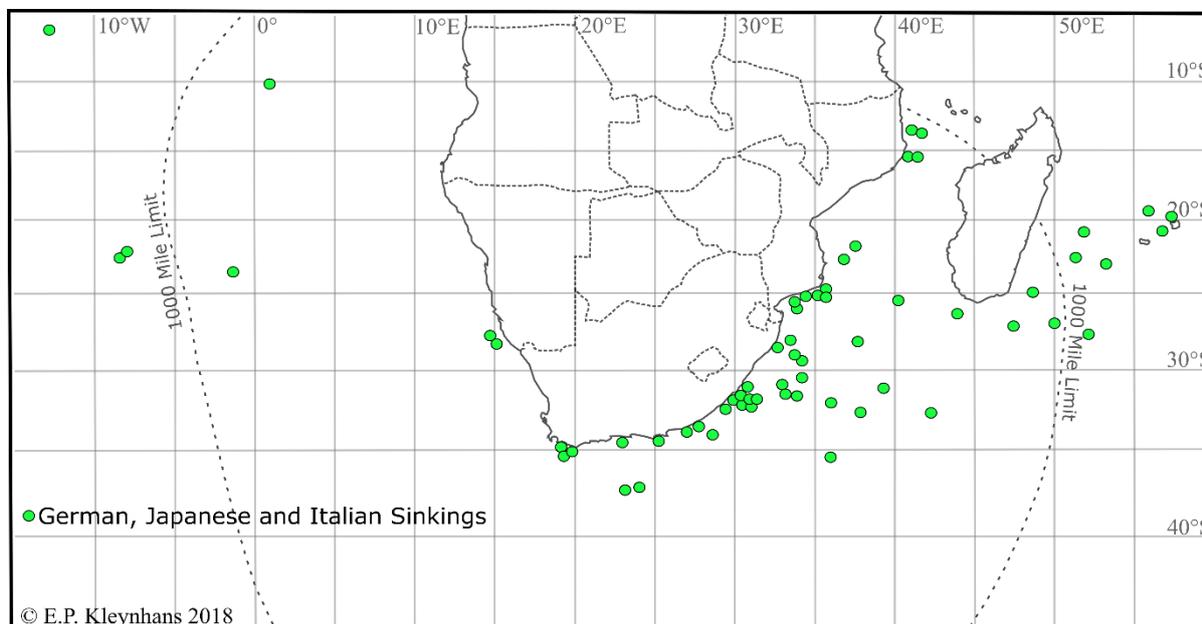
#	Date Attacked On/By	Ship	Tonnage	Country	Lat/Long
1	18-Apr-1943 (U-180)	Corbis	8,132	Brit.	34° 56'S ; 34° 03'E
2	11-May-1943 (U-402)	Nailsea Meadow	4,962	Brit.	32° 04'S ; 29° 13'E
3	11-May-1943 (U-181)	Tinhow	5,232	Brit.	25° 15'S ; 33° 30'E
4	17-May-1943 (U-198)	Northmoor	4,392	Brit.	28° 27'S ; 32° 43'E
5	27-May-1943 (U-181)	Sicilia	1,633	Swed.	24° 31'S ; 35° 12'E
6	28-May-1943 (U-177)	Storaas	7,886	Norw.	34° 57'S ; 19° 33'E
7	28-May-1943 (U-177)	Agwimonte	6,697	Amer.	34° 57'S ; 19° 33'E
8	29-May-1943 (U-198)	Hopetarn	5,231	Brit.	30° 50'S ; 39° 32'E
9	1-Jun-1943 (U-178)	Salabangka	6,586	Dutch	31° 08'S ; 31° 18'E
10	5-Jun-1943 (U-198)	Dumra	2,304	Brit.	28° 15'S ; 33° 20'E
11	6-Jun-1943 (U-198)	William King	7,176	Amer.	30° 25'S ; 34° 15'E
12	7-Jun-1943 (U-181)	Harrier	193	Brit.	25° 50'S ; 33° 20'E
13	27-Jun-1943 (U-511)	Sebastian Cermeno	7,194	Amer.	29° 00'S ; 50° 10'E
14	4-Jul-1943 (U-178)	Michael Livanos	4,774	Greek	22° 52'S ; 36° 47'E
15	4-Jul-1943 (U-178)	Brevikien	2,669	Norw.	21° 50'S ; 37° 50'E
16	6-Jul-1943 (U-198)	Hydraios	4,476	Greek	24° 44'S ; 35° 12'E
17	6-Jul-1943 (U-177)	Jasper Park	7,129	Brit.	32° 52'S ; 42° 15'E
18	7-Jul-1943 (U-198)	Leana	4,743	Brit.	25° 06'S ; 35° 33'E
19	10-Jul-1943 (U-177)	Alice F. Palmer	7,176	Amer.	26° 30'S ; 44° 10'E
20	11-Jul-1943 (U-178)	Mary Livanos	4,771	Greek	15° 40'S ; 40° 45'E
21	14-Jul-1943 (U-178)	Robert Bacon	7,191	Amer.	15° 25'S ; 41° 13'E
22	16-Jul-1943 (U-178)	City of Canton	6,692	Brit.	13° 52'S ; 41° 10'E
23	23-Jul-1943 (U-197)	Pegasus	9,583	Swed.	28° 05'S ; 37° 40'E
24	1-Aug-1943 (U-198)	Mangkalihat	8,457	Dutch	25° 06'S ; 34° 14'E
25	2-Aug-1943 (U-196)	City of Oran	7,323	Brit.	13° 45'S ; 41° 16'E
26	5-Aug-1943 (U-177)	Efthalia Mari	4,195	Greek	24° 21'S ; 48° 55'E
27	17-Aug-1943 (U-197)	Empire Stanley	6,921	Brit.	27° 08'S ; 48° 15'E
Total Merchants Sunk		27			
Total Tonnage Lost		153,718 tons			

Table 3.12: Merchantmen lost to the second U-cruiser operation, Apr-Aug 1943³⁹²

Between 8 and 20 August, the U-boats used up most of their supplies and were obliged to return home. During this period, *U-197* was lost after being bombed by Allied aircraft just south of Madagascar on 20 August. The remaining U-boats had arrived in Bordeaux by mid-October. Between 18 April and 17 August, the U-boats of the second U-cruiser operation accounted for 27 merchant ships sunk, totalling 153,718 tons of shipping lost. Despite more active South African and Allied counter-measures, Dönitz's U-boats managed to sink 44 merchant ships off the coast of South Africa during the whole of 1943, amounting to a total of 256,243 tons of shipping lost. In October, the *Faneromeni* (3,404 tons) was sunk by the Japanese submarine *I-37* in the Mozambique Channel. This was the last merchantman lost in South African waters for the year 1943.

³⁹² DOD Archives, UWH Civil, Box 340, File: Long naval history. *Ships lost or damaged by enemy action in South African waters.*

The Italian and Japanese submarines added six more merchantmen to this tally, amounting to a further 40,860 tons of shipping lost. Altogether the Axis submarine offensives accounted for 50 merchant vessels sunk in 1943, totalling 297,103 tons of shipping lost.³⁹³



Map 3.4: Shipping lost to Axis submarines, 1943

For the remainder of the Second World War, more notably from September 1943, the *BdU* ceased to regard the region off the South African coast as a viable operational area. It argued that the submarines earmarked for offensive operations in the Far East would have to pass through South African waters before they could reach their far-eastern bases at Penang and Surabaya. This would provide the U-boats with ample opportunity to attack Allied merchant shipping along the South African coastline during their journeys to and from the east. The A/S measures had become so efficient around the South African coast – especially the well-organised air patrol service by the SAAF and Royal Air Force – that the U-boats found it increasingly difficult to operate successfully against merchant shipping. There were, however, exceptions to the rule.³⁹⁴ During the course of 1944, four U-boats, *U-862* (Timm), *U-852* (Eck), *U-198* (Waldegg) and *U-861* (Oesten), managed to sink eight Allied merchant ships, accounting for 42,267 tons of shipping lost. The merchant vessels that had been sunk comprised of the *Dahomian* (5,277 tons), *Columbine* (3,268 tons), *Director* (5,107 tons), *Radbury* (3,614), *Empire Lancer* (7,037 tons), *Nairung* (5,414 tons), *Wayfarer* (5,086 tons) and the *Berwickshire* (7,464 tons). The *Point Pleasant Park* (7,136 tons) was sunk by *U-510*

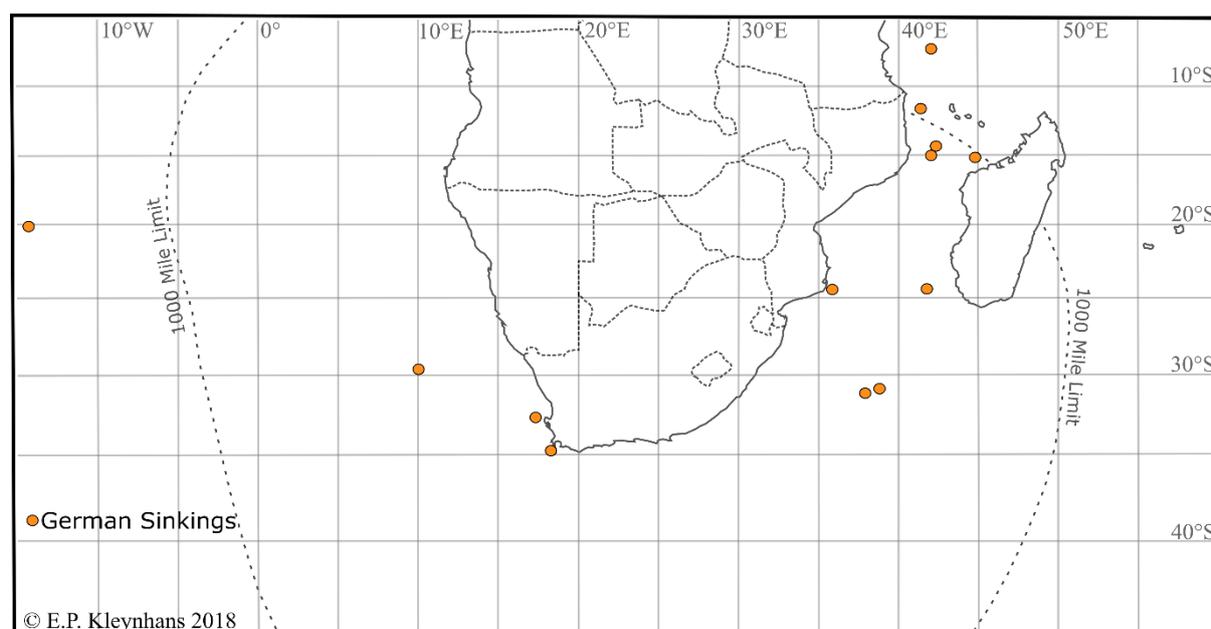
³⁹³ Turner *et al*, *War in the Southern Oceans*, p. 240; Gordon-Cumming, *Official History of the South African Naval Forces*, p. 83.

³⁹⁴ DOD Archives, UWH Civil, Box 220, File: Union War Histories Translations 14a. *U-boat Operations of the Axis Powers in S.A. Waters* compiled by Dr Jürgen Rohwer, 1954; Turner *et al*, *War in the Southern Oceans*, pp. 238-255.

(Eick) on 23 February 1945. This was the last Allied merchantman sunk off the South African coast during the war (see Table 3.13).³⁹⁵

#	Date Attacked On/By	Ship	Tonnage	Country	Lat/Long
1	1 Apr 1944(U-852)	Dahomian	5,277	Brit.	34° 25'S; 18° 19'E
2	16 Jun 1944(U-198)	Columbine	3,268	Brit.	32° 44'S; 17° 22'E
3	14 Jul 1944(U-198)	Director	5,107	Brit.	24° 30'S; 35° 44'E
4	13 Aug 1944(U-862)	Radbury	3,614	Brit.	24° 20'S; 41° 45'E
5	16 Aug 1944(U-862)	Empire Lancer	7,037	Brit.	15° S; 45° E
6	18 Aug 1944(U-862)	Nairung	5,414	Brit.	15° S; 42° E
7	19 Aug 1944(U-862)	Wayfarer	5,086	Brit.	14° 30'S; 42° 20'E
8	20 Aug 1944(U-861)	Berwickshire	7,464	Brit.	30° 58'S; 38° 50'E
9	23 Feb 1945 (U-510)	Point Pleasant	7,136	Brit.	29° 42'S; 09° 58'E
Total Merchants Sunk		9			
Total Tonnage Lost		49,403 tons			

Table 3.13: Merchantmen lost to German U-boats, 1944-1945³⁹⁶



Map 3.5: Shipping lost to German U-boats, 1944-1945

Conclusion

During the Second World War, the Axis naval forces effectively operated off the South African coast between 1939 and 1945, with the main operations materialising from June

³⁹⁵ Gordon-Cumming, *Official History of the South African Naval Forces*, pp. 287-299; DOD Archives, Map Collection, File: War in the Southern Oceans maps. *Chart and List of Ships Sunk Captured or Damaged in the Waters off Southern Africa, 1939-1945*.

³⁹⁶ DOD Archives, UWH Civil, Box 340, File: Long naval history. *Ships lost or damaged by enemy action in South African waters*.

1942 to August 1943. The Axis maritime operations in South African waters accounted for 158 ships sunk, amounting to a staggering 910,638 tons of shipping lost. Of this number, the mines accounted for 1.23% (11,211 tons) of shipping lost and raiders/warships for 13.70% (124,803 tons). The submarines were responsible for a startling 85.06% (774,624 tons). When isolated to South African figures alone, the percentages seem blatantly impressive. When juxtaposed against total shipping losses throughout the Second World War to Axis maritime operations, however, the sinking results in South African waters are less remarkable. The global shipping losses to Axis maritime operations came to a substantial 17,662,733 tons of shipping lost. The detailed global results of shipping tonnage lost involve mines – 1,406,192 tons; raiders/warships – 1,569,319 tons and submarines – 14,687,231 tons. As mentioned previously, the sinking results in South African waters, when compared to the global results of the Axis maritime operations, are less notable. In fact, the losses to Axis mines, raiders/warships and submarines in South African waters form a mere 0.79%, 7.95%, 5.27% of the global results respectively (see Table 3.14). Thus only 5.15% of the global losses to Axis maritime operations can be attributed to coordinated actions in South African waters, which did not even amount to 0.37% of the gross registered tonnage of merchant ships traversing the Cape sea route during the war.

	Maritime losses in South African waters	Global maritime losses	Maritime losses in South African waters expressed as a percentage of global maritime losses
Mines	11,211 tons	1,406,192 tons	0.79%
Raiders/Warships	124,803 tons	1,569,310 tons	7.95%
Submarines	774,624 tons	14,687,231 tons	5.27%
Total	910,638 tons	17,662,733 tons	5.15%

Table 3.14: Comparative results of maritime losses in South African waters and globally, 1939-1945

The success of the Axis maritime operations in South African waters should, however, not be measured in mere tonnage and percentages alone, but rather in terms of the strategic and operational effect which it created. The Axis maritime operations succeeded in causing a significant amount of trouble and anxiety for the Allies, particularly in South African waters. Above all the principal aim was achieved – that of destroying shipping, forcing the adoption of convoys, and creating a dire economic and financial situation for the Allies by forcing the deployment of strong naval forces to protect vast sea routes. From October 1942, the operational conditions in South African waters deteriorated considerably due to South African and Allied A/S operations. In fact, by August 1943, the *SKL* and *BdU* had ceased to consider South African waters as a viable operational area with sufficient sinking potential.

To some degree, the maritime intelligence war waged off southern Africa informed both the Axis maritime operations and Allied countermeasures in said waters.

This aspect of the Second World War is investigated in chapter four. It will soon become evident that the maritime intelligence war was extremely complex in nature, and involved a number of diverse role-players.

Chapter 4

The maritime intelligence war in southern Africa, 1939-1945

Introduction

Maritime intelligence played a crucial role during the course of the naval war in South African waters. Following the outbreak of the war, Germany attempted to initiate covert contact with the South African political opposition on several occasions.

After establishing viable radio contact with Germany, the Ossewabrandwag (OB) – which translates to Ox-wagon Sentinel, an anti-British and pro-German organisation, in particular started transmitting both political and military intelligence to Berlin. Subsequent to the establishment of the FELIX Organisation in mid-1942, there was a marked increase in maritime intelligence gathered by the OB and relayed to Berlin. The operational value of this source of maritime intelligence, however, remained questionable for the remainder of the war in southern Africa. The Cape Naval Intelligence Centre (CNIC) proved the main player in the Allied sphere of maritime intelligence in southern Africa during the war. The CNIC formed a vital link in the overall Allied maritime intelligence organisation during the war. It did so by presiding over both operational intelligence and counterintelligence during the prosecution of the naval war off the South African coast.

Chapter four has three broad objectives, the first of which is to investigate instances of sabotage and subversion within the naval sphere in South Africa during the war. This will occur predominantly in the context of the initial operational contacts established between the OB and Germany during the first few years of the war. The second aspect involves a critical discussion of the role, functioning and effectiveness of the FELIX Organisation in southern Africa during the war. Here, the particular focus is on the Organisation's contribution to the gathering and distribution of maritime intelligence to Germany. Finally, the purpose, organisation, and success of the CNIC in southern Africa during the war will be examined. Specific emphasis will be placed on the operations of each of its core sections – Tracking, Operational Intelligence, Security, Naval Press Relations and Censorship.

4.1 Sabotage, subversion and the initial South African contacts with Germany

Piet van der Schyff, erstwhile historian and archivist of the OB,³⁹⁷ argues that two pertinent questions arise regarding the OB and its possible contact with Nazi Germany during the war. First, was there definite contact between the OB and Germany during the war? Second, if such contact existed, what was the nature and extent thereof? The

³⁹⁷ For more information on the Ossewabrandwag see Marx, *Oxwagon Sentinel*; Van der Schyff, *Geskiedenis van die Ossewa-Brandwag*.

answer to the first question is straightforward. The OB maintained regular contact with Germany throughout the war, mainly due to its pro-Nazi and anti-British stance. The second question, however, needs further investigation, especially with regard to how it related to the maritime intelligence war waged in southern Africa.³⁹⁸

The first definite contact established between Germany and the OB was through Will and Marietjie Radley. They were a South African couple who was unable to leave Germany after the declaration of war. The Radleys had become involved in the German propaganda machine when they joined the broadcasting corps of Radio Zeesen, which transmitted anti-war propaganda to South Africa.³⁹⁹ In January 1940, Dr Rudolph Karlowa, a senior diplomat at the German Foreign Ministry, summoned the couple. He requested that Marietjie return to South Africa with a message from the German Government to the leader of the official parliamentary opposition in the Union. After careful investigation of the political situation within South Africa, the German Government decided to support Dr D.F. Malan and his National Party. Their decision was a result of the perceived negligible influence of Barry Hertzog and Dr Hans van Rensburg.⁴⁰⁰ The Radleys subsequently agreed to the request, whereafter Marietjie memorised the following message:

Die Duitse Ryksregering sal by voltrekking van vrede met die Unie van Suid-Afrika, sy nasionale gebied erken en waarborg, soos dit bestaan uit die Kaap Provinsie, Oranje Vrystaat, Transvaal en Natal, sowel as [die] drie protektorate, Swaziland, Basutoland en Bechuanaland. Die Duitseryksregering sal [ook] verklaar dat Duitsland nie sal belangstel indien die Unie van Suid-Afrika sy nasionale gebied sal uitbrei tot wat vandag bekend staan as Suid Rhodesië nie. Duitsland oorweeg nie die totstandkoming van 'n aparte staat op Afrikaanse bodem nie, en erken die Unie van Suid-Afrika as die leidende blanke staat in die Suid-Afrikaanse lewensruimte.

The German Government will, upon the declaration of peace with the Union of South Africa, recognise and guarantee its territorial sovereignty, comprising the Cape Province, Orange Free State, Transvaal and Natal, along with the three protectorates of Swaziland, Basutoland and Bechuanaland. The German Government will also have no reservations should the Union of South Africa decide to increase its territory by incorporating Southern Rhodesia. Germany is not considering the establishment of a separate state in Africa, and

³⁹⁸ Van der Schyff, *Die Ossewa-Brandwag en die Tweede Wêreldoorlog*, p. 96.

³⁹⁹ Van der Schyff, *Die Ossewa-Brandwag en die Tweede Wêreldoorlog*, p. 101. For more information on Radio Zeesen and its radio transmissions to South Africa during the war see NWU, RAM Div, OB Archive, Transkripsies/Bandopname. *Dr Eric Holm*. Also see Marx, 'Dear Listeners in South Africa', pp. 148-172. The DOD Archives contains a virtually complete collection of the Zeesen broadcasts, contained in the *Zeesen Broadcasts WW II* archival group (consisting of 15 archival boxes worth of documents, covering the period 1941-1945).

⁴⁰⁰ Van der Schyff, *Die Ossewa-Brandwag en die Tweede Wêreldoorlog*, pp. 101-102.

*recognises the Union of South Africa as the leading white state in the South African sphere of influence.*⁴⁰¹

Marietjie Radley travelled to South Africa during the middle of February. After failing to make contact with Malan, she instead delivered the message to Van Rensburg, the soon-to-be leader of the OB. Van Rensburg promised to pass it onto Malan. The message, however, never reached Malan, and the German Foreign Office subsequently asked Will Radley to deliver a follow-up message to him. If Radley failed to meet with Malan, the message could be passed on to Van Rensburg for later delivery to Malan.⁴⁰² The details of the second message were as follows:

Die Duitse Regering herbevestig sy voorneme en aanbod aan die Suid-Afrikaanse Volk soos vervat in die onderneming wat deur mev. Marie Radley oorgedra is in Januarie 1940.

Indien 'n gewapende opstand teen die oorlogspoging sou ontstaan in Suid-Afrika, en die opstandelinge wapens benodig, kan Duitsland die wat vry geword het nadat die Spaanse Burgeroorlog 'n aantal maande tevore ten einde geloop het, bekom en voorsien. Hoewel nie nuut nie is dit nog goed bruikbaar en dit kan in Noord-Afrika afgelewer word om dan verder self vervoer te word. Van sy eie wapens kon Duitsland egter niks afstaan nie aangesien dit alles tuis benodig word.

Die Duitse Regering sal graag kontak met die opstandsbeweging wil hou, en hulle is welkom om probleme te bespreek.

The German Government reconfirms its intentions and offer to the South African nation that which was contained in the message passed on by Mrs. Marie Radley in January 1940.

In the event of possible armed resistance breaking out against the war effort in South Africa, and if weapons be required for the resistance, Germany is able to obtain and provide weapons used during the Spanish Civil War that has ended some months before. Despite not being new, the weapons are still serviceable and can be delivered to North Africa from where they can then be transported south through own means. Germany is unable to deliver its own weapons as they are needed on the home front.

*The German Government wishes to maintain contact with the resistance movement, and it is welcome to discuss its problems.*⁴⁰³

⁴⁰¹ Radley and Radley, *Twee Poorte*, pp. 28-29.

⁴⁰² Van der Schyff, *Die Ossewa-Brandwag en die Tweede Wêreldoorlog*, p. 102.

⁴⁰³ Radley and Radley, *Twee Poorte*, p. 109.

Will Radley arrived in South Africa on 6 May 1940. With the South African Police (SAP) in hot pursuit, he made for Bloemfontein. Here Radley, like his wife, delivered the message to Van Rensburg with a request that he pass it on to Malan. Radley was, however, arrested and interned. In spite of this, he was released in December after agreeing to distance himself from any subversive activities.

This second message thus initially failed to reach Malan. By December, Radley managed to personally deliver the same message to Malan, who read it but never acted upon it.⁴⁰⁴ As to why Malan never acted on the German offer, Radley has the final word: “[Dit] kon eindelose smart en bloedvergieting tot gevolg gehad het, met baie onsekere kanse op sukses... ek dink nie dat Dr Malan met die boodskap wat ek gebring het enige iets sou kon of sou wou uitrig nie.” [... *It would have caused endless sorrow and bloodshed, with very slim chances of success... I also don't think that Dr Malan could have or would have wanted to do anything with the message that I passed on to him.*]”⁴⁰⁵

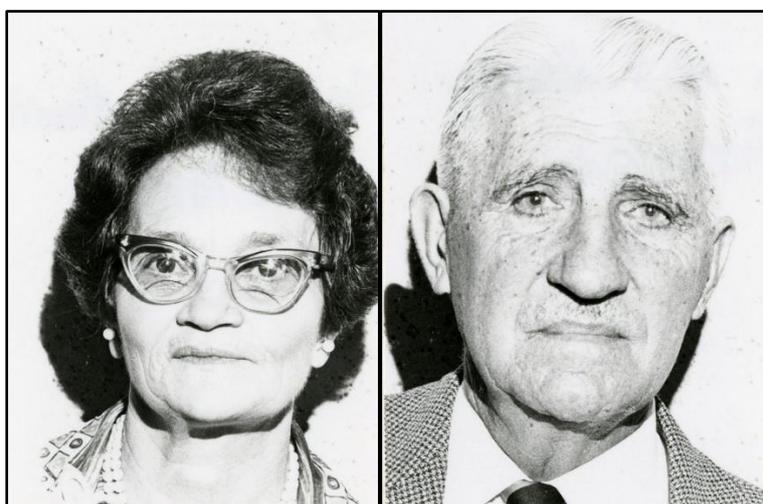


Fig 4.1: Marietjie and Will Radley – couriers between Germany and South Africa⁴⁰⁶

There is some evidence suggesting that a rudimentary German espionage organisation existed in Cape Town, and for that matter, the whole of South Africa, during 1940. Hendrik Hickman, who worked at the Globe Engineering Works in Cape Town harbour at the time, made known that a secret organisation employed him to report on all shipping that passed through the port. A student from the University of Cape Town, one ‘Rehbein’, acted as Hickman’s handler throughout 1940. Hickman was, however, rather uncertain of the command structure of the organisation he worked for.

⁴⁰⁴ Van der Schyff, *Die Ossewa-Brandwag en die Tweede Wêreldoorlog*, p. 103. Incidentally, these two German attempts to contact Malan so early in the war evaded his most recent biographer, Lindie Koorts. See Koorts, *DF Malan and the Rise of Afrikaner Nationalism*.

⁴⁰⁵ Radley and Radley, *Twee Poorte*, p. 110.

⁴⁰⁶ NWU, RAM Div, OB Archive, Photo Collection. F00660_3 – M. Radley; NWU, RAM Div, OB Archive, Photo Collection. F00660_5 – W. Radley.

Of what he was certain, though, was that the organisation comprised of ardent Nazis and national socialists.

Hickman's employment in the port evidently aided his surveillance of Allied shipping. He reported his findings every night via a signal lamp from his home in Somerset West towards the Helderberg. His messages included the names of the individual Allied vessels, their departure time from the port, and in which direction they were travelling. Hickman reported that he had been aboard HMS *Prince of Wales* and HMS *Repulse*. He was furthermore convinced, rather unrealistically, that his reports on these vessels had led to their sinking by the Imperial Japanese Navy (IJN) soon thereafter.

While working at the docks, Hickman also regularly helped to sabotage Allied vessels in the harbour through structural or mechanical damage. In 1941, however, he discontinued his work on the Cape Town docks, as well as ending his covert reporting on shipping. He did so in order to commence his studies at Stellenbosch University, where he became an active member of the OB. Hickman's testimony is, withal, somewhat problematic. He maintained that he worked on the docks and reported on a large number of Allied shipping that was sunk near Cape Point. This, however, could only have occurred during the operations of the Eisbär Group in October 1942 (see Chapter 3, page 110). At that stage he was already a student at Stellenbosch University.⁴⁰⁷

German Intelligence next attempted to establish contact with the South African opposition through Hans Rooseboom. Rooseboom was a German-born South African journalist who, like the Radleys, was unable to exit Germany after the outbreak of the war. In September 1940, the Abwehr – German military intelligence – recruited Rooseboom as an agent. He was ordered to travel to South Africa and report back on the internal political situation in the Union. He was to maintain contact with Germany through a contact in the Netherlands.⁴⁰⁸ Rooseboom's arrival in the Union did not go unnoticed by the British Secret Intelligence Service. The British Secret Intelligence Service – more commonly known as MI6 – followed his movements closely.

The fall of the Netherlands in May 1940 severed Rooseboom's original link with Germany, and he had to re-establish contact with the Abwehr through the German Embassy in Lourenço Marques. Shortly hereafter, the SAP arrested Rooseboom and imprisoned him at Leeuwkop Internment Camp. During his confinement, Rooseboom was able to establish contact with Germany through a smuggled-out message passed on to a stewardess on the Woermann Shipping Line. The message not only reported his capture and subsequent internment, but also communicated shipping movements and

⁴⁰⁷ NWU, RAM Div, OB Archive, Transkripsies/Bandopname. *H.T. Hickman*.

⁴⁰⁸ Van der Schyff, *Die Ossewa-Brandwag en die Tweede Wêreldoorlog*, pp. 103-104. For more on Hans Rooseboom's journey back to South Africa, which unfortunately contains no information about his contact with the Abwehr, see Rooseboom, *Die Oorlog Trap My Vas*.

the so-called unrest at Baviaanspoort.⁴⁰⁹ Two days after delivery of the message to the Abwehr, Radio Zeesen broadcasted the information which Rooseboom had divulged. As a result of this broadcast, the Transvaal leadership of the OB approached Rooseboom with a request to act as their official contact with Germany. Rooseboom agreed to the request, and the OB organised his escape, after which he went into hiding. He subsequently built up a rudimentary intelligence organisation, and sporadically transmitted messages from the OB to Germany.⁴¹⁰

The first particular message which the OB transmitted to Germany through Rooseboom comprised seven specific questions and requests from the South Africans regarding Germany's attitude to the Union. They were:

Sal Duitsland die Unie beset as hy die oorlog wen?

Sal Duitsland skadevergoeding van Suid-Afrika eis?

Sal Duitsland Simonstad opeis, soos die Engelse?

Wat is Duitsland se planne jeens Suidwes Afrika?

Dat Smuts en sy helpers as oorlogmisdadigers verhoor sou word.

Dat die mishandeling van krygsgevangenes in Baviaanspoortkamp volledig ondersoek en die skuldiges gestraf sal word.

Dat, wanneer 'n nuwe regering in die Unie aangewys word, Duitsland voorlopig en na onderlinge oorleg goedkeuring moet verleen aan die nuwe Eerste Minister of President.

Would Germany occupy South Africa if they won the war?

Would Germany claim damages from South Africa?

Would Germany, like Britain, take control of Simon's Town?

What are Germany's plans for South West Africa?

⁴⁰⁹ TNA, KV 2/941, Rooseboom, Hans. 46a – Extract from CSDIC/WEA Final Report on AHLRICHS re ROOSEBOOM, 4 Feb 1946. The unrest at Baviaanspoort, or as some Afrikaans sources state – 'Die slag van Baviaanspoort', originated when the internees refused to surrender one of their own to the camp authorities. After a tense stand-off, the UDF surrounded the camp and forcefully removed the internee they were after. The internees severely criticized the UDF for their forceful approach during the debacle, though they have failed to mention that they themselves were armed and fought back. It was hoped that Rooseboom's message would in some way or other generate support and empathy for the internees at Baviaanspoort.

⁴¹⁰ NWU, RAM Div, OB Archive, Transkripsies/Bandopname. *Hans Rooseboom*.

Smuts and his supporters should be tried as war criminals.

That a full investigation must be launched into the mistreatment of internees at the Baviaanspoort Camp, and the guilty parties must receive the appropriate punishment.

That upon the election of a new Union Government, Germany authorise the appointment of a new South African Prime Minister or President.⁴¹¹

The German response to the foremost OB questions was as follows:

Nee, Duitsland sal nie Suid-Afrika beset nie, maar hulle eis dat 'n goedgesinde Nasionale regering aan bewind sal kom en dat daar behoorlike samewerking moet wees. Alleen as so 'n Nasionale regering dit verlang, sal Duitsland bereid wees om troepe te stuur.

Duitsland sal wel skadevergoeding eis, maar dan as belasting uitsluitend vir alle persone wat nie kan bewys dat hulle 'n nasionale beweging in Suid-Afrika ondersteun het nie, dat hulle teen oorlogsdeelname was.

Nee, Duitsland is bewus daarvan dat dit vir Suid-Afrika 'n pynlike saak is, dat daar 'n vreemde moondheid op hulle grondgebied is. Hulle sal Simonstad ontruim en aan die SA Vloot oorlaat, maar as dit nodig sou word, sou hulle 'n ooreenkoms met Suid-Afrika aangaan om een van die eilande voor die kus as basis uit te bou.

Duitsland eis 'n verklaring waarin Suid-Afrika erken dat Suidwes-Afrika onwettig en onder valse voorwendsels van Duitsland afgeneem is, en dat dit in beginsel aan Duitsland teruggegee word. Onder heersende omstandighede en vanweë baie Afrikaners in die gebied, sou hulle eis dat Duits as 'n landstaal erken word en dat 'n ooreenkoms aangegaan sal word oor watter regte Duitsland en Suid-Afrika daar sou uitoefen.

No, Germany will not occupy South Africa, but they demand that a Nationalist government assume power to ensure good cooperation. Germany will only send troops at the request of the Nationalist government.

Germany will claim war damages in the form of a tax, but only from people who cannot prove that they were part of a nationalist movement in South Africa or against the war in general.

⁴¹¹ Van der Schyff, *Die Ossewa-Brandwag en die Tweede Wêreldoorlog*, pp. 104-105; NWU, RAM Div, OB Archive, Transkripsies/Bandopname. *H. Rooseboom*.

No, Germany is aware that it is a terse point for South Africa that a foreign power has a foothold on its territory. It will evacuate Simon's Town and leave it to the South African Navy, but if necessary, it will come to an agreement with South Africa to establish a base on one of the islands off the South African coast.

Germany demands a statement from South Africa in which it acknowledges that South West Africa was illegally taken from Germany and that it should be returned to Germany in principle. Due to the prevailing conditions, and because of a significant number of Afrikaners in the territory, Germany demands that German be recognised as an official language. Germany also demands an agreement with South Africa regarding who will exercise which powers in the territory.⁴¹²



Fig 4.2: Hans Rooseboom, front row, second from right, while interned at Leeuwkop⁴¹³

Hans Rooseboom, codename PETERS,⁴¹⁴ became the principal link through which the OB maintained regular contact with Germany during the first few years of the war. Initially, coded messages sent to Lourenço Marques appeared as death notices in English newspapers – principally the *Sunday Times*. Once a homemade radio transmitter became operational, Rooseboom ceased to use the English newspapers as a means of covert communication. The mere turn-around time of intelligence passed between the Union and Lourenço Marques via the *Sunday Times* had proved problematic, especially

⁴¹² Van der Schyff, *Die Ossewa-Brandwag en die Tweede Wêreldoorlog*, p. 105. NWU, RAM Div, OB Archive, Transkripsies/Bandopname.

⁴¹³ NWU, RAM Div, OB Archive, Photo Collection. F00005_3 – H. Rooseboom.

⁴¹⁴ Visser, *OB: Traitors or Patriots?*, pp. 88-90. Visser, interestingly, fails to identify PETERS as Rooseboom in the book.

as it was outdated by the time it arrived in Berlin. Some of the information that Van Rensburg and the OB passed on to Rooseboom for transmission to Germany involved the movement of Allied shipping along the South African coast. Van der Schyff writes about this, but does not elaborate on the extent of this information. He merely adds that Van Rensburg never reported on the movement of shipping that carried South African soldiers.⁴¹⁵

The Rooseboom Organisation effectively operated between April 1941 and March 1942, until an apparent dispute between Rooseboom and elements within the OB occurred. The primary cause of this disagreement was that Rooseboom and Van Rensburg had a difference of opinion on the military and political character of news passed on to Lourenço Marques.⁴¹⁶ The arrival of Lothar Sittig, codename FELIX, during 1942, was the second cause underlying the Rooseboom dilemma. This was because Rooseboom was the preferred agent through whom the OB hoped to maintain contact with Germany.⁴¹⁷

By the latter half of 1942, Van Rensburg had tasked one of his most trusted lieutenants, Heimer Anderson, to assume complete control over all OB communications with Germany. Anderson, along with Sittig, did not get on well with Rooseboom, and vehemently distrusted him.⁴¹⁸ Due to this mistrust, Anderson advised Van Rensburg to sever all contact with Rooseboom. Despite several attempts by Rooseboom to contact the OB leadership and plead his case, the OB officially distanced themselves from him. The organisation even contemplated his assassination should he turn state-witness.

Rooseboom went underground for the remainder of the war. For some time after September 1942, he operated a separate radio transmitter with Herbert Wild on a farm between Pretoria and Johannesburg, though the nature and extent of his communications with Germany during this period remain unclear. Rooseboom apparently made a deal with the Smuts Government at the end of the war not to prosecute him, as neither the British or South African security services arrested or interrogated him.⁴¹⁹ The nature and effectiveness of the Rooseboom organisation

⁴¹⁵ Van der Schyff, *Die Ossewa-Brandwag en die Tweede Wêreldoorlog*, p. 105. For more information on the homemade radio transmitter see: NWU, RAM Div, OB Archive, Transkripsies/Bandopname. *J.H. Barnard*.

⁴¹⁶ TNA, KV 2/941, Rooseboom, Hans. 43a – *Copy of Interim Report on MASSER, mentioning ROOSEBOOM, 26 Oct 1945*; TNA, KV 2/941, Rooseboom, Hans. 44a – *Copy of Interim Report on Walter Paul Kraizizek, 31 Oct 1945*.

⁴¹⁷ Visser, *OB: Traitors or Patriots?* p. 90.

⁴¹⁸ For more on Van Rensburg's distrust of Rooseboom and their dispute see NWU, RAM Div, OB Archive, Transkripsies/Bandopname. *J.H. McDonald*; NWU, RAM Div, OB Archive, Transkripsies/Bandopname. *L. Sittig*; NWU, RAM Div, OB Archive, Transkripsies/Bandopname. *H.J.R. Anderson*.

⁴¹⁹ TNA, KV 2/941, Rooseboom, Hans. 11a – *Copy of cable received from Pretoria re ROOSEBOOM, SITTIG and MASSER, 27 Jul 1943*; TNA, KV 2/941, Rooseboom, Hans. 13a – *Extract from BIB report on German Espionage in the Union of South Africa re ROOSEBOOM, 25 Sept 1943*; TNA, KV 2/941, Rooseboom, Hans. 37a – *Copy of information from BJ 135893*.

remain questionable, particularly regarding the naval intelligence war, since MI6 only picked up on his activities in mid-1942.

The formation of the militant Stormjaers movement within the OB during February 1940, thanks to the untiring efforts of Abraham Spies in particular, signalled the beginning of organised sabotage and subversion within South Africa. Spies ordered each of the OB Commandos within the Transvaal and Free State to create a core section of Stormjaers within their ranks. The Stormjaer movement never found favour in the Cape Province, and a so-called 'Wag-afdeling' [guard section] was instead established. The Stormjaers and Wag-afdeling, however, never cooperated, and functioned completely independently of one another.⁴²⁰ A former policeman, George Visser, provided an accurate description of the aim of the movement. He said, "Just as the German Nazi Party had the Schutz Staffel – SS – so had the Ossewabrandwag the Stormjaers ready to storm forward as their militant action front when the time seemed ripe."⁴²¹ Van Rensburg, while acknowledging the existence of the Stormjaers, described them as a parallel movement: "... they were half in and half out of the O.B. Let us call it parallel to and connected with! They numbered some seven or eight battalions, carrying on a semi-independent and hardly peaceful existence."⁴²² Spies is more direct when he states, "The Stormjaers [were] actually organised to be ready to execute a coup d'état in the case of a German victory, or to conduct active resistance against Smuts."⁴²³

The Stormjaers were undeniably involved in acts of sabotage and subversion in South Africa throughout the war. These actions often involved theft, occasional murders, the planting of bombs, the cutting of telegraph wires, and to assist with numerous escape and evasion attempts from internment camps.⁴²⁴ The Stormjaers may have conducted several minor acts of sabotage at South African harbours during the war similar to that which Hickman described. But there was at least one notable incident of attempted sabotage in the naval sphere that could have held serious repercussions for both the Allies and South Africa had it succeeded.

By mid-1942, two members of the Stormjaers, Kokkie van Heerden and Dawid Scribante, travelled to Durban. Their objective was to blow up the Durban Graving Dock. Van Heerden and Scribante conducted active surveillance of the Durban Graving Dock, whereafter they started to stockpile enough dynamite and clocks to enable delayed detonations. At this stage, their target was the *SS Île de France*, a French ocean-liner, which was in the Durban Graving Dock for refit and repairs. The two men managed to get to the wire fence surrounding the Graving Dock, but then realised that the planting

⁴²⁰ Van der Schyff, *Die Ossewa-Brandwag en die Tweede Wêreldoorlog*, pp. 83-87.

⁴²¹ Visser, *OB: Traitors or Patriots?*, p. 29.

⁴²² Van Rensburg, *Their Paths Crossed Mine*, p. 184.

⁴²³ NWU, RAM Div, OB Archive, Transkripsies/Bandopname. A.S. Spies; NWU, RAM Div, OB Archive, Transkripsies/Bandopname. J.H. McDonald. The original Afrikaans text reads: "Die SJ's was eintlik georganiseer... om gereed te wees vir [wanneer] die Duitse oorwinning nou vir ons die geleentheid gee om hier 'n staatsgreep uit te voer of in aktiewe opstand teen Smuts te kom."

⁴²⁴ Van der Schyff, *Die Ossewa-Brandwag en die Tweede Wêreldoorlog*, pp. 93-95.

of the explosives would prove far too dangerous as the approaches were well lit. They did not make another attempt at blowing up the Graving Dock, and subsequently buried the explosives in the backyard of the house of an OB supporter in Durban. While this act of sabotage was unsuccessful, it proves the sheer vulnerability of the South African ports during the war – where OB and Stormjaer men, often working for the Union Government, could pass in and out of sensitive areas of key national importance with the explicit intention of committing acts of sabotage.⁴²⁵

4.2 The Trompke Network, the FELIX Organisation and maritime intelligence

The final, and most enduring contact between the OB and Germany was through a German citizen with the name of Lothar Sittig. Sittig arrived in South Africa well before the war and worked mainly in the agriculture sector in the Cape Province. The Union Government detained him at the Leeuwkop Internment Camp at the outbreak of war. In 1941, however, he escaped with fellow compatriot Nils Pasche.⁴²⁶ After their arrival in Lourenço Marques in June, Sittig made contact with the German Embassy, and came under the influence of the Consul-General Paul Trompke and a Consul on his staff, Luitpold Werz. Werz was in the service of the German Foreign Office, but primarily ran the German espionage ring in southern Africa during the war.⁴²⁷

According to Van der Schyff, the German government was perturbed about the political situation in South Africa, mainly since there was little to no coordination between or action by the anti-war movements. Moreover, previous attempts at establishing a viable link with Afrikaner resistance movements through the Radleys and Rooseboom had proved unsuccessful. Similarly ineffectual were the endeavours made by the German Government through Robey Leibbrandt, who was infiltrated into South Africa during Operation Weissdorn. Leibbrandt in fact only created more problems for the OB, and the National Socialist Rebels – a group that he had formed – played no role in gathering or transmitting naval intelligence.⁴²⁸

It was the arrival of Olaf Andresen in Lourenço Marques in 1941, that did, however, signal the beginning of a change in the relations between the OB and Germany – particularly in the sphere of espionage. The OB had sent Andresen to Lourenço Marques. Andresen was explicitly despatched to deliver a secret report to Trompke, detailing the existence of the militant Stormjaers organisation within the OB. The Stormjaers, according to this report, were capable of conducting various forms of sabotage, and regularly held secret military training exercises. The report further spoke

⁴²⁵ NWU, RAM Div, OB Archive, Transkripsies/Bandopname. *D.J.F. Scirbante*.

⁴²⁶ NWU, RAM Div, OB Archive, Transkripsies/Bandopname. *L. Sittig*.

⁴²⁷ TNA, KV 2/202, Elferink, Lambertus. *152a – Interim Report on WERZ, Luitpold, 31 Oct 1945; Fokkens, 'Afrikaner Unrest within South Africa during the Second World War', p. 140.*

⁴²⁸ TNA, KV 2/925, Leibbrandt, Robey. *67a – From Col. Webster attaching replies to questionnaire, copies of photograph, memorandum re LEIBRANDT's activities, 1 Jun 1942.* For more information on Leibbrandt see Visser, *OB: Traitors or Patriots?*, pp. 54-66; TNA, KV 2/925, Leibbrandt, Robey; TNA, KV 2/924, Leibbrandt, Robey; Strydom, *Vir Volk en Führer*.

of armed rebellion, underground resistance, and a possible coup d'état. It concluded that Van Rensburg – the new leader of the OB – knew about, and was actively involved in, the organisation.⁴²⁹



Fig 4.3: Lothar Sittig, the infamous FELIX, photographed after the war⁴³⁰

Andresen's report signalled a drastic change in the way in which Germany viewed the OB. Germany considered the OB to have transformed from a cultural to a more militant organisation. According to Sittig, this communiqué prompted Werz to communicate with Van Rensburg directly. Werz subsequently sent Sittig to South Africa to establish contact with the leader of the OB. His assignment was comprised of four key aspects. He had to deliver a personal message from the German government to Van Rensburg and establish direct radio contact with Germany. He was also expected to maintain the secret code for, and act as the principal contact with, Van Rensburg, and report on all political and military matters within South Africa.⁴³¹

In January 1942, Sittig crossed the Mozambican border at Komatipoort, but the SAP arrested him once on South African soil. According to Sittig, an unknown source leaked the complete details of his intended border crossing, leading to his subsequent arrest. He remained at the Baviaanspoort Internment Camp until his escape at the beginning of April,⁴³² after which he delivered the intended message to Van Rensburg.

⁴²⁹ NWU, RAM Div, OB Archive, Transkripsies/Bandopname. *L. Sittig*; NWU, RAM Div, OB Archive, L. Sittig Collection. *Kontak tussen die Ossewabrandwag en die Duitse Regering, 1942-1944*.

⁴³⁰ NWU, RAM Div, OB Archive, Photo Collection. *F01069_5 – L. Sittig*.

⁴³¹ NWU, RAM Div, OB Archive, L. Sittig Collection. *Kontak tussen die Ossewabrandwag en die Duitse Regering, 1942-1944*.

⁴³² Van der Schyff, *Die Ossewa-Brandwag en die Tweede Wêreldoorlog*, p. 109

The notice read: “The German Government wishes to once more try and establish direct, and reliable, contact between Germany and the Ossewabrandwag, especially with the view of supplying weapons.”⁴³³

Sittig reported the successful delivery of the message to Van Rensburg with three successive advertisements appearing in the South African newspaper, *The Star*. It was Pasche, another escaped German internee working at the German Consulate in Lourenço Marques, who picked up the three coded advertisements. Pasche, generally considered a close associate of Sittig, detected a message that read, “Judy, dachshund, lost Commissioner Street Johannesburg, reward will be paid. Phone...” He then informed Werz of Sittig’s success.⁴³⁴

The OB, with the help of Reijer Groeneveld, soon manufactured its own radio transmitter, and used it to establish direct contact with Germany in July 1942. Van Rensburg maintained exclusive, personal control over the radio contact with Germany, despite several attempts by factions within the OB to gain insights and control over this communication channel.⁴³⁵ Sittig subsequently transmitted Van Rensburg’s reply to Werz, who passed it on to Berlin. The message stated “Van Rensburg asks for intensification of German propaganda for Ossewabrandwag. Stormjaers very active but decisive action impossible without German assistance. Suggestion that coastal town be bombarded [personal suggestion by Sittig].”⁴³⁶

Initially, there were only one-way transmissions between Sittig and Germany. Berlin was, however, concerned about the code and wavelengths that Sittig used in his transmissions to Berlin. This was because they were the same as those used by Rooseboom, and which were considered compromised. After the split occurred with Rooseboom, Sittig requested a new secret code for wireless transmissions to Germany. Pasche personally delivered this new code to Sittig after Werz instructed him to journey to the Union and assist in the transmission of political and military intelligence. The German Foreign Office once more changed the code, with the new code largely based on Morse code with further derivations in the figure groups. Another German agent, Lambertus Elferink, codename HAMLET, delivered the new code to Van Rensburg. Sittig soon began to use it to transmit to Germany. By August 1943, radio contact between

⁴³³ NWU, RAM Div, OB Archive, L. Sittig Collection. *Kontak tussen die Ossewabrandwag en die Duitse Regering, 1942-1944*. The original Afrikaans text reads: “Die Duitse Regering wil nog eenkeer op die noodsaaklikheid van ’n betroubare, direkte verbinding tussen Duitsland en die Ossewabrandwag verwys met die oog op die lewering van wapens.”

⁴³⁴ NWU, RAM Div, OB Archive, Transkripsies/Bandopname. *L. Sittig*.

⁴³⁵ NWU, RAM Div, OB Archive, Transkripsies/Bandopname. *R. Groeneveld*; NWU, RAM Div, OB Archive, L. Sittig Collection. *Kontak tussen die Ossewabrandwag en die Duitse Regering, 1942-1944*.

⁴³⁶ Van der Schyff, *Die Ossewa-Brandwag en die Tweede Wêreldoorlog*, p. 110.

Sittig and Germany became more regular, and two-way transmissions occurred two to three times per week.⁴³⁷

There are indications that Hans Masser, another escaped German internee, wished to establish a second radio transmitter for sending political and military intelligence to Germany. He would do so through Rooseboom's connection Wild, thereby circumventing the OB and Sittig network completely. Werz, however, did not receive these proposals with enthusiasm, and the scheme never materialised.⁴³⁸ Sittig was convinced that the Allied intelligence services never broke the codes which he and Pasche used throughout the war. The available evidence, however, suggests the contrary, since the Allied intelligence services were well aware of Sittig's existence and transmissions from 1942. The National Archives of the United Kingdom (UK) preserves a number of the decrypted copies of these wireless transmissions, which further reinforces this standpoint.⁴³⁹



Fig 4.4: The radio transmitter built by Reijer Groenewald and operated by FELIX⁴⁴⁰

⁴³⁷ TNA, KV 2/202, Elferink, Lambertus. *152a – Interim Report on WERZ, Luitpold, 31 Oct 1945*; NWU, RAM Div, OB Archive, L. Sittig Collection. *Lyste met kodes, ongedateer*. NWU, RAM Div, OB Archive, L. Sittig Collection. *Kontak tussen die Ossewabrandwag en die Duitse Regering, 1942-1944*.

⁴³⁸ TNA, KV 2/941, Rooseboom, Hans. *44a – Copy of Interim Report on Walter Paul Kraizizek, 31 Oct 1945*.

⁴³⁹ NWU, RAM Div, OB Archive, L. Sittig Collection. *3(a) – N.O. Pasche, 12 Aug 1986*; TNA, KV 2/939, Lothar SITTIG/ Nils PAASCHE. *79a – Copy of First Report on German Espionage in the Union of South Africa, 25 Sept 1943*; TNA, KV 2/939, Lothar SITTIG/ Nils PAASCHE. *121b – Copy of Second Report on German Espionage in the Union of South Africa, 27 Nov 1943*; TNA, KV 2/939, Lothar SITTIG/ Nils PAASCHE. *194a – Extracts from Third Report German Espionage in the Union of South Africa, 25 May 1944*.

⁴⁴⁰ NWU, RAM Div, OB Archive, Photo Collection. *M0011 – Radiosender*.

From the outset, the German Foreign Office requested all possible information on shipping movements in southern Africa. The particular data required included the number of ships coming into port, their names whenever possible, their cargo, tonnage, destination and any other information considered of interest.⁴⁴¹ While the reporting of such information from Lourenço Marques was rather straightforward, Sittig had a more difficult time gathering the required information from the South African ports. One particular challenge was that the location from which he regularly transmitted – close to Vryburg in the former Western Transvaal – was quite a distance from the coast. Sittig could thus not conduct personal surveillance of the ports. Instead, he had to rely on second-hand information gathered by OB sympathisers who worked at the South African ports.

The interrogation of Walter Kraizizek, a known German agent, provide some insight into how Sittig obtained much of his naval intelligence. He states that Van Rensburg informed him that Sittig depended on Department of Railways and Harbours (SAR&H) employees who were OB members. These members were strategically positioned at the Durban and Cape Town Harbours to regularly report on shipping movements. Once Van Rensburg received the relevant shipping information, which was sent north via rail once per week, he passed it on to Sittig for transmission to Germany.⁴⁴² By the time the information had reached Germany too much time had passed, so the reports had little to no operational value. This is an assessment shared by some contemporary historians.⁴⁴³ Moreover, when considering that viable two-way transmissions between Sittig and Berlin only commenced in July 1943, the operational value of the shipping information he passed on is questionable. From August 1943, the *Seekriegsleitung* (SKL) and *Befehlshaber der U-Boote* (BdU) also ceased to regard South African waters as a viable operational area, particularly since it lacked sufficient sinking potential.⁴⁴⁴

By November 1943, Berlin instructed Sittig to exclusively report on political matters within the Union, as they were concerned that his lengthy transmission might lead to his discovery. FELIX, however, chose to ignore Berlin's orders somewhat, and continued to transmit military information to Germany. These reports rarely contained matters of naval intelligence. Instead, they imparted information on the movement of South African troops and armament production in the Union. In one particular instance, they relayed particulars about the monthly consumption of potatoes in 48 South African military camps. In return, Germany regularly transmitted sabotage instructions to Sittig. Throughout the first half of 1944, it continued to emphasise the importance of closer collaboration between Sittig and Van Rensburg. The intelligence passed through to

⁴⁴¹ TNA, KV 2/202, Elferink, Lambertus. 152a – *Interim Report on WERZ, Luitpold, 31 Oct 1945.*

⁴⁴² TNA, KV 2/940 – Kolb, Hubert. 55a – *Interim Report on Walter Paul Kraizizek.*

⁴⁴³ Harrison, 'On Secret Service for the Duce', pp. 1348-1349; Fedorowich, 'German Espionage and British Counter-Intelligence in South Africa', p. 225.

⁴⁴⁴ TNA, KV 2/939, Lothar SITTIG/ Nils PAASCHE. 79a – *Copy of First Report on German Espionage in the Union of South Africa, 25 Sept 1943.*

Berlin by Sittig continued to prove irrelevant until such time that regular transmissions ceased by the middle of 1944. Its insignificance was predominantly a result of the fact that the tide of the war in the Southern Oceans had drastically turned some months before.⁴⁴⁵

In mid-1942 Sittig made a proposal to Berlin. He suggested that he could transmit shipping intelligence obtained from Cape Town and Durban directly to U-boats operational in the Southern Oceans. Berlin was slow to respond, and by January 1943, Sittig once more pointed out the Achilles heel of these naval operations. He stated that the weak point remained the tenuous link between the source of the intelligence, the wireless station and the operational U-boats – hence his suggestion to transmit shipping intelligence directly to the U-boats. By February, Berlin had confirmed that Sittig would receive a special code in a short time, but by April the scheme was turned down after careful examination proved it impractical.⁴⁴⁶

Hugh Trevor-Roper was an officer who worked at the Radio Security Service (RSS) of the SIS during the war. According to the British historian Edward Harrison, Roper concluded that the naval intelligence supplied by the German espionage networks in southern Africa was not valuable enough to assist the U-boats operating in South African waters.⁴⁴⁷ Moreover, Sittig's proposal seems impractical, particularly since the *BdU*, and Dönitz in particular, maintained daily contact with the operational U-boats, and passed on the relevant intelligence reports from the *B-Dienst* when applicable.⁴⁴⁸

Between 1942 and 1943, Sittig made several appeals to Berlin for the transference – by U-boat – of weapons for sabotage, several wireless sets and spare parts, a qualified wireless technician, as well as a large sum of money for sustenance purposes. After delivery, the U-boat would return to Germany with a consignment of diamonds and a representative from the OB to cooperate with the authorities in Berlin, especially with regard to broadcasting propaganda back to the Union. Heimer Anderson was initially earmarked to travel to Germany as the OB representative, largely due to his close personal relationship with Van Rensburg and his involvement in the Sittig transmissions. By September 1943, Sittig had suggested a number of possible points along the South African coastline where the transfer could take place. He somewhat optimistically informed Berlin that the area between Mossel Bay and George was

⁴⁴⁵ TNA, KV 2/939, Lothar SITTIG/Nils PAASCHE. *194a – Extracts from Third Report German Espionage in the Union of South Africa, 25 May 1944.*

⁴⁴⁶ TNA, KV 2/939, Lothar SITTIG/Nils PAASCHE. *79a – Copy of First Report on German Espionage in the Union of South Africa, 25 Sept 1943*; TNA, KV 2/939, Lothar SITTIG/ Nils PAASCHE. *121b – Copy of Second Report on German Espionage in the Union of South Africa, 27 Nov 1943*; Fedorowich, 'German Espionage and British Counter-Intelligence in South Africa', p. 228.

⁴⁴⁷ Harrison, 'British Radio Security and Intelligence, 1939-43', p. 88.

⁴⁴⁸ The B-Dienst was the cryptographic section of the Naval High Command, which helped to monitor Allied radio traffic and hence tried to decipher these messages. See Faulkner, 'The Kriegsmarine, Signals Intelligence and the Development of the B-Dienst', pp. 521-546.

particularly well suited as most of the local inhabitants were OB supporters.⁴⁴⁹ Sittig eventually convinced Berlin that the best location for the landing by a German submarine would be at Cape St Francis. This area is situated near Port Elizabeth, at a spot close to the mouth of the Seekoei River. Despite lengthy transmissions regarding the above, nothing ever came of the scheme, and by the end of 1943, Berlin ceased to regard it as a viable operation.⁴⁵⁰



Fig 4.5: The secret rendezvous location near Cape St Francis⁴⁵¹

Sittig, however, remained somewhat sceptical of the real value of his transmissions to Germany. He was confident that Radio Zeesen utilised the political matters he reported on for propaganda purposes. But he was less confident of the value of the military matters he reported on. This was particularly the case since he was convinced that Adm Wilhelm Canaris buried the Abwehr intelligence reports emanating from southern Africa to such an extent that the *Oberkommando der Wehrmacht* came to distrust the source of intelligence. He did, however, maintain that the value of the military intelligence passed on to Germany by the OB was high. According to Sittig, several members of both the Stormjaers and the OB served in the Union Defence Force (UDF) and SAP and instinctively passed on valuable military intelligence for transmission to Germany.⁴⁵² Van Rensburg, however, prevented the transmission of military intelligence that would directly endanger South African lives, despite several objections to the contrary from within the OB and from Germany. This very matter formed the basis of the disagreement between Van Rensburg and Rooseboom mentioned previously – and the eventual disillusionment of Pasche. According to Sittig, certain OB members continued to hope for direct German military intervention in South

⁴⁴⁹ TNA, KV 2/939, Lothar SITTIG/Nils PAASCHE. 79a – *Copy of First Report on German Espionage in the Union of South Africa, 25 Sept 1943*. For more on the apparent contact between South Africans and U-boats during the war see the highly dubious Mahncke, *U-Boats & Spies in Southern Africa*.

⁴⁵⁰ TNA, KV 2/939, Lothar SITTIG/Nils PAASCHE. 194a – *Extracts from Third Report German Espionage in the Union of South Africa, 25 May 1944*.

⁴⁵¹ Author's personal photo collection.

⁴⁵² Also see Shear, 'Colonel Coetzee's War', pp. 222-248.

Africa. Germany, however, never contemplated this, and Van der Schyff maintains that Van Rensburg would have militantly opposed any such attempt.⁴⁵³

It is incorrectly stated by Van der Schyff that the final contact between the OB and Germany occurred in January 1944 when Groeneveld received a last non-encoded message from Germany. It was only by mid-1944 that Groeneveld received the final message from Berlin, though by this stage of the war the value of Sittig and his political reports had diminished to such an extent that it was of no real use to Germany.⁴⁵⁴ A British Security Service (MI5) officer working on the Sittig case perhaps has the final word on the operational effectiveness of his intelligence reports during the war. He states that:

The most surprising fact with regard to the whole organisation is that ... Sittig and his agents have produced little information of real value. It is almost inconceivable to believe that anywhere else in the world, German agents as well-placed as Sittig and his associates, in close contact with an opposition leader of high standing, would not produce information which would be of vital interest to the Abwehr. Sittig has produced occasional inaccurate shipping information and political gossip which could be culled from the columns of any South African newspaper.⁴⁵⁵

4.3 South Africa, British naval intelligence, and the counterintelligence war

Before the outbreak of the war, the British Naval Intelligence organisation in South Africa consisted of a Staff Officer Intelligence (SO (I)), with a small staff, which operated from the Castle in Cape Town. In February 1939, Maj Charles Ransome RM assumed the position of SO (I) Cape Town. He became responsible for political intelligence, industrial intelligence, and port intelligence. These were acquired by keeping close contact with the UK High Commissioner and the British Trade Commissioner in South Africa, as well as the Intelligence Officers of the Royal Navy (RN) Africa Station based in Simon's Town. Furthermore, the secretary of the SO (I) Cape Town kept a complete record of all naval and merchant shipping movements in South African waters. With the help of his staff, Ransome ensured the extraction of supplemental naval information from the South African press, the Lloyd's Shipping Index, local shipping agents, and from the monthly reports submitted by the Reporting Officers within the Cape Intelligence Area (see Map 4.1 and Fig 4.6).⁴⁵⁶

⁴⁵³ Van der Schyff, *Die Ossewa-Brandwag en die Tweede Wêreldoorlog*, pp. 110-114.

⁴⁵⁴ Van der Schyff, *Die Ossewa-Brandwag en die Tweede Wêreldoorlog*, p. 114.

⁴⁵⁵ TNA, KV3/10. German Espionage in South Africa, 1939-1945. *German intelligence activities in South Africa during the Second World War*.

⁴⁵⁶ TNA, ADM 1/27176. Naval Intelligence Organisation South Africa. *Cape Town Intelligence Centre – Report of Working, 1933*.

By 1938, and owing to the impending global war, the CNIC started plotting the movement of all German, Japanese and Italian merchant vessels in the Southern Oceans, as well as all potential armed merchant cruisers and commerce raiders. The SO (I) Cape Town subsequently reported the movement of each foreign warship to the Admiralty, and when such a vessel left the region, it was reported to the SO (I) into whose area it moved. The SO (I) Cape Town collected all of these reports and then drafted a daily intelligence summary which was forwarded to the Commander-in-Chief (C-in-C) Africa Station for transmission to RN vessels within its area of command. At the time of the Munich Crisis, the C-in-C Africa Station identified six retired RN Officers for service on the staff of the SO(I) Cape Town. After an initial call-up in 1938, Ransome's staff had been placed on a complete war footing by 30 August 1939. It comprised of additional sections, principally concerned with Tracking, Operational Intelligence, Security, Naval Press Relations and Censorship.⁴⁵⁷ To gain a complete understanding of the functioning of the CNIC during the war, each of the above sections will be discussed separately.

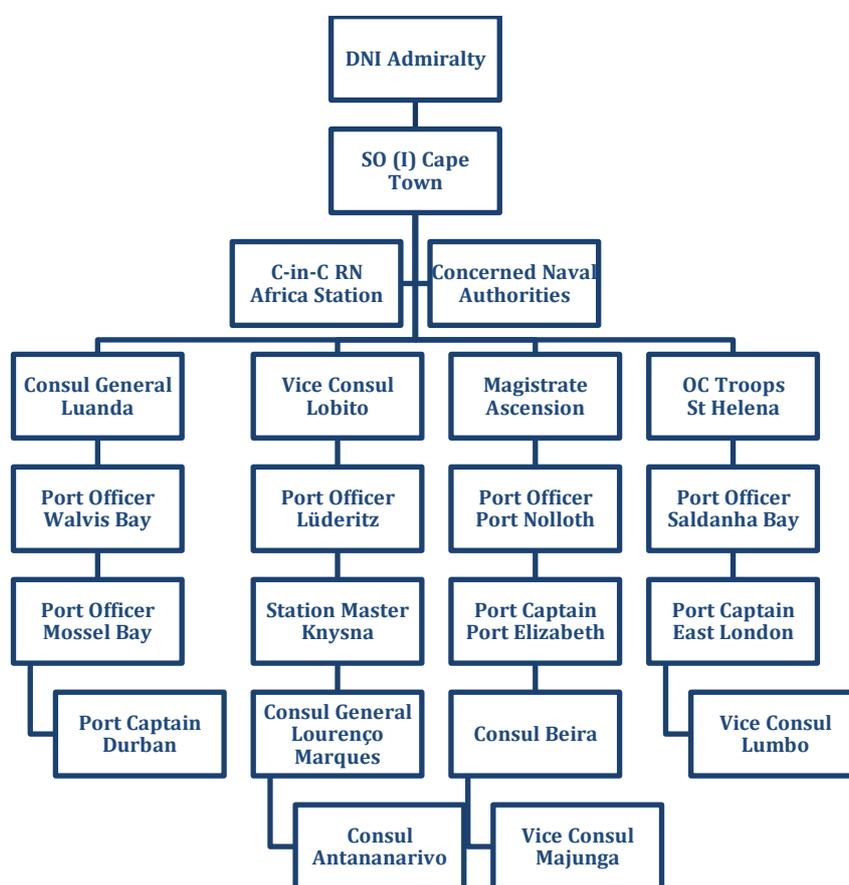
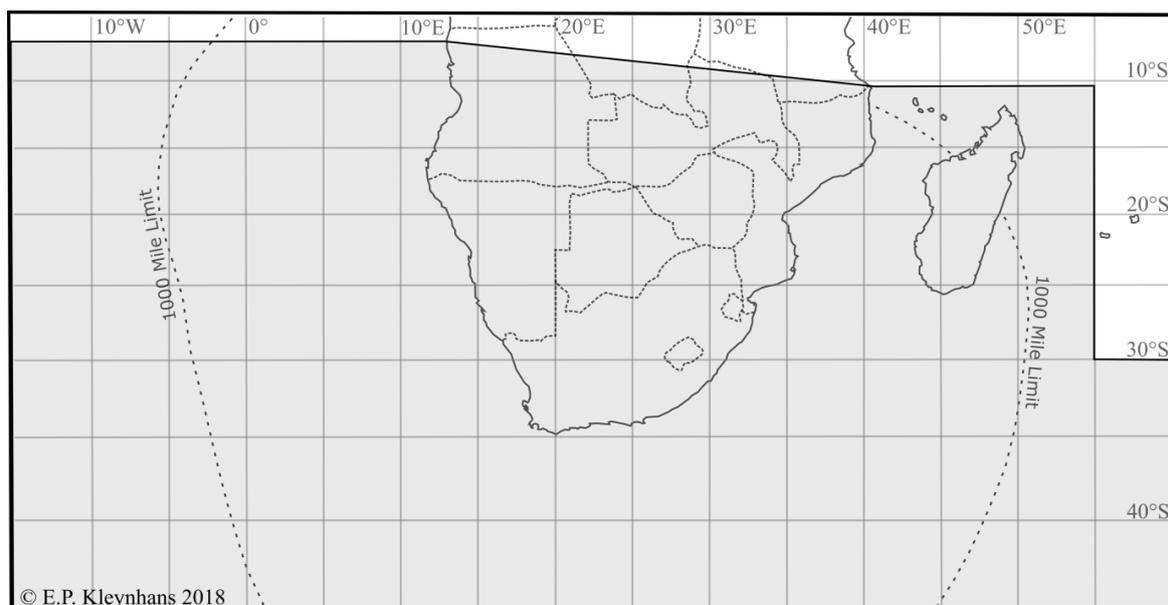


Fig 4.6: Pre-war organisation of the Cape Intelligence Area Reporting Officers⁴⁵⁸

⁴⁵⁷ TNA, ADM 1/31006. History and Organisation of the Naval Intelligence Centre Cape Town. *General Organisation and Expansion from Peace to War Footing.*

⁴⁵⁸ TNA, ADM 1/31006. History and Organisation of the Naval Intelligence Centre Cape Town. *Appendix I.*



Map 4.1: The Cape Intelligence Area, 1939-1942

4.3.1 The Tracking Section

The establishment of a separate Tracking Section in September 1939 allowed for the centralised control over all shipping movements. The Tracking Section maintained a Merchant Shipping Plot, which included up to date data on the last known positions of all merchant vessels in the Cape Intelligence Area. Moreover, the introduction of the VESCA⁴⁵⁹ system allowed for the regular updating of the Merchant Shipping Plot. Ransome received all 'IN' VESCA messages from the designated Reporting Officers within the Cape Intelligence Area, in addition to those from adjacent areas where shipping was known to head for South African waters. The Admiralty, as well as the authorities at the various ports of destination, received all 'OUT' VESCA messages from Ransome in Cape Town. Ransome was also responsible for transmitting all VESCA messages from Lourenço Marques and Beira onwards due to the high cable charges in Portuguese East Africa. Because of the sudden increase in its organisation and operational responsibilities (see Fig 4.7), the CNIC relocated to a new building in Dock Road, near the main entrance to the Cape Town harbour. The new property, known as Seaward House, was also the headquarters of the Seaward Defence Force (SDF). Between November 1939 and October 1940, there were several increases in the staff of the CNIC due to the continuous increment of cypher work.⁴⁶⁰

⁴⁵⁹ After the outbreak of the war in Europe the British Admiralty adopted the Lloyds reporting system, and hence modified it to meet wartime needs and augment it by including reports from routing officers, intelligence centers and additional reporting officers to permit a reasonably accurate plot of all merchant shipping world-wide. This system was called the "VESCA" (Vessel and Cargo) system. See US Navy Department, *History of Convoy and Routing*, p. 63.

⁴⁶⁰ TNA, ADM 1/31006. History and Organisation of the Naval Intelligence Centre Cape Town. *Tracking Section*.

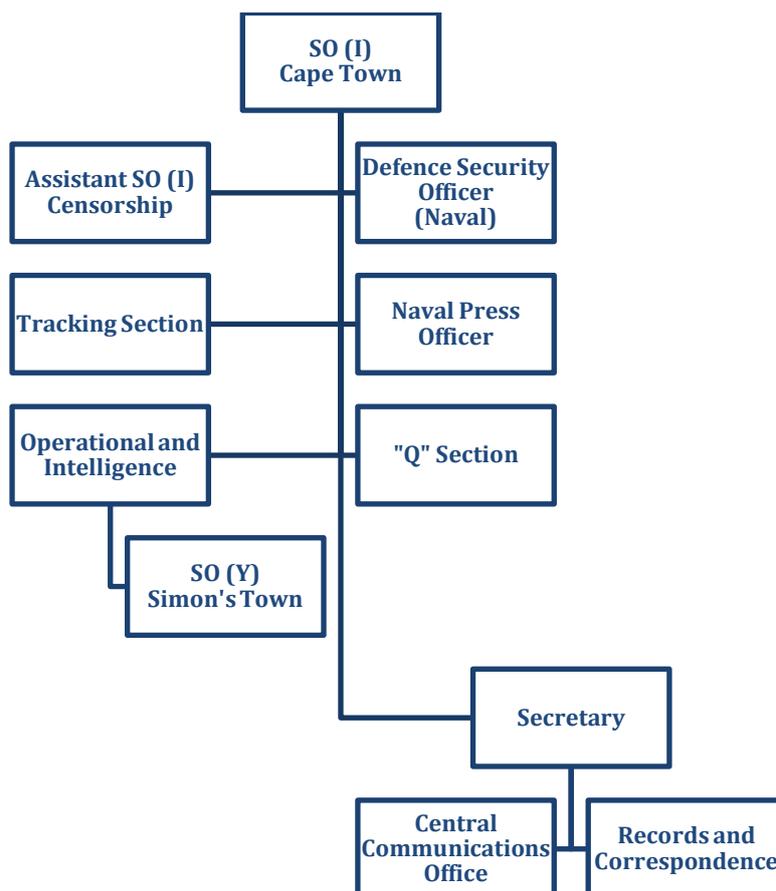


Fig 4.7: Organisation of the Cape Naval Intelligence Centre, 1940-1942⁴⁶¹

Towards the end of 1940, Ransome established a Central Communications Office under his direct control at the CNIC. The Central Communications Office assumed responsibility for the receipt, dispatch and distribution of all signals. These signals were addressed to the SO (I) Cape Town, Naval Liaison Officer, Naval Control Service Officer, the Sea Transport Officer at Cape Town, as well as the Director of the SDF and the RN Authorities in Cape Town and Simon's Town respectively. Additionally, Ransome's Cypher Staff handled all Admiralty general messages, East Indies Station messages, "Q" messages⁴⁶², VESCA signals, routing instructions, disposition signals, enemy reports, all high-grade cyphers and all other coded messages. The Central Communications Office was also responsible for relaying these messages to all other concerned parties within the sphere of the CNIC. As he was based in Cape Town, Ransome personally controlled all VESCA messages originating from Cape Town, and by 1940 introduced a message system known as VELOX. This messaging system allowed for confidential shipping

⁴⁶¹ TNA, ADM 1/31006. History and Organisation of the Naval Intelligence Centre Cape Town. *Appendix III*.

⁴⁶² The "Q" code is a standardised collection of three-letter codes, all of which start with the letter "Q". It is an operating signal initially developed for commercial radiotelegraph communication on the Morse code. Codes in the range QOA-QQZ and QRA-QUZ are reserved for maritime use as well as all services. During the Second World War, German radio teleprinter networks were utilized to establish and maintain circuit connections. Also see Khan, 'Codebreaking in World Wars I and II', pp. 617-639.

information to pass between ports and Reporting Officers in the Cape Intelligence Area (see Fig 4.9). The VELOX telegrams were essentially a coded and re-coded message. It was comprised of the VELOX in plain language; the ship's signal letter along with a dummy letter; the estimated time of arrival, and the time of origin and date in plain language.⁴⁶³

The Central Communications Office, furthermore, oversaw the distribution of shipping information to all Allied vessels in South African harbours as well as those at sea. All Allied merchant shipping within South African harbours received a briefing on relevant shipping information just before their departure. As a result, the Merchant Shipping Plot in each vessel was a direct replica of that kept in Ransome's office. Ransome supplied this information in the form of Cape Area Intelligence Notes and other Intelligence Summaries. These incorporated detailed information on all merchant ships in South African harbours including Lourenço Marques and Beira and all ships travelling between South African ports. Further details encompassed vessels due to arrive at South African ports from adjoining intelligence areas; lists of ships sailing from South African ports after each Allied vessel departed, and ships approaching the Cape Intelligence Area from adjacent areas that the Allied vessels may encounter.

A further system of Daily Encounter signals sent from Simon's Town ensured that all Allied vessels at sea could maintain accurate and up to date shipping plots. These messages, derived according to a system of squares, proved unsatisfactory, and by 1941 a new method of passing information to Allied vessels at sea had come into effect. This system embodied a series of signals for shipping travelling from South African ports, known as AS and ES messages for the South Atlantic Station, FS messages for the Freetown area, and MS messages for the East Indies. The AS signals reported on all northbound shipping in the Atlantic Ocean, while the ES signals reported on all eastbound shipping in the Indian Ocean. The AS and ES signals remained in use until August 1942. After this, the SO Mercantile Movements at Combined Headquarters assumed the responsibility for tracking duties as well as reporting all known shipping movements to Allied vessels for the remainder of the war.⁴⁶⁴

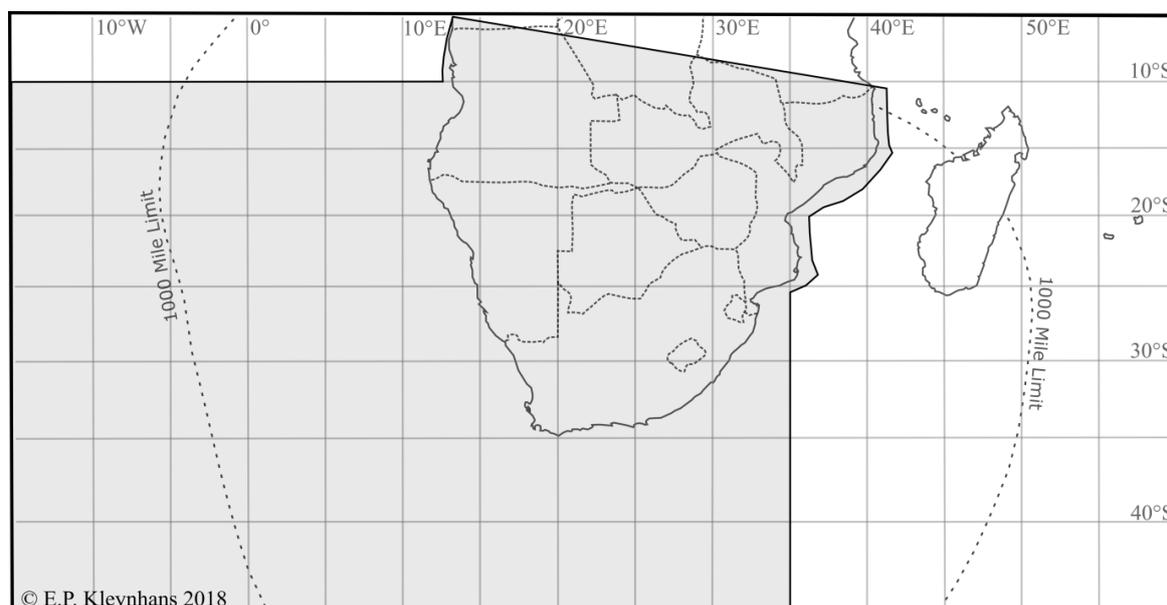
In March 1942, the headquarters of the C-in-C South Atlantic were relocated to Simon's Town. This transfer severely altered the operational boundaries of the Cape Intelligence Area (see Map 4.2). The Eastern Boundary hence extended from the South Pole up to 35°E meridian to the coast of Africa, and from there along the coast to the northern border of Portuguese East Africa. The Western Boundary extended from the South Pole up to the meridians of 26°W and 40°S, and from there along the parallel 10°S to the coast of Africa near the mouth of the Congo River. Though the land boundary in

⁴⁶³ TNA, ADM 1/31006. History and Organisation of the Naval Intelligence Centre Cape Town. *Tracking Section.*

⁴⁶⁴ TNA, ADM 1/31006. History and Organisation of the Naval Intelligence Centre Cape Town. *Tracking Section.*

the north remained undefined, Angola and Portuguese East Africa were considered to form the natural northern boundary.

A Combined Headquarters was established in Cape Town during the month of August 1942 in the Old University buildings in Cape Town. The CNIC also moved from Seaward House to the Combined Headquarters. The Tracking Section was subsequently removed from Ransome. He was thus no longer responsible for collating information regarding the movement of shipping. The Mercantile Movements Section at Combined Headquarters, under the control of an SO from the South Atlantic Station, assumed responsibility for this task. This led to a marked reduction in the staff of the CNIC in 1942 and 1943.⁴⁶⁵



Map 4.2: The Cape Intelligence Area, 1942-1945

The arrival of Lt Cdr J.S. Bennet in Simon's Town in March 1940 marked the beginning of the RN "Y" Organisation in South Africa during the war. The "Y" Organisations in general formed the foundation of all British wartime Signals Intelligence (SIGINT) work. Their explicit focus was on the interception and deciphering of Axis wireless communications.⁴⁶⁶ Bennet was appointed as the SO (Y) on the staff of the C-in-C South Atlantic.⁴⁶⁷ He and his staff immediately established a continuous watch over each wireless transmission passing through the "Y" Station in Simon's Town. They also copied all similar traffic originating from the known South African "Y" Station located at Robert's Heights in Pretoria. The "Y" Station in Pretoria fell under the direct control of Major J. Kreft, the then Deputy Director of Military Intelligence in South

⁴⁶⁵ TNA, ADM 1/31006. History and Organisation of the Naval Intelligence Centre Cape Town. *General Organisation and Expansion from Peace to War Footing*.

⁴⁶⁶ Also see Harrison, 'British Radio Security and Intelligence, 1939-43', pp. 53-93; Rohwer, 'Signal Intelligence and World War II', pp. 939-951.

⁴⁶⁷ N.A. Stott, 'South Africa's secret war' (<http://www.samilitaryhistory.org/vol111ns.html>).

Africa.⁴⁶⁸ After reaching an agreement with the South African Post Office (SAPO), Bennet agreed to the creation of a High-Frequency/Direction Finding (HF/DF)⁴⁶⁹ station near Milnerton in Cape Town. This station became effective on 19 April, and fell under the control of the SAPO. Thereafter a second HF/DF station, along with a “Y” Station, was established in Durban at the end of April. By June 1941, a third HF/DF station had come into operation at Bulawayo in Southern Rhodesia. Shortly hereafter Brig H.J. Lenton, the Union Postmaster-General, approved the transfer of the Milnerton HF/DF Station to Bennet and his “Y” Organisation.

Saboteurs regularly interfered with communications between these stations by simply cutting the trunk lines which connected them to one another. The result was that on several occasions all of the HF/DF Stations in the Union were completely isolated from one another for lengthy periods of time. These interruptions adversely affected all interception work. After wireless sets were installed at the HF/DF stations at Simon’s Town, Durban and Bulawayo, the situation improved somewhat. In the event of further sabotage, a simple slide-rule code, established by Bennet, allowed these stations to communicate intercepted bearings and instructions rapidly to Simon’s Town.⁴⁷⁰

Following the commencement of the Japanese submarine operations in the Mozambique Channel in June 1942, the “Y” Organisation in South Africa was able to help intercept wireless transmissions from IJN vessels. This occurred despite the fact that none of the operators in the Union were being trained in reading Japanese naval codes. After the “Y” operators studied the code, they were able to identify and cover all Japanese transmissions and pass it on to the Government Code and Cypher School (GC&CS) at Bletchley Park for further deciphering. The signals intercepted by the HF/DF stations in the Union (see Map 4.3), could then be used to pinpoint the exact location of the Japanese wireless transmissions. As a result, a constant track of the IJN vessels operational in the Mozambique Channel during 1942 could be maintained. The operators were able to achieve this without relinquishing their normal watch on the German naval frequencies during this period.⁴⁷¹

In May, the Admiralty made a further request. The “Y” Organisations under the overall control of the South African Director of Military Intelligence, Col Ernst

⁴⁶⁸ TNA, WO 208/5111. South Africa General. *Telegram from C-in-Ci Middle East to War Office, 7 Mar 1942.*

⁴⁶⁹ HF/DF is a type of radio direction finder used during the war. HF/DF was primarily employed to catch enemy radios while they transmitted over HF and great distances. Once several bearings were obtained from a number of HF/DF stations, these were laid out on specially prepared charts and intersection lines drawn to indicate the approximate position of the wireless transmission. See Scott, ‘South Africa’s secret war’ (<http://www.samilitaryhistory.org/vol111ns.html>).

⁴⁷⁰ TNA, ADM 1/26888. “Y” Organisation in South Africa. *Report by Staff Officer (Y) on “Y” Organisation, 24 Jun 1943.*

⁴⁷¹ TNA, WO 208/5156. “Y” Committee South Africa. *Memo from Chairman ‘Y’ Board on ‘Y’ Services in South Africa, 3 Oct 1942.*

Malherbe,⁴⁷² should copy all wireless traffic between Lisbon and Lourenço Marques. The same should be done with Vichy French traffic from Madagascar. The information would then be forwarded to the Admiralty at Whitehall. This process was achieved through forwarding a copy of the intercepted messages and bearings to Bennet in Simon's Town from Pretoria by surface mail, as no high-speed receiving gear was available there.⁴⁷³

Following the instalment of a recording apparatus at the Simon's Town "Y" Station, the situation somewhat improved. Poor reception and limited staff, however, affected the amount of traffic handled. The arrival of an assistant SO (Y) by the end of 1941, along with a number of trained RN telegraphists, allowed Bennet to cover his increasing commitments to a larger degree. By June, a further HF/DF station – built and manned by the SAPO – had become operational in Port Elizabeth.⁴⁷⁴

By the end of April 1942, Lenton had appealed to the C-in-C South Atlantic to allow Bennet to inspect his "Y" Organisation, and draw up a report with suggestions for improvements in its operations. The Postmaster-General's "Y" Organisation comprised of a control station at Sunningdale near Johannesburg, and two HF/DF stations located at Bloemfontein and Komatipoort. A number of mobile direction finding units also supplemented the work of these stations. The principal aim of Lenton's "Y" Organisation was to intercept all illegal transmissions within the Union, and to assist in general internal security work.⁴⁷⁵ During Bennet's inspection, he established that these stations had little to no operational success. This was mainly due to a lack of organised search and coordination efforts, as knowledge regarding the highly specialised nature of work was also wanting.⁴⁷⁶ Lenton therefore suggested that his "Y" Organisation revert to being under the control of Bennet in Simon's Town.⁴⁷⁷

An immediate advantage of this new arrangement was that all HF/DF stations in the Union were now concerned with naval interception duties. At the same time, the former SAPO stations could focus purely on commercial interception work when necessitated by the Admiralty.⁴⁷⁸ Moreover, the staff of the SO (Y) Organisation could

⁴⁷² For more on the wartime organisation and functioning of the office of the DMI see Malherbe, *Never a Dull Moment*; Van Deventer, 'Die Ontwikkeling van 'n Militêre Inligtingsvermoë', pp. 86-103.

⁴⁷³ TNA, ADM 1/26888. "Y" Organisation in South Africa. *Memo on Y and RSS in South Africa, 16 Mar 1942*.

⁴⁷⁴ TNA, ADM 1/26888. "Y" Organisation in South Africa. *Report by Staff Officer (Y) on "Y" Organisation, 24 Jun 1943*.

⁴⁷⁵ TNA, ADM 1/26888. "Y" Organisation in South Africa. *Memo on Y and RSS in South Africa, 16 Mar 1942*.

⁴⁷⁶ TNA, ADM 1/26888. "Y" Organisation in South Africa. *Report by Staff Officer (Y) on "Y" Organisation, 24 Jun 1943*.

⁴⁷⁷ TNA, WO 208/5156. "Y" Committee South Africa. *Minute to DMI, 19 Aug 1942*; TNA, WO 208/5156. "Y" Committee South Africa. *Minute from Y Board with enclosed paper on formation of Y Committee in South Africa, 13 Aug 1942*.

⁴⁷⁸ TNA, WO 208/5111. South Africa General. *South Atlantic 'Y' Organisation, 12 Dec 1942*.

now concentrate exclusively on naval “Y” work. The reorganisation took place as follows:

- The control station at Sunningdale closed down, and all equipment and operators moved to Durbanville, near Cape Town, where a new control station was established. This relocation allowed for more effective management of the control station by the SO (Y) and his staff.
- The HF/DF station at Bloemfontein was subsequently connected to the SO “Y” Organisation in Simon’s Town by a trunk line. This allowed for centralised control over its functioning.
- A system of indexing cards, documenting all unknown call-signs and other useful information, was instituted at the Central Post Office in Cape Town. All logs and other matter were forwarded to the SO (Y).⁴⁷⁹

It is of particular interest to note that the Admiralty maintained complete control over the “Y” Organisation in South Africa throughout the war, mainly due to security reasons and distrust of certain elements within the UDF. From the outbreak of the war, Bennet and his staff proved wary of Malherbe’s “Y” Organisation. The principal reason for their suspicion was the fact that the messages that passed through his station at Roberts Heights, were prone to compromise owing to the existence of known subversive elements within the UDF.⁴⁸⁰ Moreover, the existence of two largely similar “Y” Organisations within South Africa, one controlled by the Deputy Director of Military Intelligence in Pretoria and the other by the SO (Y) in Simon’s Town, proved unacceptable, especially from an operational approach. The Admiralty was especially opposed to this state of affairs, particularly due to the duplication of work and constant concerns over security. Consequently, these two organisations never merged during the war, largely due to the continued operational distrust shown by the Admiralty towards the UDF.⁴⁸¹

By August 1942, the “Y” Organisation had undergone further restructuring due to the opening of the Combined Headquarters in Cape Town (see Fig 4.8). The SO (Y) and his staff relocated to the Combined Headquarters. Lenton authorised the instalment of a number of private wires that connected the Cable and Wireless Office, the Durbanville Control Station, the Central Communications Office, the various Operations Rooms at Combined Headquarters, and the private residence of the SO (Y) with one another. In this way, greater cooperation was ensured. Moreover, the “Y” Station at Simon’s Town served as the control station for the entire “Y” Organisation in South

⁴⁷⁹ TNA, WO 208/5111. South Africa General. *South Atlantic ‘Y’ Organisation, 12 Dec 1942.*

⁴⁸⁰ Also see Shear, ‘Colonel Coetzee’s War’, pp. 222-248; Van der Waag, *A Military History of Modern South Africa*, p. 180; Fedorowich, ‘German Espionage and British Counter-Intelligence in South Africa’, p. 229.

⁴⁸¹ TNA, WO 208/5156. “Y” Committee South Africa. *Draft telegram to Chairman ‘YI’ Board from Chairman ‘Y’ Board, 3 Oct 1942*; TNA, WO 208/5156. “Y” Committee South Africa. *Minute from Y Board with enclosed paper on formation of Y Committee in South Africa, 13 Aug 1942*; TNA, WO 208/5156. “Y” Committee South Africa. *Letter from ME to M18, 13 May 1942.*

Africa, with all trunk lines from the HF/DF stations from across the Union terminating there. This office was also equipped with receivers and a wireless transmitter for uninterrupted communication should the trunk lines fail. The office operated around the clock, with all plotting and other “Y” intelligence disseminated from there onwards for operational purposes.

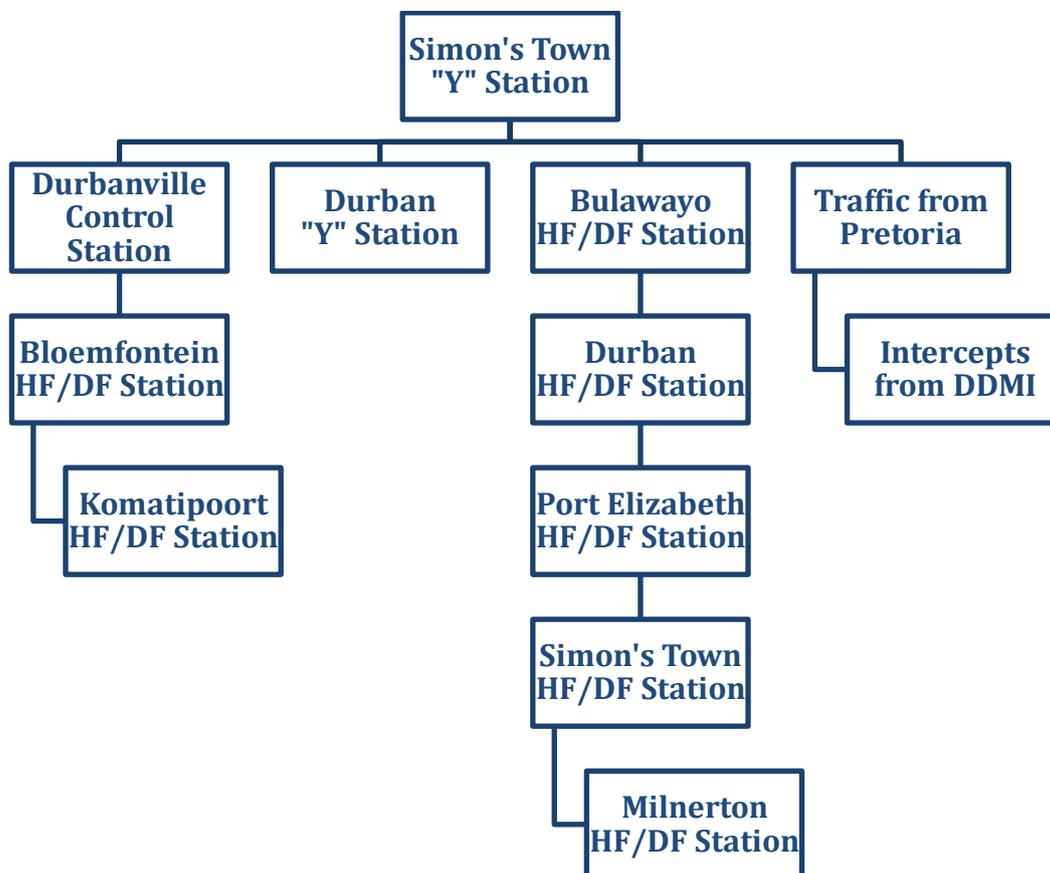
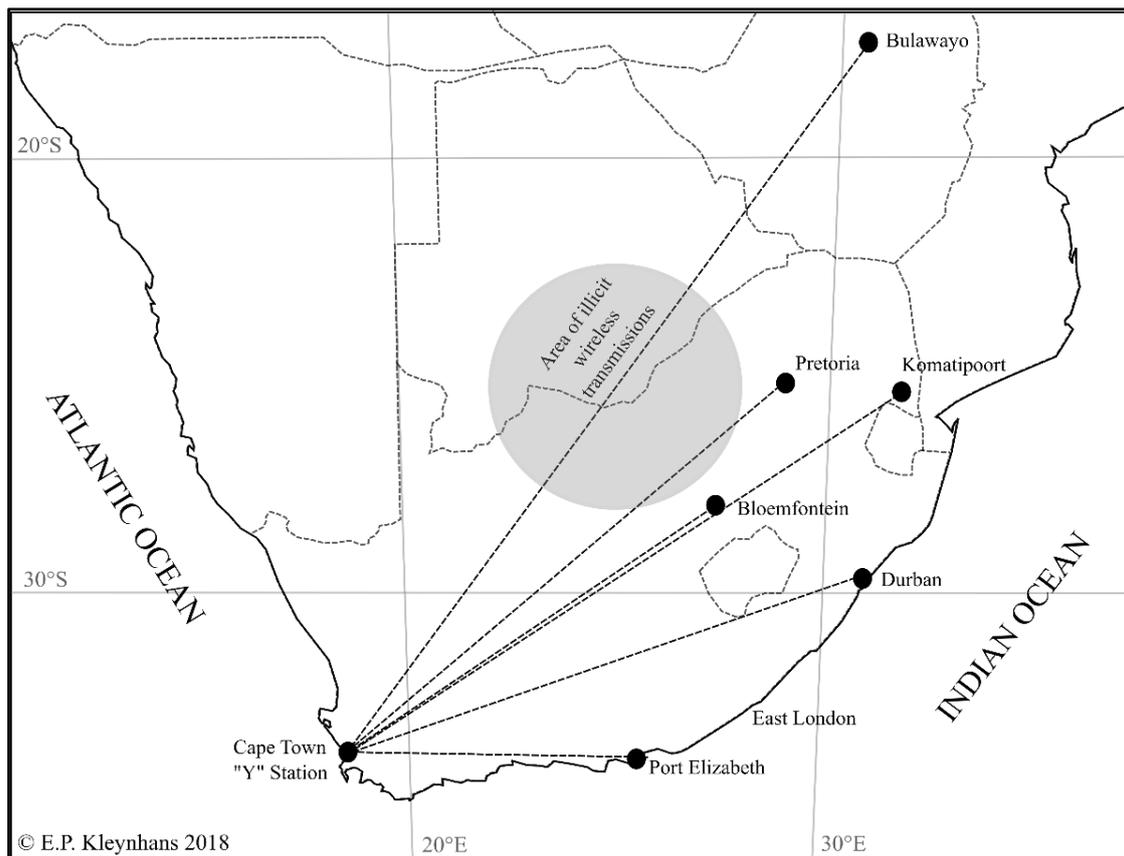


Fig 4.8: The SO “Y” Organisation in South Africa during the war⁴⁸²

During the latter half of 1942, there was a notable growth in the importance of the SO “Y” Organisation in the Union. Its increased significance was a direct consequence of the intensified German U-boat campaign in South African waters. The various HF/DF stations successfully plotted the locations and movements of the German U-boats while they were operating off the South African coast. Following an official visit from Capt H.R. Sandwith RN to the Union in November, and upon his recommendation, the Admiralty expressed their intention of installing new measuring equipment and building of an entirely new HF/DF Station at Durbanville.⁴⁸³

⁴⁸² TNA, WO 208/5111. South Africa General. *South Atlantic 'Y' Organisation, 12 Dec 1942*; TNA, WO 208/5156. “Y” Committee South Africa. *Memo from Chairman 'Y' Board on 'Y' Services in South Africa, 3 Oct 1942*.

⁴⁸³ TNA, WO 208/5111. South Africa General. *South Atlantic 'Y' Organisation, 12 Dec 1942*.



Map 4.3: The local “Y” Organisation and principal HF/DF stations in southern Africa, along with the general centre of illegal transmissions in the Union

The new HF/DF Station at Durbanville opened in March 1943. It proved immensely successful in connection with receiving and intercepting wireless communication, and ensuring improved coordination. The Durbanville “Y” Station especially maintained a continuous watch over all German, Italian, Japanese, French and Portuguese naval frequencies of vessels operational in Southern Oceans. It directed the control station at Durbanville to the frequencies on which such transmissions were heard. This station also recorded all high-speed commercial traffic from Lisbon to Lourenço Marques, as well as traffic intercepted from Rome.⁴⁸⁴ Intercepted traffic of this nature was then cabled to the Director of Naval Intelligence (DNI) at Whitehall and the GC&CS at Bletchley Park for information and operational purposes. The station also maintained constant monitoring over Union transmissions for internal security reasons.

During this period, an enhanced alarm flash circuit was installed at all HF/DF stations, which allowed the control station at Cape Town to communicate with its six substations within ten to fifteen seconds after the fixing of an illicit wireless transmission. As a result, Bennet and his staff were able to obtain accurate bearings of

⁴⁸⁴ TNA, KV3/10. German Espionage in South Africa, 1939-1945. *German intelligence activities in South Africa during the Second World War.*

all Axis naval vessels operating along the South African coast, which greatly assisted in the anti-submarine warfare (ASW) measures and operations in these waters.⁴⁸⁵

In August 1943, Bennet's "Y" Organisation proved instrumental in obtaining a rudimentary plot of the wireless set operated by Sittig. By intersecting the bearings taken by several HF/DF stations in the Union, the plot indicated that Sittig transmitted from a position close to the border with the then Bechuanaland. In order to gain an accurate plot of the Sittig wireless set, a number of mobile DF units searched the area for nine days without locating the transmitter. Their inability to do so was largely due to several technical difficulties encountered with the harsh terrain. The fact that the Vryburg area was known to be a hotbed of OB support was equally problematic.

During this period, Bennet's "Y" Organisation also picked up on the proposed rendezvous between Sittig and a U-Boat near Cape St Francis. By November, Smuts had given his blessing for a renewed drive to make a concerted move against the FELIX transmitter. Lenton and Maj Michael Ryde, the deputy MI5/MI6 representative in the Union, planned the operation in December. Nonetheless, it was temporarily put on hold in January 1944 for a number of political reasons. In February, a renewed operation against the FELIX transmitter was planned between Lenton, Ryde and Bennet, though this plan also never came to fruition. Its failure was partly due to growing British inter-agency rivalries as well as continued concerns over the political loyalties of various Union officials. Instead, Bennet issued a raid of his own near Vryburg, without the consent of Ryde. The raid proved a dismal failure as the FELIX wireless set was not located. The planned swoop was also outside of Bennet's normal operational domain.⁴⁸⁶ During the rest of the war, no concerted move was made against the FELIX Organisation in South Africa, and Sittig managed to successfully evade the security authorities well after the cessation of hostilities in 1945.⁴⁸⁷

4.3.2 The Operational Intelligence Section

By November 1940 the formation of the Enemy Reports Department (ERD) at the CNIC had led to the centralisation of all operational intelligence from SIGINT. This intelligence included information on Allied and neutral warships, merchant shipping and convoys, as well as German, Italian and Japanese surface raiders, warships, submarines and blockade runners in South African waters. The officer in charge of this department was known as the Enemy Reports Officer. This officer concurrently acted as

⁴⁸⁵ TNA, ADM 1/26888. "Y" Organisation in South Africa. *Report by Staff Officer (Y) on "Y" Organisation, 24 Jun 1943.*

⁴⁸⁶ TNA, KV3/10. German Espionage in South Africa, 1939-1945. *German intelligence activities in South Africa during the Second World War*; Furlong, 'Allies at War? Britain and the 'Southern African Front', pp. 23-25.

⁴⁸⁷ NWU, RAM Div, OB Archive, L. Sittig Collection. *Kontak tussen die Ossewabrandwag en die Duitse Regering, 1942-1944.*

the Boarding Officer and the Naval Liaison Officer to all Allied warships calling at Cape Town.

The staff of the ERD kept a constant plot of all Axis and Allied shipping movements in the Cape Intelligence Area, as well as in adjoining areas. The department obtained the required information from HF/DF bearings. These were received from the SO "Y" and his organisation, as well as from enemy reports obtained from RRR, QQQ and SSS messages passed along by Allied merchant shipping. In some instances, the boarding of shipping in Cape Town harbour supplemented these reports.⁴⁸⁸

The staff of the ERD painstakingly sifted through all information received, and regularly published a Cape Area Naval Intelligence Pamphlet. Copies of the pamphlets, commonly known as 'Enemy Reports', were circulated among all Allied vessels which called at Cape Town, Simon's Town, East London, Port Elizabeth, and Durban. These pamphlets contained a wealth of information on the Axis shipping operational in the Cape Intelligence Area. They included possible sketches and photographs of the vessels, along with full particulars of tonnage, fuel capacities, and last known movements. These reports proved extremely valuable for RN and South African Naval Forces (SANF) vessels hunting Axis merchant raiders, submarines, and blockade runners during the war, and also when investigating suspicious vessels at sea.

Following the establishment of close liaison between the Coastal Area Command and CNIC in 1941, regular contact was maintained between the ERD and a South African Air Force (SAAF) Intelligence Officer at headquarters. This led to the establishment of a system of photographing all merchant shipping in South African waters, which helped to identify certain suspicious vessels. The Enemy Reports Officer also proved instrumental in the requisitioning of Vichy shipping at East London and Port Elizabeth during the war.⁴⁸⁹

The ERD carried out the above duties until August 1942, whereafter Ransome and his staff moved to the Combined Headquarters in Cape Town. The Operational Intelligence Department (OID) hence assumed responsibility for all operational intelligence, and worked in close liaison with Bennet and his "Y" Organisation in this regard. Through direction finding bearings, sighting reports, and from sinking reports, these two departments managed to compile fairly accurate tracking charts of all U-boats operational in South African waters.⁴⁹⁰ After the commencement of the sustained German U-boat offensives in October 1942, the OID also helped to interview and

⁴⁸⁸ TNA, ADM 1/31006. History and Organisation of the Naval Intelligence Centre Cape Town. *Operational Intelligence*; TNA, WO 208/5111. South Africa General. *South Atlantic 'Y' Organisation, 12 Dec 1942*.

⁴⁸⁹ TNA, ADM 1/31006. History and Organisation of the Naval Intelligence Centre Cape Town. *General Organisation and Expansion from Peace to War Footing*; TNA, ADM 1/31006. History and Organisation of the Naval Intelligence Centre Cape Town. *Operational Intelligence*.

⁴⁹⁰ TNA, ADM 1/31006. History and Organisation of the Naval Intelligence Centre Cape Town. *Operational Intelligence*.

interrogate the survivors of sunken merchantmen. This work continued unabated until mid-1943, when the German U-boat attacks gradually ceased. As a result, the OID drafted a comprehensive report on U-boat attacks in South African waters for the Admiralty.⁴⁹¹

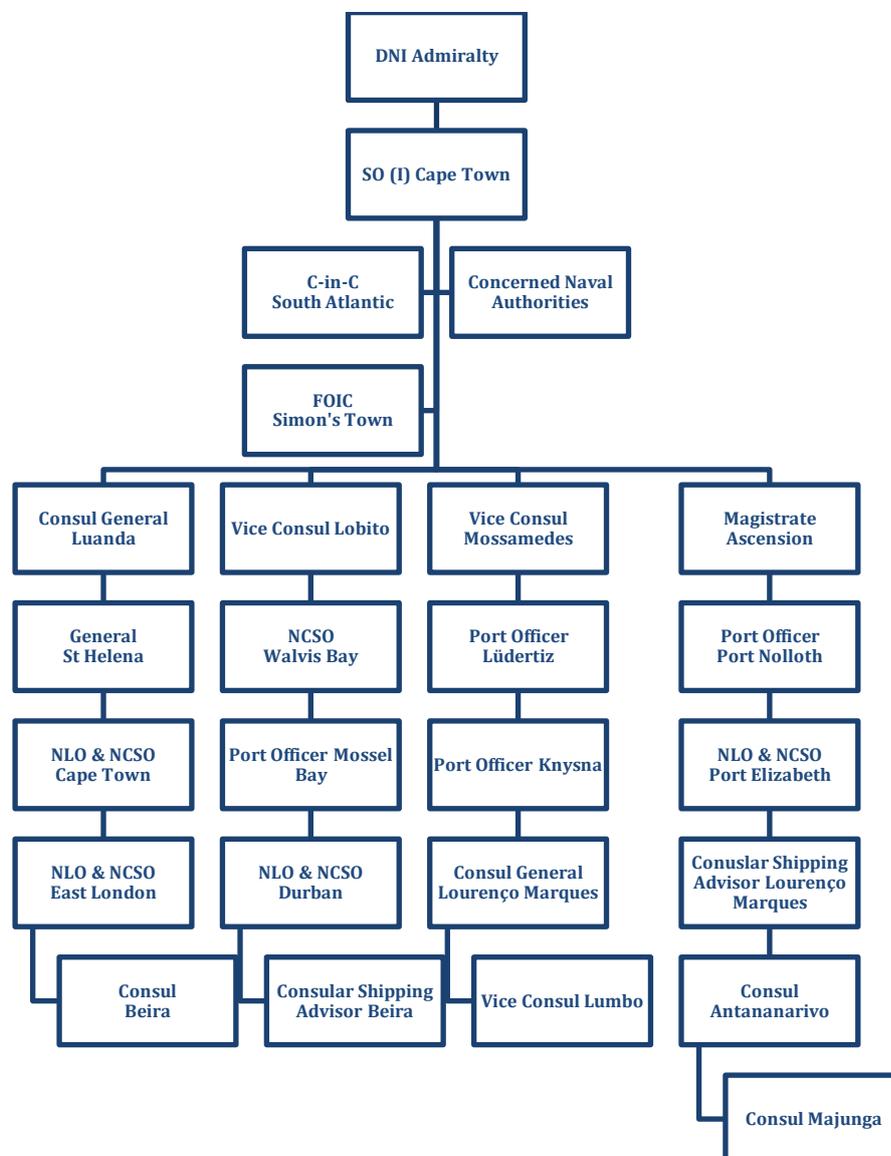


Fig 4.9: Wartime organisation of the Cape Intelligence Area Reporting Officers⁴⁹²

Throughout this period, the OID cooperated closely with the Naval Operations Department and War Room at Combined Headquarters, as well as with the General Officer Commanding (GOC) Coastal Area Command and his Intelligence staff. The result was a comprehensive report on the movements of all Axis naval vessels in the area, which greatly assisted the RN, SDF/SANF, SAAF and Royal Air Force in providing

⁴⁹¹ TNA, ADM 1/31006. History and Organisation of the Naval Intelligence Centre Cape Town. *Operational Intelligence*.

⁴⁹² TNA, ADM 1/31006. History and Organisation of the Naval Intelligence Centre Cape Town. *Appendix II*.

adequate cover for, and routing of, merchant convoys. It also allowed for the launching of combined operations against all Axis naval vessels operational in South African waters.⁴⁹³ By 1944 the OID produced fortnightly intelligence summaries, which detailed all U-boat attacks on merchant shipping in South African waters. These reports included all sightings, counter-attacks by surface units or aircraft, direction finding bearings and all daily dispositions given through by the Admiralty. The ERD and OID rendered sterling service throughout the course of the naval war in the Cape Intelligence Area.⁴⁹⁴

4.3.3 The Security Section

In September 1939, Ransome's staff was increased to include a Defence Security Officer (Naval) (DSO (N)). Initially, the DSO (N) was mainly concerned with the monitoring of known communists while keeping a comprehensive record of suspected enemy agents and subversive elements within South Africa. Shortly after the offices of the SO (I) Cape Town moved to Seaward House, there was a marked increase in naval information passed on to the CNIC from South Africans loyal to the war effort and the Smuts Government. These citizens reported on those parts of South African society who actively worked against the Union's war effort in the naval sphere. Of particular interest were those in the employ of the SAP, the UDF and the broader Public Service.⁴⁹⁵ All Security Officers from naval vessels berthed in Cape Town were required to report to the DSO (N) upon arrival, who conveyed all anti-sabotage information and provided a detailed overview of the current political situation in the Union. The DSO (N) also initiated local deception plans to disguise the future movements of all naval and merchant shipping.⁴⁹⁶

In December 1939, all South African harbours and adjoining dockyards – bar Simon's Town, which fell under British legislation – were declared prohibited areas under Section 85 of the South African Defence Act of 1912.⁴⁹⁷ The legislation furthermore outlined the duties and responsibilities of the various Dock commandants and their staff. The introduction of entry and exit permits to dockyards, as well as the issuing of boarding permits for naval vessels, helped to control the movement of personnel at Union harbours. This system remained in operation until March 1942. After this, the Dock Commandants and SANF agreed to a system of Naval Identity Cards for Officers, and Pay and Identity Books for Naval Ratings wishing to gain access to dockyards and for boarding shipping. Henceforth, boarding permits were required for all civilians wishing to board naval vessels as well. The SAR&H Police also guarded all entrances to the dockyards and scrutinised boarding passes and permits. This system,

⁴⁹³ Kleynhans, 'Good Hunting', pp. 179-183.

⁴⁹⁴ TNA, ADM 1/31006. History and Organisation of the Naval Intelligence Centre Cape Town. *Operational Intelligence*.

⁴⁹⁵ Furlong, 'Allies at War? Britain and the 'Southern African Front', pp. 23-24.

⁴⁹⁶ TNA, ADM 1/31006. History and Organisation of the Naval Intelligence Centre Cape Town. *Security*.

⁴⁹⁷ South African Defence Act (13 of 1912).

however, created a shortage of SAR&H Police for patrols within the inner docks.⁴⁹⁸ The creation of the Essential Service Protection Corps in 1939, largely made up of military veterans, helped to guard key installations both within and outside the docks and other important installations in the Union. Guards were placed on the gangways of all merchant shipping. These guards also mainly consisted of ex-soldiers, who were vetted by both the Criminal Investigation Department of the SAP and the DSO (N) up to 1942, whereafter the Port Security Police took over this responsibility.⁴⁹⁹

By mid-October 1942, Smuts had instructed Defence Headquarters to form a dedicated Port Security Force, upon the recommendation of Col W.H.A. Webster – the former MI5/MI6 representative in the Union. Several representatives of the concerned Departments and Services attended the meeting held in Pretoria during October and discussed all existing protective measures in force at union ports since the outbreak of war.⁵⁰⁰ The meeting agreed that the new GOC Coastal Area Command assume complete control over the field security at each Union harbour. Control over field security would be similar to that which existed in British ports, though amended for South African conditions, and each concerned Department/Service would continue functioning as at present. The main functions of the Field Security Unit would be counterespionage work, the prevention of the leakage of sensitive information, the investigation and prevention of sabotage, and the interrogation of suspects. In addition, a senior Railway Officer, with intimate knowledge of railway and harbour conditions in the Union was appointed. This person formed part of the staff of the GOC Coastal Area Command, and acted as a liaison officer in lieu of harbour defence.⁵⁰¹

The appointment of Directors of Port and Shipping at Cape Town and Durban, and Dock Commandants at East London and Port Elizabeth, occurred at the beginning of November 1942.⁵⁰² The Directors of Port and Shipping also all acted as liaison officers. On 26 November 1942, an Internal Security Meeting of the Cabinet was held in Pretoria. Here, it was decided that the new Port Security Organisation would comprise of committees at each Union port, and would replaced the now defunct Intelligence Records Bureau. These committees would consist of representatives from Naval Intelligence, Military Intelligence, Naval Censorship, Essential Service Protection Corps, Dock Commandants, Railway Police, SAP and officials from Customs and Immigration. Later on, representatives from the Ministry of War Transport (MWT) and War Shipping

⁴⁹⁸ TNA, ADM 1/31006. History and Organisation of the Naval Intelligence Centre Cape Town. *Security*.

⁴⁹⁹ Fokkens, *The Role and Application of the Union Defence Force*, p. 116; Fokkens, 'Afrikaner Unrest within South Africa during the Second World War', pp. 134-135.

⁵⁰⁰ DOD Archives, CGS War, Box 38, File: Port and Dock Security Measures. *Memorandum of Meeting held at DHQ re Docks Field Security, 15 Oct 1942*; DOD Archives, CGS War, Box 38, File: Port and Dock Security Measures. *Extract from Col Webster's report on security at the Port of Cape Town, undated (probably Jun 1940)*.

⁵⁰¹ DOD Archives, CGS War, Box 38, File: Port and Dock Security Measures. *Notes of meeting held at DHQ in connection with the proposed formation of a Port Security Unit, 15 Oct 1942*.

⁵⁰² DOD Archives, UWH Civil, Box 24, File: SA Railways and Harbours Departmental Civil War History Vol VIII. *Ports & Shipping*.

Administration, as well as the US Naval Attaché, sat in on these meetings. The objectives of these committees were to discuss all problems relating to the security of ports and shipping and to establish collective measures which would improve the security at each port. They would also to keep the GOC Coastal Area Command informed of all matters which affected port security. This would be executed through the respective Fortress Commanders. To its credit, the Port Security Organisation functioned successfully from the time of its formation until the end of the Second World War.⁵⁰³



Fig 4.10: A guard aboard a merchant ship at a South African harbour during the war⁵⁰⁴

During the war, cases of sabotage and suspected sabotage in the naval sphere were dealt with in two distinct ways. First, a special committee convened by each harbour's administration, handled sabotage cases involving docked merchant shipping. Second, sabotage cases detailed by vessels at sea were the concern of the MWT or the naval authorities at the port where first reported. In each case, however, the DSO (N) forwarded any reports of sabotage to the Admiralty for information. After January 1944, all sabotage accounts were also forwarded to the Director-General of MI5 for information. Following the commencement of the German submarine operations in South African waters in October 1942, the DSO (N) toured the entire coastal area. He

⁵⁰³ DOD Archives, CGS War, Box 38, File: Port and Dock Security Measures. *Memorandum of Meeting held at DHW re Docks Field Security, 15 Oct 1942*; TNA, ADM 1/31006. History and Organisation of the Naval Intelligence Centre Cape Town. *Security*.

⁵⁰⁴ South African National Museum of Military History, Masondo Reference Library. *SA Navy Photo Collection, S.A. 1657*.

delivered lectures on U-boat recognition to the Coast Watchers organisation and local fishermen. The DSO (N) also issued instructions in the *Africa Pilot* to merchant seamen on how to approach the South African coast in open boats in the case of an emergency, and what procedures to follow once making landfall.⁵⁰⁵

4.3.4 The Naval Press Relations Section

Before the war, the officer on the staff of the SO (I) Cape Town responsible for Press Censorship, Press Relations, and Naval Publicity, was closely connected with publicity matters. This person therefore had a knack for dealing with the South African press. The Naval Press Officer (NPO) had two responsibilities. Firstly, he had to censor all naval material and information made available to the media. Secondly, he had to arrange facilities for the media to procure naval information made available for publication. This was, however, only possible through the development of good personal relations with the editors and members of the South African Press Corps, broadcast personnel, film production managers, authors, and all relevant Union Government Departments. Moreover, the Naval Press Office of the CNIC had to carry out all of the duties normally performed by the Naval Information Division of the Admiralty. In addition, the NPO was responsible for the duties of the Naval Advisory Staff of the Ministry of Information in the UK.

From April 1940, Port NPOs assumed similar duties at Durban, East London and Port Elizabeth, and were responsible for all local press and related liaison duties. By March 1942, the appointment of an Assistant NPO at Cape Town greatly improved the day-to-day operation of the Naval Press Office. The Assistant NPO was a former editor at a prominent South African newspaper. The post was, however, abolished by November 1943, only to be reinstated in April 1945. It is worthy to note that the Naval Press Office and its sub-offices in South Africa, along with all matters connected with naval publicity, developed without any direct assistance from the Admiralty. Only after the NPO had visited London in December 1944 for training purposes, did the Admiralty regularly supply the Naval Press Office with suitable material. An assortment of books, articles and photos were hence distributed among Allied sailors.⁵⁰⁶

The NPO also had the responsibility of arranging Press visits to Allied naval vessels that called at South African ports, and in some cases, arranged special trips to sea for the South African reporters. This organisation showed no discrimination in this regard, and despite different political outlooks, even extended invites to reporters from Afrikaans newspapers which were conspicuously opposed to both the Smuts Government and the war. A number of carefully censored articles thus appeared in

⁵⁰⁵ TNA, ADM 1/31006. History and Organisation of the Naval Intelligence Centre Cape Town. *Security*.

⁵⁰⁶ TNA, ADM 1/31006. History and Organisation of the Naval Intelligence Centre Cape Town. *Naval Press Relations*.

English and Afrikaans newspapers, primarily due to a good working relationship established by the NPO with both the RN and the SANF.



Fig 4.11: A journalist aboard a visiting Allied naval vessel during the war⁵⁰⁷

The photography of dock areas was similarly controlled by the NPO. The Naval Press Office applied certain statutory powers contained under Local Emergency War regulations to enforce compliance. Photography in dock areas, for instance, was only authorised when an officer of the Naval Press Office escorted the photographer. Needless to say, this responsibility placed an immense strain on the office of the NPO. The NPO also carried out all Press relation and censorship duties for the SANF upon a direct request from the Director of the SANF. The NPO furthermore had to maintain close liaison with the Navy League of South Africa, the Navy War Fund Committees as well as other maritime inclined bodies in the Union. The Naval Press Office further helped to organise the naval section of the Victory Cavalcade staged in Cape Town in April 1944, as well as the Navy Week held during the same year. Both the former and the latter exhibited the work of the RN, Fleet Air Arm and the SANF to the South African public.⁵⁰⁸

The basis of press control during the war, especially with regard to publishing the movements of shipping, was the statutory prohibition contained under Section 91(1) of the Defence Act of 1912. It read "... no information with respect to the movements or dispositions of the Union Defence Forces or other of His Majesty's Forces,

⁵⁰⁷ South African National Museum of Military History, Masondo Reference Library. *SA Navy Photo Collection, S.A. 1231.*

⁵⁰⁸ TNA, ADM 1/31006. History and Organisation of the Naval Intelligence Centre Cape Town. *Naval Press Relations.*

or of His Majesty's ships shall be published in any newspaper, magazine, book, pamphlets or by any other means..."⁵⁰⁹ Despite this legislation, there was no effective machinery to deal with or control the publication of information dealing with merchant shipping. The signing of the Voluntary Censorship Agreement took place in June 1940. This occurred as a result of negotiations carried out with the press by the South African Bureau of Information. The Agreement formalised control over the press and prohibited the publication of any news of a maritime nature without prior reference to the NPO.⁵¹⁰ In return, news of a maritime nature was provided to the press by the NPO whenever possible. Despite the Voluntary Censorship Agreement being nothing more than a gentleman's agreement, all parties, including the anti-war newspapers, honoured the agreement throughout the war. The Union Government thus never enforced compulsory naval censorship during the war. This was largely the result of the good personal relationship between the various newspaper editors and the Naval Press Office.⁵¹¹



Fig 4.12: Allied wartime propaganda posters aimed at preventing careless talk about shipping⁵¹²

As a result of the increased losses of merchant ships in South African waters, the Naval Press Office initiated a 'Don't Talk Campaign' in 1942. The campaign was carried out in an endeavour to prevent careless talk about naval and shipping matters (see Fig 4.12). The danger that careless talk held for the safety of Allied shipping was accentuated by anti-British elements active in South Africa, as well as the Trompke

⁵⁰⁹ South African Defence Act (13 of 1912).

⁵¹⁰ Monama, *Wartime Propaganda in the Union of South Africa*, pp. 70, 92.

⁵¹¹ TNA, ADM 1/31006. History and Organisation of the Naval Intelligence Centre Cape Town. *Naval Press Relations*.

⁵¹² <http://collections.vam.ac.uk/item/O122410/loose-talk-can-cost-lives-poster-dohanos-stevan/>; <http://time.com/4591841/loose-lips-sink-ships-posters/> (Accessed on 8 June 2018).

Network known to operate out of Lourenço Marques.⁵¹³ The NPO started the 'Don't Talk Campaign' in all earnest in February, with the explicit object of stopping loose talk on shipping matters. The campaign ran throughout the Union, and became commonly known as the 'Don't Talk about Ships or Shipping' campaign. The NPO employed a variety of means to convey its message, including posters, notices in trains and buses, articles and advertisements in the press, radio broadcasts and films, to name a few. The South African Bureau of Information provided the necessary funding, and a large segment of the South African public supported the campaign during the war.⁵¹⁴

4.3.5 The Naval Censorship Section

After the establishment of the Union Censorship Office in November 1939, an officer on Ransome's staff was appointed as the full-time Naval Censorship Representative (NCR) in the office of the Chief Censor. Because the office of the Chief Censor, Brig H.J. Lenton – the Union Postmaster General – was located in Cape Town, it allowed for closer cooperation with the CNIC. The Cape Intelligence Centre received censorship reports on a daily basis, which were subsequently scrutinised by the NCR.⁵¹⁵ The NCR reported on any naval interest, and then passed on the information by signal or letter to other interested authorities. The CNIC also gave constant guidance to Shipping Agents regarding general censorship requirements by the regular issuing of a Cape Area Naval Intelligence Pamphlet, titled 'Communication between Shipping Agents'. This system continued until 1943, when it was replaced by two separate pamphlets issued by the MWT representative in Cape Town. They were the 'Oversea Communications' and 'Internal Communications' Cape Area Naval Intelligence Pamphlets. The MWT Representative scrutinised and considered all censorship reports, and closely cooperated with the CNIC about censorship matters. The MWT Representative dealt with internal matters that involved cases where Shipping and Clearing Agents passed along information involving vessels improperly, while Maj F.M. Bramall RM, the new SO (I) Cape Town since March 1943, dealt with all matters regarding oversea communications.⁵¹⁶

The NCR assisted the Allied and South African naval authorities in enforcing the naval censorship where breaches of the censorship rules occurred. The major scapegoats in this regard were ships' personnel and troops calling at South African ports in troop transports which breached censorship rules through the posting of letters while ashore.⁵¹⁷ The NCR hence delayed the posting of these letters by 14 days and sent a stereotyped letter to the Master/Captain of the vessel informing him of the

⁵¹³ Monama, *Wartime Propaganda in the Union of South Africa*, p. 92.

⁵¹⁴ TNA, ADM 1/31006. History and Organisation of the Naval Intelligence Centre Cape Town. *Naval Press Relations*.

⁵¹⁵ Monama, 'South African Propaganda Agencies', p. 151.

⁵¹⁶ TNA, ADM 1/31006. History and Organisation of the Naval Intelligence Centre Cape Town. *Naval Censorship*.

⁵¹⁷ Monama, *Wartime Propaganda in the Union of South Africa*, pp. 69-70.

breach of censorship for further action. More serious cases where codes were arranged to communicate future shipping movements were forwarded to the MWT Representative in Cape Town, or to the appropriate authorities at the next port of call, for the required disciplinary action.

Throughout the war, there was good cooperation between the NCR and the Union Censorship Office. The NCR was furthermore responsible for preparing all Port Intelligence Reports during the war. He was also accountable for other special operational intelligence reports, such as the interception of Vichy shipping and the Madagascar campaign, and circulating these reports within the Cape Intelligence Area.⁵¹⁸

Conclusion

The Axis influence on the maritime intelligence war in southern Africa proved negligible from the start. The initial contacts established between Germany and the OB were found to be haphazard, especially since the Germans desired to establish contact with Malan rather than with Van Rensburg. In addition, these contacts had no immediate bearing on the maritime war in South African waters.

The arrival of Rooseboom and Sittig in South Africa had a marked influence, as both agents at various stages passed along shipping intelligence to Berlin via the Trompke Network in Lourenço Marques. Once Sittig established direct contact with Berlin, he was able to transmit both political and military intelligence without interference by Werz. The operational value of the military intelligence passed along by Sittig to Berlin was, however, extremely questionable, especially since the shipping intelligence was substantially outdated by the time it was transmitted to Germany. Besides, two-way transmissions between Sittig and Berlin were only established in July 1943, which was shortly before the *SKL* and *BdU* ceased to consider South African waters as a viable operational area. The shipping intelligence passed on to Berlin by the *FELIX* Organisation after July 1943 thus held no direct operational value to Dönitz and his U-boat Commanders for the rest of the war.

The CNIC, under the control of the SO (I) Cape Town, was the main role player in the Allied maritime intelligence war fought in southern Africa between 1939 and 1945. The CNIC formed a vital link in the overall Allied maritime intelligence organisation during the war by presiding over both operational intelligence and counterintelligence in the Cape Intelligence Area. The various sub-departments of the SO (I) Cape Town, namely Tracking, Operational Intelligence, Security, and Naval Press Relations and Censorship, worked in unison during the pursuit of the naval war. The “Y” Organisation in South Africa in particular, proved indispensable in detecting the locations of all Axis

⁵¹⁸ TNA, ADM 1/31006. History and Organisation of the Naval Intelligence Centre Cape Town. *Naval Censorship*.

naval vessels in South Africa during the war, while also listening in on the illicit wireless transmissions in the Union and Mozambique.

Measuring the true operational value of the CNIC during the war forms the focus of the final chapter of this dissertation. Ascertaining its worth, however, is only possible by investigating the nature, extent and successes of the ASW operations in South African waters during this period. These aspects are thus discussed in chapter 5.

Chapter 5

The anti-submarine war off Southern Africa, 1942-1944

Introduction

It was the commencement of the first sustained German U-boat operation in October 1942 that awakened the need for dedicated anti-submarine warfare (ASW) measures in South African waters. Before this, the full effect of the naval war was rather distant. The unreality of war resulted in an undeniable indifference regarding the adoption of ASW measures.

The resultant U-boat offensives off the southern African coast between October 1942 and August 1943, compelled the South African and British naval authorities to adopt a series of ASW measures. These steps were aimed at reducing the number of merchant sinkings in the waters off South Africa. The ASW measures implemented after October 1942 resulted in a notable decrease in the number of merchants sunk along the South African coast from 1943 onwards. Moreover, three German U-boats were sunk between 1942 and 1944. These sinkings provided another tangible measure of the success of the ASW measures in place along the South African coast from October 1942.

The two objectives of this final chapter are wide ranging. In the first place, the evolution of the ASW in South African waters is scrutinised. This is done through the comparison of the ASW measures in place before the commencement of the main U-boat offensive in October 1942, with those prevalent during 1944 when the U-boat offensives in said waters ceased all-together. Secondly, the effectiveness of the ASW measures off the South African coast will be evaluated. Apart from the obvious diminishing merchant losses, the sinkings of the three German submarines in 1942 (*U-179*), 1943 (*U-197*) and 1944 (*UIT-22*) will be discussed. These U-boats were arguably sunk at the beginning, the height, and at the end of the German submarine offensives in South African waters. They thus reflect positively on the improvements made apropos ASW in these waters throughout the period concerned.

5.1 Lacklustre attitudes, the start of the U-boat offensives, and a chance sinking

The Eisbär group commenced their attack on the shipping off Cape Town on 7 October 1942. Among them were *U-68* (Merten), *U-172* (Emmermann), *U-504* (Poske) and *U-159* (Witte). Before launching the submarine offensive, the *B-Dienst* estimated Cape Town harbour to contain up to 50 anchored ships at any given time. Furthermore, the *Befehlshaber der U-Boote* (*BdU*) believed that a surprise attack by the Eisbär boats on shipping in the Cape Town harbour could achieve significant sinking results, owing to the element of surprise. Surprisingly, both the U-boat commanders and the *BdU* were of the opinion that the South African defences were unprepared for a sudden onslaught on

merchant shipping in the waters off Cape Town. This was most likely because it seemed to them that neither their wireless transmissions nor their presence was detected while travelling south.⁵¹⁹

In the days preceding the launching of the surprise attacks, *U-68* and *U-172* conducted several brazen reconnaissance sorties into Table Bay and the approaches to Cape Town harbour. During these forays, the two U-boat commanders were soon able to gauge both the extent and the state of readiness of the South African coastal defences.⁵²⁰ Carl Emmermann's account of the evident unpreparedness off Cape Town is enlightening:

The picture which the town and harbour presented was so beautiful and so peaceful that we stayed a few hours on the surface and called up the crew one by one to the bridge to enjoy the sight. Cape Town at that moment was busy with an air-raid exercise. There were a few target planes circling above the brilliantly illuminated city, and the long groping fingers of the searchlights tried to catch them in their beams. The picture reminded us of the scenes in our German towns at the beginning of the war: everything indicated that here people felt they were remote from hostilities ... Brilliant sunshine on the roadstead, the sea as smooth as a mirror, only a strong swell making it difficult to keep the U-boat at a steady depth. We were only a few hundred metres from the main shipping channel, ships were passing close by and quite unaware of the nearness of the enemy. Quite undisturbed, we were able to take bearings of the entrance and exit channels and study the harbour installations.⁵²¹

Unbeknown to the *BdU*, *U-172* launched surprise attacks on two unsuspecting merchantmen on the morning of 7 October. These strikes resulted in the sinking of the *Chikasaw City* (6,196 tons) and the *Firethorn* (4,700 tons). The sinkings, however, went unnoticed, as neither the *Chikasaw City* nor *Firethorn* managed to transmit distress signals prior to their sinkings. The Combined Headquarters in Cape Town were only informed of these sinkings after their survivors were picked up the following afternoon and evening.⁵²² For the remainder of the day, the U-boats refrained from attacking any more merchants. After receiving the order to attack that night, the U-boats managed to

⁵¹⁹ DOD Archives, UWH Civil, Box 341, File: U-boat material. *Extracts from war diary U-159 (Helmut Witte), 24 Aug 1942 – 5 Jan 1943*; DOD Archives, UWH Civil, Box 341, File: U-boat material. *Comments on war diary U 159 (Helmut Witte)*; DOD Archives, UWH Civil, Box 341, File: U-boat material. *Report on my experiences on board U-68 on voyage to Cape Town from middle of August to middle of December 1942 by Walter Meyer.*

⁵²⁰ Kleynhans, 'Good Hunting', p. 174.

⁵²¹ DOD Archives, UWH Civil, Box 341, File: U-boat matters. *Extract from letter from Carl Emmermann on Operation Eisbär, 17 Oct 1953.*

⁵²² DOD Archives, UWH Civil, Box 339, File: Gordon-Cumming U-Boat Material. *South Atlantic Station War Diary, Oct 1942*; DOD Archives, UWH Civil, Box 341. File: U-boat matters. *Operation Order "Eisbär", 1 August 1942.*

sink the *Boringia* (5,821 tons), *Koumoundouros* (3,598 tons), *Gaasterkerk* (8,679 tons), and *Clan Mactavish* (7,631 tons). By daybreak on 8 October, the Eisbär boats could account for nearly 33,000 tons of shipping sunk off Cape Town. The success of the surprise attacks was, however, short-lived. The South African coastal defences were in fact not entirely unprepared for the sudden onslaught on the merchant shipping off its coastline.⁵²³

During the early hours of 8 October, the South African and Allied authorities activated all ASW measures. These followed the receipt of several reports of explosions and light flashes near the Cape Point lighthouse. A single Ventura from No. 23 Torpedo Bomber Reconnaissance (TBR) South African Air Force (SAAF) Squadron was dispatched to investigate these reports. Shortly after daybreak, the aircraft sighted the wreckage of the *Gaasterkerk* 20 miles south-west of Cape Point. Four lifeboats with some survivors were also identified. Soon after that, the South Atlantic Station dispatched a corvette, HMS *Rockrose*, and two destroyers, HMAS *Nizam* and HMS *Foxhound*. They were sent to a general area off Cape Point to assist in the rescue of survivors, as the sinkings of *Boringia* and *Clan Mactavish* had also become known. The U-boat attacks during that morning were rather brazen as they operated on the surface, but increasing aerial patrols forced them to remain submerged. Throughout the morning, the Venturas from No. 23 SAAF TBR Squadron maintained a continuous patrol off Cape Point and assisted in pinpointing the location of survivors adrift in lifeboats.⁵²⁴

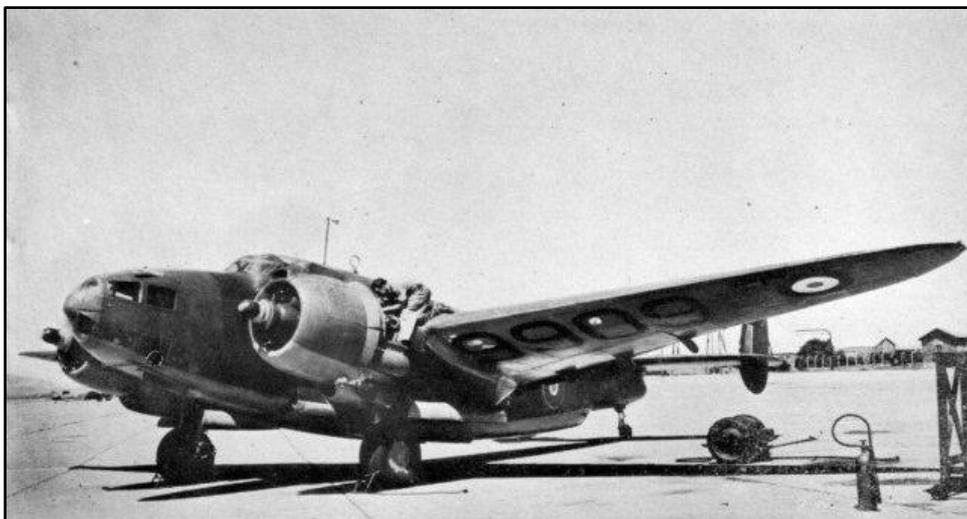


Fig 5.1: A Ventura in service with the SAAF during the war⁵²⁵

During the course of the morning's air patrols, there were two separate instances during which South African aircraft successfully engaged U-boats in the waters off Cape Town. After a U-boat was spotted 130 miles to the west of Cape Town, a Ventura

⁵²³ Gordon-Cumming, *Official History of the South African Naval Forces*, pp. 79-80.

⁵²⁴ Turner *et al*, *War in the Southern Oceans*, p. 174.

⁵²⁵ <http://www.saairforce.co.za/the-airforce/aircraft/171/b-34-ventura-ii> (Accessed 11 June 2018).

engaged it and dropped four 250 lb depth charges in its vicinity after it submerged. This attack received a stern rebuff from the Commander Coastal Air Defences, who regarded it a waste of bombs. The second attack occurred soon after midday when a Ventura observed a U-boat at periscope depth some miles off Green Point. Due to a communications breakdown within the Ventura – partly caused by the transmission of an outgoing signal – there was a considerable delay before releasing the four 250 lb depth-charges in the vicinity of the U-boat. It is of interest to note that none of the four U-boats operational in the area reported being attacked by aircraft on 8 October. During the remainder of the afternoon, the Venturas from No. 23 TBR SAAF Squadron flew several more reconnaissance sorties in the hope of spotting more survivors and locating the U-boats. They were assisted by three Albacores from the Royal Navy (RN) Fleet Air Arm (FAA), deployed to South Africa to help bolster its coastal defences and for convoy escort duties.⁵²⁶

Two RN destroyers, HMS *Active* and HMS *Arrow*, sailed shortly before midday from Simon's Town to assist in locating and picking up survivors from the *Clan Mactavish*. All South African Naval Forces (SANF) anti-submarine (A/S) vessels were, however, retained to keep constant control of the perimeter of the Cape Town anchorage. The exception was HMSAS *Vereeniging*, which accompanied the Mine Clearance Flotilla while they once more swept the area near Cape Point which the *Doggerbank* had mined that April. During the course of the day, the Union Defence Force (UDF) and South Atlantic Station issued several pertinent ASW orders due to the intensifying U-boat operations off Cape Town. To start with, the use of all coastal and harbour navigation lights, radio beacons and fog signals were discontinued with immediate effect. While the use of Saldanha harbour since June reduced the daily number of ships in Table Bay to an average of twenty, a system of double-banking provided ten extra berths within the Cape Town harbour that day. This considerably reduced the number of merchants lying in the undefended roadstead. Moreover, some of the sailings planned for the following days were postponed. A wireless message was also sent to all shipping in South African waters. They were told not to approach within seventy miles of Cape Town during the hours of darkness.⁵²⁷

That night, all the Venturas from No. 23 TBR SAAF Squadron were grounded, as they lacked the required equipment for night operations. The RN vessels operational off Cape Town, however, had a very busy night hunting the U-boats and looking for survivors. During the night of 8/9 October *U-68* managed to sink a further four merchants, the *Sarthe* (5,271 tons), *Swiftsure* (8,206 tons), *Examelia* (4,981 tons) and *Belgian Fighter* (5,403 tons). The other U-boats had a less successful evening, as the hunters appeared to become the hunted.

⁵²⁶ DOD Archives, UWH Civil, Box 339, File: Gordon-Cumming U-Boat Material. *South Atlantic Station War Diary, Oct 1942*; Turner *et al*, *War in the Southern Oceans*, p. 175.

⁵²⁷ Turner *et al*, *War in the Southern Oceans*, p. 175.

During that night Emmermann once more navigated his U-boat to the approaches of Table Bay with the hope of scoring another surprise attack. As soon as the U-boat entered the approaches, Emmermann heard distinct propeller noises which signalled an impending attack. HMS *Rockrose* attacked *U-172* in an area approximately 70 miles to the west of Hout Bay. While HMS *Rockrose* did not manage to sink *U-172* during the night, it did force Emmermann to remain submerged for an extended time. This meant that the U-boat could not recharge its batteries, nor sufficiently ventilate the boat, before daylight.⁵²⁸ Emmermann's logbook provides a vivid account of HMS *Rockrose's* attack during the night:

2020 – Asdic impulses can be heard on my set... am creeping along.

2037 – 12 depth-charges, ineffectively released. Slight damage, chiefly to fuses. Gyrocompass failing. Lid on tube IV not tight. Shortly after, two further patterns of 12 each, farther away.

2100 – Two U-boat chasers clearly audible, alternately on my course, trying to locate me.

0100 – U-boat chasers continue near my boat. They operate very skilfully, in spite of my constant doubling here and there.

0500 – No longer possible to surface while it is dark. Conditions for listening and locating are ideal, as the sea is smooth. Every little noise made in the boat produces reaction.⁵²⁹

On the same night, the destroyers HMAS *Nizam*, HMS *Foxhound* and HMS *Active* were operational approximately 60 miles to the west of Dassen Island travelling on a course roughly South by East. Initially, the vessels were dispatched to help collect survivors from the *City of Athens* (6,558 tons). Shortly before midnight, however, HMS *Active* – under the command of Lt Cdr Michael Tomkinson – obtained a radar contact on a bearing of 150° at a distance of 2,500 yards.⁵³⁰ Unbeknown to the Eisbär group, *U-179* (Sobe) had sailed from the equator at such a high speed, that he had arrived in the waters off Cape Town in time for the unexpected attacks. After successfully sinking the *Pantelis* (3,845 tons) on 8 October, *U-179* was caught off guard and sunk by HMS *Active* on the same night (see Map 5.1).⁵³¹ In an extract from the *Proceedings of the U-Boat Assessment Committee*, there is an unmatched account of the attack and sinking of *U-179*. The report states:

⁵²⁸ Gordon-Cumming, *Official History of the South African Naval Forces*, pp. 79-80; Kleynhans, 'Good Hunting', pp. 174-175.

⁵²⁹ Turner *et al*, *War in the Southern Oceans*, p. 177.

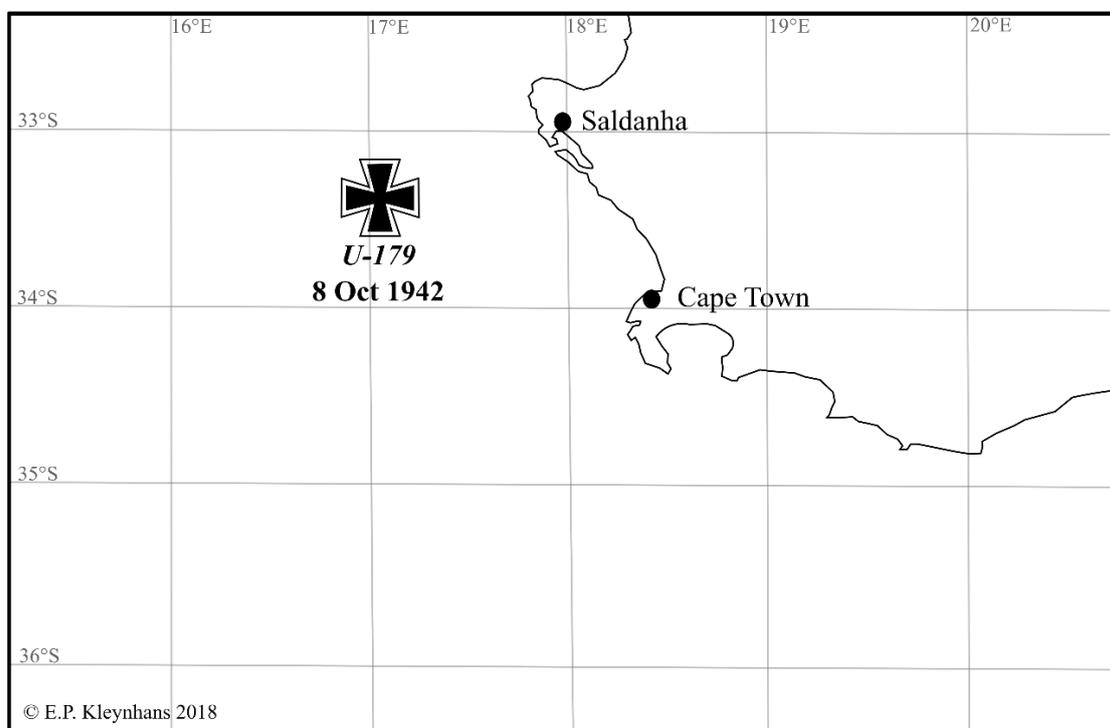
⁵³⁰ DOD Archives, CGS War, Box 122, File: Raiders. *Most secret cable between DECHIEF and COASTCOM re sinking of German submarine off Cape Town, 9 Oct 1942.*

⁵³¹ DOD Archives, UWH Civil, Box 341, File: U-Boat matters. *Questions and answers submitted by UWH section to Fregattenkapitän Gunter Hessler re U-boat warfare in South African waters.*

Shortly after, an asdic contact right ahead at a range of 1,600 yards was obtained and a large U-boat sighted on the surface, inclination 20° [to the] right.

The U-boat appeared to be stopped, presumably charging her batteries. Speed was increased to 25 knots and course altered slightly to starboard to bring [the] U-boat broader on the beam. At 800 yards the target was illuminated by searchlight, and fire was opened by B gun, no hits however being scored. The U-boat dived when range was 500 yards.

[HMS] *Active* altered towards and steadied on a course about 5° ahead of [the] U-boat's conning tower. The U-boat passed down the port side at close range on a converging course and was attacked with a 10-charge pattern by eye, set to 50 and 150 feet. The charges are reported to have burst all around the U-boat, the swirl and bubbles caused by its diving still being clearly visible. The depth-charge party reported that the U-boat was blown to the surface as a result of the attack and then disappeared, but this cannot be confirmed. No contact was obtained in spite of a search carried out throughout the night. A large patch of diesel oil came to the surface which, by dawn, was some 3 miles in length and half a mile wide. No wreckage was found.⁵³²



Map 5.1: Location of the sinking of *U-179*

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DOD Archives, UWH Civil, Box 339, File: Gordon-Cumming U-Boat Material. Extract from *Proceedings of U-boat Assessment Committee (Volume 9), Sept-Dec 1942*.

A post-war report from Emmermann confirms the loss of *U-179*. The *BdU* did not realise that *U-179* was lost in the waters off Cape Town, and for some time believed that it was sunk near Ascension Island on its return voyage. Emmermann wrote:

During this chase we clearly heard the sounds of another U-boat being sunk. After a bad depth-charge volley, we were able to pick up the sound of sinking quite clearly. On my return, I voiced my opinion that it may have been *U-179* (Sobe). Apparently *U-179*, quite unaware, had slap-bang run right into the first furious wave of defensive actions taken by the enemy and thus sealed her doom.⁵³³



Fig 5.2: Ernst Sobe – the ill-fated commander of *U-179*⁵³⁴

While the U-boat pickings were initially easy off Cape Town, the surprise gained during the initial attacks started to dwindle by 10 October. The immediate activation of the combined South African and Allied ASW measures ensured that the full extent of the surprise attack in the waters off Cape Town did not materialise. As a result, there was no indiscriminate massacre of anchored shipping as predicted by the *BdU*. The U-boats had a staggering success by sinking 14 merchantmen (100,902 tons) in a mere four days. Despite this, Donitz ordered the *Eisbär* group to extend their operational areas to the waters off Port Elizabeth and Durban.⁵³⁵ His decision was as a direct result of the ASW measures encountered from 8 October onwards. These measures negated the operational advantage gained by the initial surprise attacks, which equally revealed several cracks in the South African coastal defences. In truth, before the commencement

⁵³³ DOD Archives, UWH Civil, Box 341, File: U-boat matters. *Emmermann (U-172) on Operation Eisbär*.

⁵³⁴ <https://uboat.net/men/commanders/1200.html> (Accessed 3 May 2018).

⁵³⁵ DOD Archives, UWH Civil, Box 341, File: U-boat matters. *Questions and answers submitted by UWH section to Fregattenkapitän Gunter Hessler re U-boat warfare in South African waters*.

of the first sustained U-boat offensive in October, the ASW measures employed in South African waters were somewhat haphazard. They were also embryonic in nature, and curtailed by several factors which warrant further discussion.

First, there was some prior warning of a possible move of a group of German U-boats into the South Atlantic by the end of August. The Headquarters of the South Atlantic Station, however, remained unsure of the exact time and area in which to expect an attack on merchant shipping. Throughout September, the Submarine Tracking Room at Whitehall continued to warn the Combined Headquarters in Cape Town of the southward movement of a group of U-boats through continued wireless interceptions.⁵³⁶ The sinking of the British troopship *Laconia* (19,965 tons) on 12 September near Ascension Island, also served to confirm the presence of a group of U-boats travelling southward. While Combined Headquarters in Cape Town thus knew of the impending U-boat attack in the Southern Oceans, there were insufficient SANF and RN A/S vessels in South Africa to justify pre-emptive offensive patrols.⁵³⁷

Any pre-emptive action by the British or South African authorities, moreover, would have alerted German agents in Cape Town that the Allies were aware of the impending attack. This naturally created a somewhat tense situation at Combined Headquarters. Whereas the defence planners continued to expect an attack on merchant shipping off Cape Town from the end of September onwards, the ASW measures in South African waters remained inactive until the U-boat attack commenced. The fact that the sinkings of the *Chikasaw City* and *Firethorn* initially went unnoticed, highlighted the point that both the South African and British authorities only became aware of the presence of the Eisbär group by 8 October, and only after a report of the first sinkings. This obliviousness is, however, not unexpected, considering Tait and his staff's stance. Their conviction was "that the first news of the presence of enemy raiders, whether surface or submarine, in the area will be the report of their first attack."⁵³⁸

Second, because the Axis threat to Allied shipping off the South African coast had not materialised by mid-1942, an apathetic attitude was prevalent in the Union regarding coastal defence. The fact that the Department of Railways and Harbours (SAR&H) only switched off the non-essential harbour and coastal lights during that June – after the commencement of the Japanese submarine offensive in Mozambican waters – highlights the dismal state of affairs.⁵³⁹ By 4 October, an intelligence appreciation from

⁵³⁶ DOD Archives, UWH Civil, Box 339, File: Gordon-Cumming U-Boat Material. *Report on U-boat Activities in South African Waters, Oct-Dec 1942*; Turner *et al*, *War in the Southern Oceans*, pp. 168-169.

⁵³⁷ Kleynhans, 'Good Hunting', p. 173.

⁵³⁸ Roskill, *The War at Sea: Volume II – The Period of Balance*, p. 270; DOD Archives, UWH Civil, Box 339, File: Gordon-Cumming U-Boat Material. *South Atlantic Station War Diary, Oct 1942*; DOD Archives, Diverse, Group 1, Box 127, File: Appreciations navy. *C-in-C South Atlantic appreciation of the naval situation in the Cape area*, 4 Oct 1942.

⁵³⁹ DOD Archives, CGS War, Box 38, File: Blackouts and lighthouses. *Correspondence between Tait and Van Ryneveld re coastal blackouts, 19 Jun 1942*; DOD Archives, CGS War, Box 38, File:

the South Atlantic Station had failed to report the presence of the U-boats moving south towards Cape Town. This was only days before the Eisbär group launched their surprise attack. It would seem as if Tait and his staff were also lulled into a false sense of security. The feeling of confidence in their safety prevailed despite the various naval intelligence sources indicating the southward movement of a number of U-boats in the Atlantic Ocean since the end of August.⁵⁴⁰ The focus of the South African and British naval authorities was, instead, on the Indian Ocean, and the presumed threat posed by a further Imperial Japanese Navy operation in these waters.⁵⁴¹

Third, the intelligence appreciation furthermore advised that there was an insufficient number of naval forces in South African waters. The consideration of launching an offensive operation in the case of a U-boat attack on merchant shipping was therefore dismissed. Incidentally, the intelligence appreciation acknowledged that the only defence against possible attacks against the trade routes off Cape Town was to either adopt a policy of escorting group sailings and convoys or to enforce a system of evasive routing. The crux of the matter was, however, that without an adequate number of naval vessels available in South African waters, these intended measures were impossible to execute.⁵⁴²

By October, the South Atlantic Station could account for only one dedicated A/S vessel, the Flower-class corvette HMS *Rockrose*. By good fortune, two destroyers from the Eastern Fleet, HMAS *Nizam* and HMS *Foxhound*, were also in Simon's Town for refit. The arrival of two further destroyers, HMS *Arrow* and HMS *Active*, which called at Simon's Town on their way to Freetown, also bolstered the meagre naval forces. From 8 October, these five vessels operated continuously against the Eisbär group to locate and destroy the U-boats, while also assisting in picking up survivors from the merchant sinkings. The arrival of three vessels drastically strengthened the naval forces operational off Cape Town. They were a Free French corvette, the *Commandant Detroyat*, on 10 October, and two more RN destroyers that arrived the following day: HMS *Thyme* and HMS *Cyclamen*. By the end of the month, the Commander-in-Chief (C-in-C) Eastern Fleet, VAdm (Sir) James Somerville, dispatched a further six destroyers, along with four corvettes and an A/S whaler, for service with the South Atlantic Station. Throughout this period, SANF vessels mainly assisted in the defence of the South African harbours, and in specific instances helped to collect survivors along the coast. The sheer size of the operational area off the South African coast created a situation unfavourable to the productive employment of naval vessels in the pursuit of ASW and

Blackouts and lighthouses. *Circular from Office of the C-in-C South Atlantic Station (Tait) to Naval Liaison Officers at Durban, East London, Port Elizabeth and Cape Town re harbour and coast lights, 19 Jun 1942.*

⁵⁴⁰ DOD Archives, Diverse, Group 1, Box 127, File: Appreciations navy. *C-in-C South Atlantic appreciation of the naval situation in the Cape area, 4 Oct 1942.*

⁵⁴¹ DOD Archives, Diverse, Group 1, Box 126, File: Coastal appreciations general. *A Japanese attack on South Africa: An appreciation from the enemy point of view, 29 Sept 1942.*

⁵⁴² DOD Archives, Diverse, Group 1, Box 127, File: Appreciations navy. *C-in-C South Atlantic appreciation of the naval situation in the Cape area, 4 Oct 1942.*

the proposed escort duties. This is especially true when taking into account the fact that the submarine attacks extended towards Port Elizabeth and Durban later on in October.⁵⁴³

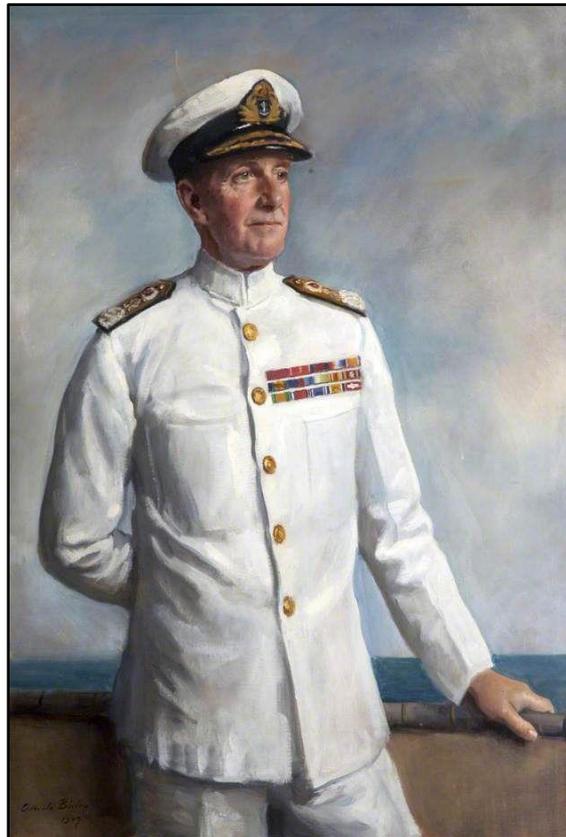


Fig 5.3: Vice Admiral (Sir) James Somerville – C-in-C Eastern Fleet (1942-1944)⁵⁴⁴

Fourth, by mid-1942, there was minimal air cover available over the extensive South African coastline. The situation was so dire that Smuts approached Churchill in an attempt to create awareness of the weak air cover over the vital sea route around the Cape of Good Hope. Smuts requested Churchill to have the deficiencies in South African equipment and aircraft addressed. In return, the Union would provide crews to operate the new aircraft. To some degree, the Joint Air Training Scheme, established in South Africa during the war, provided the required training to air and ground crews employed on coastal defence work.

Smuts also reminded Churchill of the vital importance of the maritime nodal point off Cape Town, and stated that it “is so vital to our war strategy that all provision against attack and even casual raids should be urgently made.”⁵⁴⁵ Churchill

⁵⁴³ DOD Archives, UWH Civil, Box 339, File: Gordon-Cumming U-Boat Material. *South Atlantic Station War Diary, Oct 1942.*

⁵⁴⁴ <https://za.pinterest.com/pin/328833210276773262/?lp=true> (Accessed on 29 June 2018).

⁵⁴⁵ TNA, CAB 84/46, Air Defence on South Africa and Madagascar. *Personal Telegram from Smuts to Churchill, 5 Jun 1942.*

subsequently instructed the Joint Planning Staff of the War Cabinet to investigate and prepare a report on the air defence of South Africa. Two successive reports from the Joint Planning Staff highlighted the dismal situation which existed in the Union regarding air defences. It also put forward some proposals to rectify the matter.

Location	Existing Programme	Proposed Programme
Cape Town/Cape Peninsula	1 X Fighter squadron 2 X TBR flights	2 X Fighter squadrons 2 X TBR squadrons
Port Elizabeth/East London	1 X Fighter squadron 1 X TBR flight	2 X Fighter squadrons 1 X TBR squadron
Durban/Adjoining Area	1 X Fighter squadron 1 X TBR flight	2 X Fighter squadrons 2 X TBR squadrons
South West Africa/Angola Littoral	2 X TBR flights	None
Mozambique/East Africa Littoral	3 X TBR flights	1 X TBR squadron
General Union Reserve	1 X Fighter squadron 1 X Bomber squadron	2 X Fighter squadron 1 X Bomber squadron
Total Requirements	4 X Fighter squadrons 3 X TBR squadrons 1 X Bomber squadron	6 X Fighter squadrons 6 X TBR squadrons 1 X Bomber squadron

Table 5.1: Proposed expansion of the SAAF in lieu of coastal defence, 1942⁵⁴⁶

By the end of May, the SAAF could account for only 27 operational aircraft within the Union to conduct coastal and other patrols. This number excluded training aircraft and those on operational duty across Africa, and consisted of Mohawks, Beauforts, Marylands and Ansons. The South African requirements were, however, somewhat unrealistic, notably since it proposed that the United Kingdom (UK) provide the SAAF with a further thirteen squadrons for use in the aerial defence of the Union (see Table 5.1).⁵⁴⁷ The Joint Planning Staff provided a counter-proposal to Churchill, where they suggested that the provision of Venturas could provide the SAAF with both a coastal bombing and medium reconnaissance ability. They concluded that 36 Venturas were ready for immediate delivery to the Union from the United States of America and that a further 36 Venturas would follow suit. In addition to the 72 Venturas, the arrival of an Royal Air Force (RAF) Catalina squadron in South Africa would provide a further, much-needed, long-range reconnaissance and offensive ability. Thus, by the time the Eisbär group struck off Cape Town, there was considerably more air cover available along the

⁵⁴⁶ TNA, CAB 84/46, Air Defence on South Africa and Madagascar. *Note by the Secretary of the Joint Planning Staff on the South African Air Force, 12 Jun 1942.*

⁵⁴⁷ TNA, CAB 84/46, Air Defence on South Africa and Madagascar. *Report by the Joint Planning Staff on the Air Defence of South Africa and Madagascar, 7 Jun 1942*; TNA, CAB 84/46, Air Defence on South Africa and Madagascar. *Note by the Secretary of the Joint Planning Staff on the South African Air Force, 12 Jun 1942.*

South African coast. Unfortunately, most of the SAAF crews remained untrained on the Venturas, especially in the general aspects of ASW.⁵⁴⁸



Fig 5.4: An RAF Catalina attached to Coastal Area Command at Durban.⁵⁴⁹

Last, before October, only a limited number of group sailings were in operation along the west coast of South Africa for ships travelling along the Cape Town–Freetown shipping route. Group sailings, by definition, comprised a number of merchant ships that travelled together in an attempt to reduce losses. Group sailings were, however, not escorted by naval vessels. When naval vessels escorted group sailings, it became a convoy. Air cover, whether complete or partial, interestingly, had no bearing on this definition.⁵⁵⁰ By October the majority of the merchantmen had travelled independently along the South African coastline, in a general area up to 300 miles offshore. The size of the operational area that needed to be patrolled by South African and British naval and air forces on a daily basis was immense. This meant that protecting merchant shipping

⁵⁴⁸ TNA, CAB 120/474, South Africa: correspondence with Field-Marshal Smuts. *Note to Prime Minister on Air Defence of South Africa, 16 Jun 1942*; TNA, ADM 1/12101, Anti-U-boat warfare. *Measures required to meet the U-boat threat in South Atlantic, 7 Dec 1942.*

⁵⁴⁹ South African National Museum of Military History, Masondo Reference Library. *SA Navy Photo Collection, S.A. 5219.*

⁵⁵⁰ DOD Archives, UWH Civil, Box 339, File: Gordon-Cumming U-Boat Material. *Miscellaneous notes, undated.*

against U-boat attacks proved an exceptionally difficult, if not impossible, task. Moreover, the state of affairs in South Africa had worsened as a result of the limited air cover and naval escorts available.⁵⁵¹ Shortly before the Eisbär group launched their attacks off Cape Town, the Admiralty instructed Tait to order all vessels travelling through and approaching South African waters, to revert to travelling in groups with naval escorts when possible. The irony of this order was not lost to Tait. He simply did not have the required number of destroyers, corvettes, and trawlers under his command to provide the required escort duties.⁵⁵²

5.2 Defensive measures, lessons learned, and an operational success

It was the notable successes achieved by the Eisbär group during October 1942, which prompted the *BdU* to dispatch several more U-boats to operate in South African waters. These U-boats operated off the east coast of South Africa between Durban and Lourenço Marques and were particularly successful. By the end of November, the *Seekriegsleitung* (*SKL*) had ordered the remaining U-boats operational off southern Africa to return to the North Atlantic, to help oppose the American landings in North Africa during Operation Torch. The *BdU* had, however, succeeded in proving to the *SKL* that operations as far south as the waters off Cape Town were possible, and that such undertakings could yield good sinking results. Between October and December, eight U-boats sunk 53 Allied merchant ships, for the loss of only one U-boat. These impressive results prompted the *SKL* to order the *BdU* to send a fresh batch of U-boats to operate off Cape Town at the start of 1943. The aim was to achieve similar sinking results.⁵⁵³

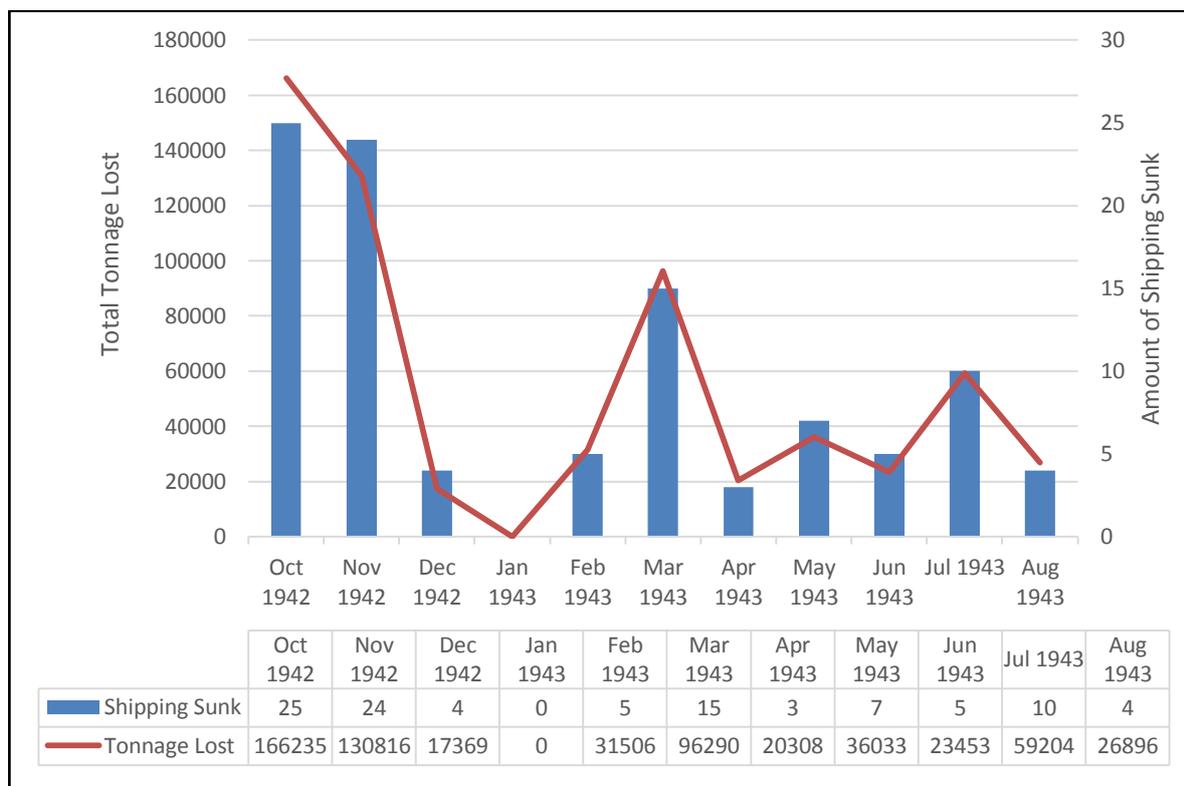
The Seehund group arrived off Cape Town during February 1943, though their sinking results were virtually negligible for its entire operational period. Between 10 February and 2 April, the six U-boats attached to the Seehund group only managed to sink a total of seventeen merchant ships in South African waters. The operational results of the Seehund Group were thus inauspicious, although no U-boat was lost during this period. From April onwards, the *BdU* intermittently dispatched U-boats to operate off the southern African coast, which on occasion were moderately successful. The U-boats were also increasingly active towards the east coast of South Africa during the course of 1943. They operated in a quadrant that extended from Durban to Lourenço Marques, the Mozambique Channel, Mauritius and Madagascar. Between 18 April and 17 August, these U-boats accounted for 27 merchants sunk, with the loss of only one U-boat recorded towards the end of August. For the remainder of the war, however, the *BdU* ceased to regard the area off the South African coast as a viable working area. As an alternative, it argued that the U-boats earmarked for operations in

⁵⁵¹ DOD Archives, UWH Civil, Box 339, File: Gordon Cumming U-boat material. *The Commanders-in-Chief South Atlantic and Eastern Fleet, Report on the safety of shipping in South African waters, 30 Mar 1943.*

⁵⁵² Turner *et al*, *War in the Southern Oceans*, p. 169.

⁵⁵³ DOD Archives, UWH Civil, Box 341, File: U-Boat matters. *Questions and answers submitted by UWH section to Fregattenkapitän Gunter Hessler re U-boat warfare in South African waters.*

the Far East had ample opportunity to attack Allied merchant shipping off the South African coastline while journeying to and from their new operational areas.⁵⁵⁴



Graph 5.1: Decreasing merchant shipping losses in South African waters, 1942-1943⁵⁵⁵

It is evident that there was a drastic change in the operational conditions in South African waters from October 1942 to August 1943. Both the South African and British naval authorities adopted a number of stringent ASW measures aimed at curtailing the losses of merchant shipping around the South African coast. The steady decline in the number of merchant shipping lost off the South African coast during the first months of 1943 has a direct correlation with the improved ASW measures implemented after the first U-boat attacks of October 1942 (see Graph 5.1). There were several so-called 'lessons learnt' during the initial German submarine operations off South Africa. These allowed both the UDF and the South Atlantic Station to evaluate their initial response and implement improved ASW measures to prevent the same situation from reoccurring. In this regard, the surprise attacks launched by the Eisbär group, along with the South African and British response, served as the nadir of ASW in South Africa during the war. The implementation of the following four ASW measures best explains the decrease in the number of merchant sinkings in these waters.

⁵⁵⁴ DOD Archives, UWH Civil, Box 220, File: Union War Histories Translations 14a. *U-boat Operations of the Axis Powers in S.A. Waters* compiled by Dr Jurgen Rohwer, 1954.

⁵⁵⁵ Gordon-Cumming, *Official History of the South African Naval Forces*, pp. 287-299; DOD Archives, Map Collection, File: War in the Southern Oceans maps. *Chart and List of Ships Sunk Captured or Damaged in the Waters off Southern Africa, 1939-1945*.

Firstly, following the opening attacks of the Eisbär group, the Headquarters of the South Atlantic Station immediately established group sailings for all outgoing merchant vessels travelling along South Africa's west coast. Inbound merchant shipping, however, mostly sailed independently, and formed the mainstay of the subsequent vessels sunk in said waters.⁵⁵⁶ By March 1943, Tait and his staff had divided the problem of trade protection in South African waters into two broad categories (see Map 5.2). The first category involved the protection of slower moving merchant vessels travelling along the South African coast. Tait and his staff decided to use Walvis Bay as an assembly port for all eastbound merchant shipping approaching the South African coast. This would afford the vessels maximum protection.

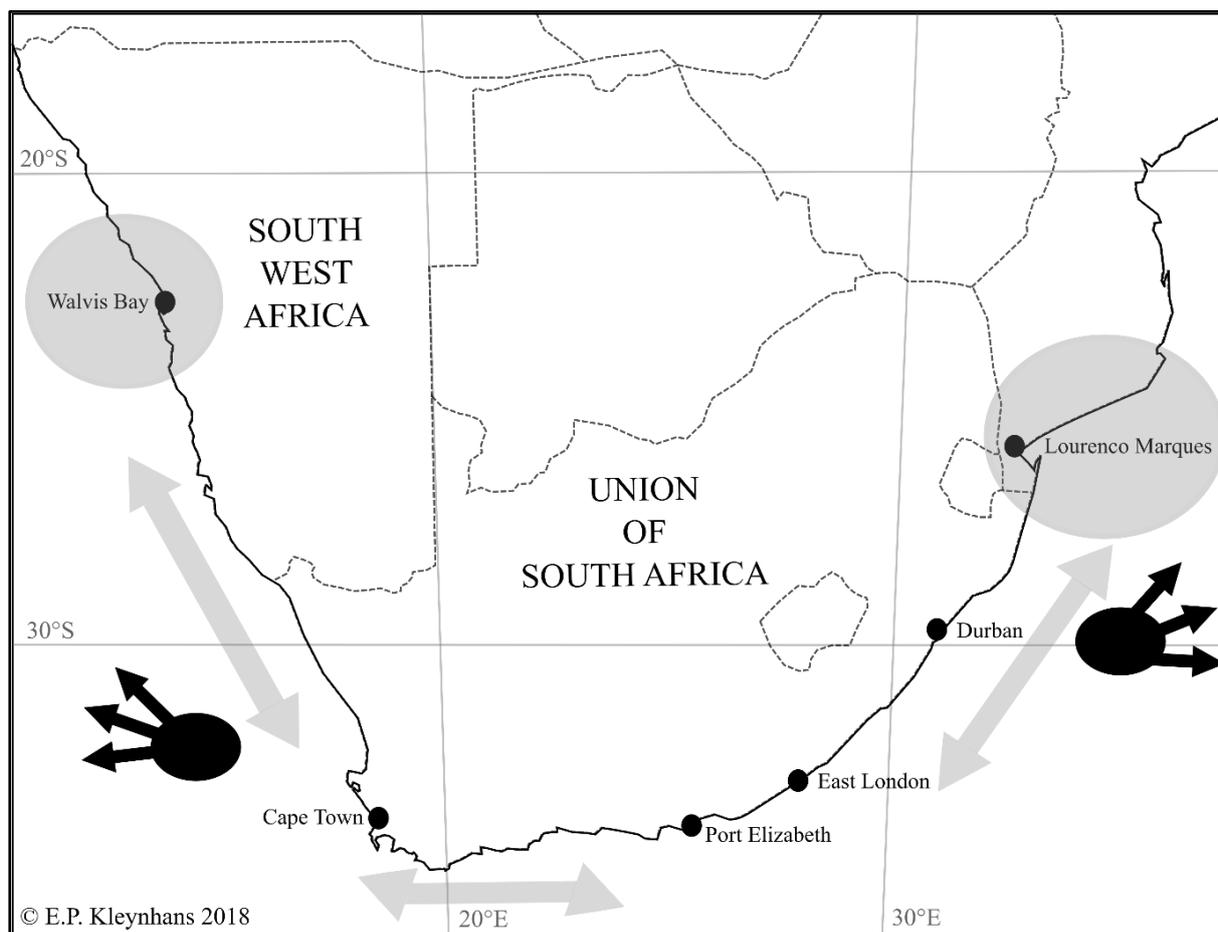
The Admiralty had initially hoped to form all eastbound vessels travelling to South Africa from South America and along West Africa into escorted convoys. Such a measure, however, proved unfeasible. Once the merchant shipping arrived at Walvis Bay, it travelled in a coastal convoy to either Cape Town, Durban or one of the other Union ports. The eastbound merchant vessels destined for other distant ports travelled in escorted convoys to a deep sea dispersal point, either off Cape Town or Durban. After this, they continued their onward journeys independently. Tait and his staff utilised Lourenço Marques as a holding and bunkering port – as well as a convoy assembly point – for all westbound merchant shipping approaching South African waters. A coastal convoy thus operated between Lourenço Marques and Durban for all westbound shipping, under the nominal protection of both surface and air escorts. The westbound shipping destined for ports outside the Union, travelled in a convoy to a deep sea dispersal point off Walvis Bay, whereafter the vessels continued their journeys independently.⁵⁵⁷

The second category which Tait and his staff had to consider, involved the so-called 'special ships.' The special ships comprised of all troop transports, important naval vessels and all other shipping whose great speed precluded their inclusion into the ordinary slow convoys. Such eastbound vessels approached the South African coast from varying positions, with air escort provided at the earliest possible time. Most of this shipping formed into convoys at Saldanha or Cape Town and travelled under escort to a deep water dispersal point to continue their onward journey. The vessels that proceeded along the South African coast sailed independently, with a dedicated surface and air escort. All westbound shipping either first called at Durban for logistical purposes, or travelled directly to Cape Town with an air escort provided as soon as it

⁵⁵⁶ Roskill, *The War at Sea: Volume III – The Offensive (Part II)*, p. 86.

⁵⁵⁷ DOD Archives, UWH Civil, Box 339, File: Gordon Cumming U-boat material. *The Commanders-in-Chief South Atlantic and Eastern Fleet, Report on the safety of shipping in South African waters, 30 Mar 1943.*

was available. Those calling at Durban sailed independently along the South African coast with a surface and air escort.⁵⁵⁸



Map 5.2: Convoy assembly points, deep sea dispersal points, and the major convoy routes along the South African coast

This particular convoy system remained in use along the South African coast until 16 September 1943. After this point, the use of convoys temporarily ceased owing to a decrease in merchant sinkings along the South African coast. The resurgence of U-boat attacks in the South Atlantic and the Indian Ocean in 1944 prompted Tait to once more reinstate convoys in South African waters on 26 March that year. This was, however, only a temporary measure, and shipping soon again travelled independently in Union waters.⁵⁵⁹

⁵⁵⁸ DOD Archives, UWH Civil, Box 339, File: Gordon Cumming U-boat material. *The Commanders-in-Chief South Atlantic and Eastern Fleet, Report on the safety of shipping in South African waters, 30 Mar 1943.*

⁵⁵⁹ DOD Archives, CSD, Box 15, File: Group sailing operations Union waters. *Note on commencement and ceasing of group sailings, 1944*; DOD Archives, CSD, Box 15, File: Policy (escort groups). *Note on commencement and ceasing of group sailings, 1944*; DOD Archives, CSD, Box 43, File: SANF Anti-submarine Warfare Committees. *Minutes of A/S Sub-Committee meeting coastal area headquarters, 12 Mar 1943.*

	Number of Convoys	Monthly Total
Walvis Bay to Cape Town	4 per month	44 merchant vessels
Cape Town to Durban	4 per month	48 merchant vessels
Cape Town to deep sea dispersal	6 per month	20 merchant vessels
Durban to deep sea dispersal	8 per month	144 merchant vessels
Durban to Cape Town	4 per month	36 merchant vessels
Cape Town to Walvis Bay	4 per month	45 merchant vessels
Durban to Lourenço Marques	4 per month	12 merchant vessels
Lourenço Marques to Durban	4 per month	12 merchant vessels
Total	38 convoys per month	361 merchant vessels in convoy

Table 5.2: Convoys operational in South African waters, 1943-1944⁵⁶⁰

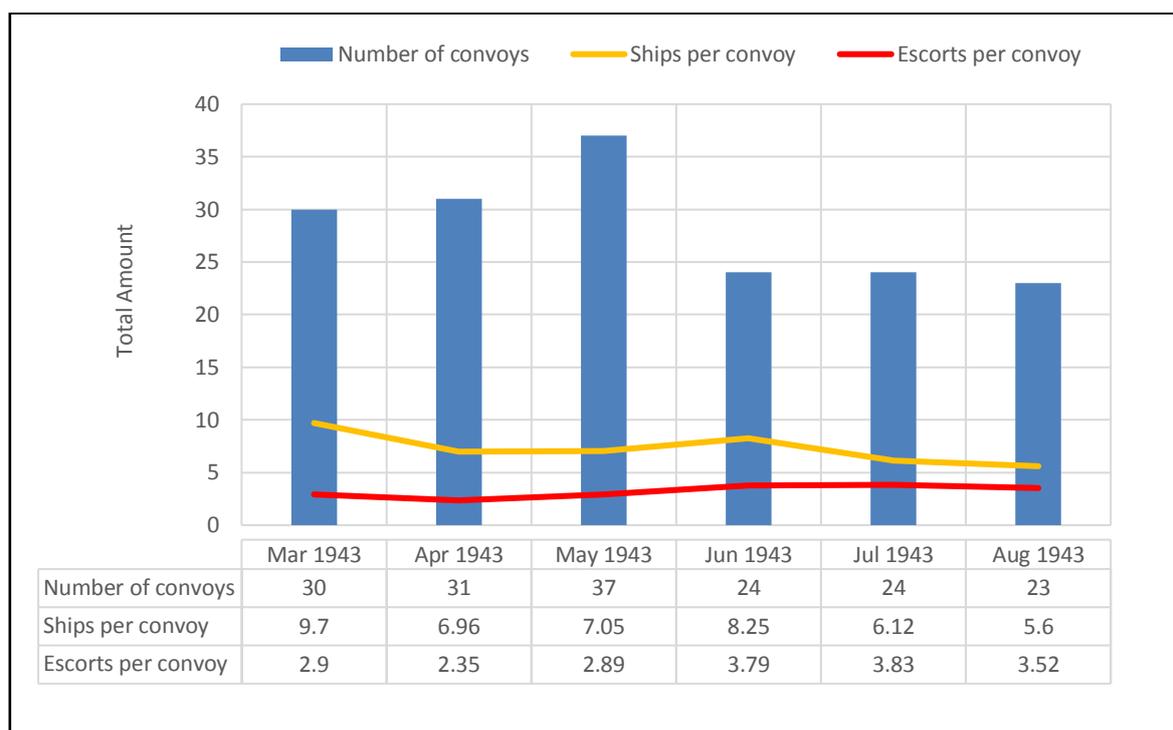
Secondly, in theory, the adoption of convoys seemed the ultimate answer for ensuring the protection of seaborne trade around the South African coastline. In practise, however, the afore-mentioned convoys required both a surface and air escort in order to ensure maximum protection from U-boat attacks. By March 1943 the South Atlantic Station estimated that it needed at least eight naval escort groups to provide the required defensive protection for the convoys operational off South Africa (see Table 5.2). At the bare minimum, Tait and his staff predicted that the adequate protection needed by each convoy was at least two corvettes and three trawlers. At that stage, the South Atlantic Station could only account for seven corvettes and 21 trawlers. This figure included a number of naval vessels attached from the Eastern Fleet to the South Atlantic Station for service in South African waters. To meet the minimum requirements of escorts per convoy, Tait and his staff were thus short of nine corvettes and three trawlers. Alarming, the estimated escorts did not include any provision for the protection of special ships or troop convoys. Destroyers usually provided such protection. The South Atlantic Station was, however, dependent on the Eastern Fleet and the West Africa Station to provide the required naval vessels in this regard. Tait subsequently requested the Admiralty to reinforce the South Atlantic Station with nine corvettes, three trawlers and six destroyers.⁵⁶¹

These reinforcements were slow to materialise. But the detachment of several larger SANF A/S vessels to South Atlantic Station at the end of 1942 to assist in escort duties drastically strengthened Tait's defensive capabilities (see Graph 5.2). As from January 1943, one of the five escort groups operational along the South African coast was the sole responsibility of the SANF A/S vessels. These vessels rendered valuable service, and mainly escorted ships between Cape Town and Durban. Following the

⁵⁶⁰ DOD Archives, UWH Civil, Box 339, File: Gordon Cumming U-boat material. *The Commanders-in-Chief South Atlantic and Eastern Fleet, Report on the safety of shipping in South African waters, 30 Mar 1943.*

⁵⁶¹ DOD Archives, UWH Civil, Box 339, File: Gordon Cumming U-boat material. *The Commanders-in-Chief South Atlantic and Eastern Fleet, Report on the safety of shipping in South African waters, 30 Mar 1943.*

introduction of group sailings between Durban and Mombasa after September 1943, the South African A/S Vessels also rendered escort work along the east coast of Africa. For the next eighteen months, the South African A/S vessels formed part of the 3rd and 4th Escort Groups and rendered sterling work throughout without encountering any enemy contacts.⁵⁶² By the end of July 1943, the strength of the escort vessels available to Tait marginally increased to 33. These naval vessels included eleven corvettes and 22 trawlers.



Graph 5.2: Total number of convoys, including average number of ships and escorts per convoy, in South Africa waters, Mar-Aug 1943⁵⁶³

The strength of the escort force further increased after the arrival of nine more frigates in the same month. The quality of the escort vessels was, however, dubious, as many of the vessels arrived at the South Atlantic Station with significant defects and

⁵⁶² DOD Archives, CSD, Box 15, File: Policy (escort groups). *CSD Approval of exchange with RN of A/S vessels, 15 Nov 1943*; DOD Archives, CSD, Box 15, File: Policy (escort groups). *Personal correspondence between CSD and GOC coastal area re SANF vessels and A/S warfare, 30 Oct 1942*; DOD Archives, CSD, Box 15, File: Policy (escort groups). *Correspondence between CSD and SANOi/c Durban re SANF A/S vessels on escort duties, 28 Apr 1943*; DOD Archives, CSD, Box 15, File: Policy (escort groups). *Correspondence between CSD and SANOi/c Durban re participation of SANF vessels in convoy escorts from SA ports, 23 Jan 1943*.

⁵⁶³ TNA, ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, Mar 1943*; TNA, ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, Apr 1943*; TNA, ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, May 1943*; TNA, ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, Jun 1943*; TNA, ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, Jul 1943*; TNA, ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, Aug 1943*.

with antiquated ASW equipment. Throughout 1943 and 1944 the strength of the escort force fluctuated, especially after the reopening of the Mediterranean for merchant shipping in August 1943.⁵⁶⁴



Fig 5.5: An RAF Catalina on an anti-submarine patrol off the South Africa coast⁵⁶⁵

Thirdly, the provision of air escorts further helped to ensure the protection of seaborne trade, as well as naval vessels, travelling around the South African coast during the war. Aircraft from the RAF, as well as the FAA, increasingly assisted the SAAF in this regard from the end of 1942. As the maritime war continued along the South African coast throughout 1943, the South African contribution in lieu of the provision of coastal air escorts notably increased.

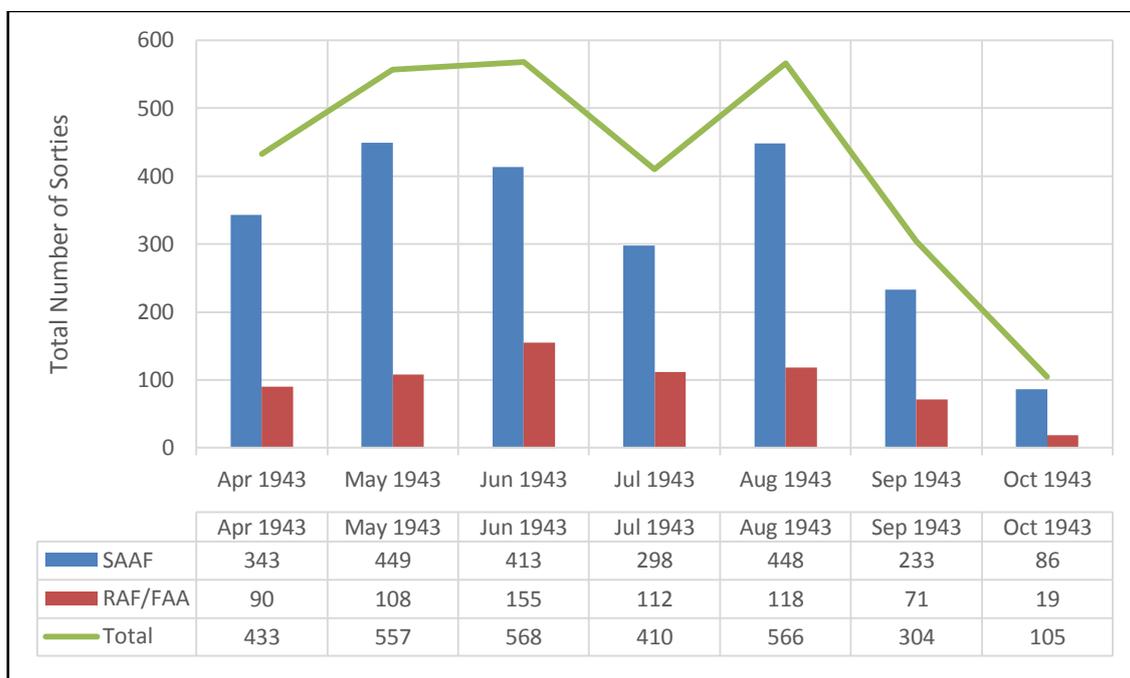
A number of RAF Catalina squadrons, which principally operated from Langebaan and St Lucia, were utilised in all long-range escort work. At times, the RAF Catalinas made use of Durban and Kosi Bay as well, with several aircraft also operating from inland aerodromes located at Darling near Cape Town and St. Albans near Port Elizabeth. All short-range escort work remained the responsibility of the SAAF Ventura squadrons operating from Darling, St. Albans, Walvis Bay and Durban. Several smaller detachments operated from George, Mtubatuba and the Eerste River near Cape Town when required.⁵⁶⁶ The establishment of dedicated merchant shipping routes along the

⁵⁶⁴ TNA, ADM 1/12643, Anti-Submarine Operations – South Atlantic Station. *Report of Captain Howard-Johnston's Visit to the Cape, Oct 1943.*

⁵⁶⁵ DOD Archives, Photographic Repository. 841000346 - RAF Catalina of 262 Sqn.

⁵⁶⁶ DOD Archives, UWH Civil, Box 339, File: Gordon Cumming U-boat material. *The Commanders-in-Chief South Atlantic and Eastern Fleet, Report on the safety of shipping in South African waters, 30 Mar 1943*; TNA, AIR 9/190, Anti U-boat Warfare – African Shipping. *Memorandum by the*

entire South African coastline further allowed the SAAF and RAF/FAA squadrons to provide adequate air cover to all merchant and naval shipping travelling along these designated routes (see Graph 5.3).⁵⁶⁷



Graph 5.3: Coastal air patrols employed on anti-submarine work and convoy escort duties, 1943⁵⁶⁸

The need for continuous air cover along the South African coastline in 1943 was ever pressing. Both the SAAF and RAF/FAA realised that in order to meet this need, they required more operational aircraft. By March, Tait and his staff estimated a requirement of at least 24 more Catalinas for operational service in South Africa. They further called for the four SAAF Ventura squadrons in South Africa to be bolstered by an additional

Secretary of State for Air re Anti-submarine air protection of convoys on the west coast of Africa and the Indian Ocean, 25 Jan 1943.

⁵⁶⁷ DOD Archives, CSD, Box 43, File: SANF Anti-submarine Warfare Committees. *Minutes of A/S Sub-Committee meeting coastal area headquarters, 12 Mar 1943*; DOD Archives, CSD, Box 43, File: SANF Anti-submarine Warfare Committees. *Report by Officer Commanding HMSAS Gannet re U-boat warfare in the South Atlantic, 10 Jun 1943*; DOD Archives, CSD, Box 25, File: SANF Escort Force exercises. *Proposed Atlantic convoy instructions re action to counter U-boats anti-asic tactics.*

⁵⁶⁸ TNA, ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, Apr 1943*; TNA, ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, May 1943*; TNA, ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, Jun 1943*; TNA, ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, Jul 1943*; TNA, ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, Aug 1943*; TNA, ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, Sept 1943*; TNA, ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, Oct 1943.*

two squadrons, which would bring the total number of operational Venturas in the Union up to over a 100.

	Required Strength		Actual Strength		Deficiency	
	Aircraft	Squadrons	Aircraft	Squadrons	Aircraft	Squadrons
Catalina	117	13	57	7	60	6
Hudson	0	0	32	2	0	0
Ventura	62	5	38	3	24	2
Wellington	48	3	1	1	47	2
Liberator	12	1	0	0	12	1
Total	239	22	128	13	143	11

Table 5.3: Aircraft requirements in South Africa⁵⁶⁹

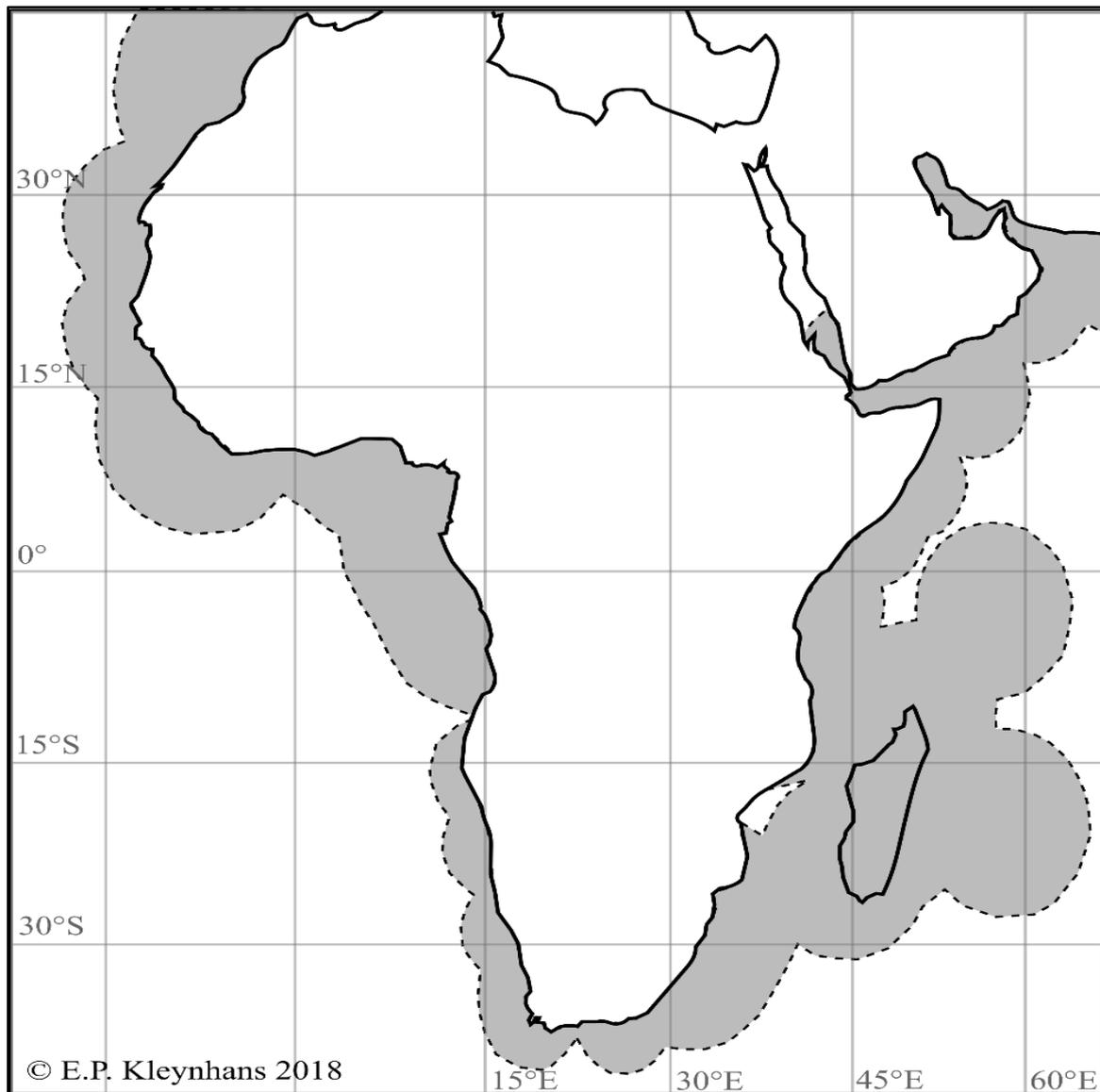
In reality, however, the situation was far from adequate. A small number of aircraft had to carry a considerably large operational load during the course of 1943. As a result, there was an operational deficiency of nearly 143 aircraft in South Africa. These were desperately needed in the ASW sphere (see table 5.3). Additionally, the South Atlantic Station regarded the Venturas in service with the SAAF as entirely unsatisfactory for inshore escort work. They also felt that the current South African policy of exchanging Ventura crews between service in the Middle East and off the South African coast was unacceptable. The operational experience gained by SAAF personnel in the Middle East, they argued, had no bearing on the operational conditions encountered off the South African coastline. After Van Ryneveld became aware of the matter, and upon the implementation of remedial action, all SAAF Ventura crews operational in the Union received adequate training in A/S as well as escort work.⁵⁷⁰

Coastal air patrols, particularly on A/S work and escort duties, remained a regular feature along the South African coast until about October 1943. An investigation of the South Atlantic Station war diaries between April and August 1943 highlights the fact that coastal air patrols – particularly those on escort duties – provided some immunity to merchant shipping from attack by U-boats. In truth, only in a few instances between June and July were escorted convoys with air cover attacked along the South African coast (see Map 5.3). The majority of merchant shipping attacked in South African waters during this period did not travel in convoy, did not have any air cover, and were attacked at night. Tait and his staff argued that these incidents by themselves

⁵⁶⁹ DOD Archives, UWH Civil, Box 339, File: Gordon Cumming U-boat material. *The Commanders-in-Chief South Atlantic and Eastern Fleet, Report on the safety of shipping in South African waters, 30 Mar 1943.*

⁵⁷⁰ TNA, AIR 9/190, Anti U-boat Warfare – African Shipping. *Memorandum by the Secretary of State for Air re Anti-submarine air protection of convoys on the west coast of Africa and the Indian Ocean, 25 Jan 1943*; DOD Archives, UWH Civil, Box 339, File: Gordon Cumming U-boat material. *The Commanders-in-Chief South Atlantic and Eastern Fleet, Report on the safety of shipping in South African waters, 30 Mar 1943.*

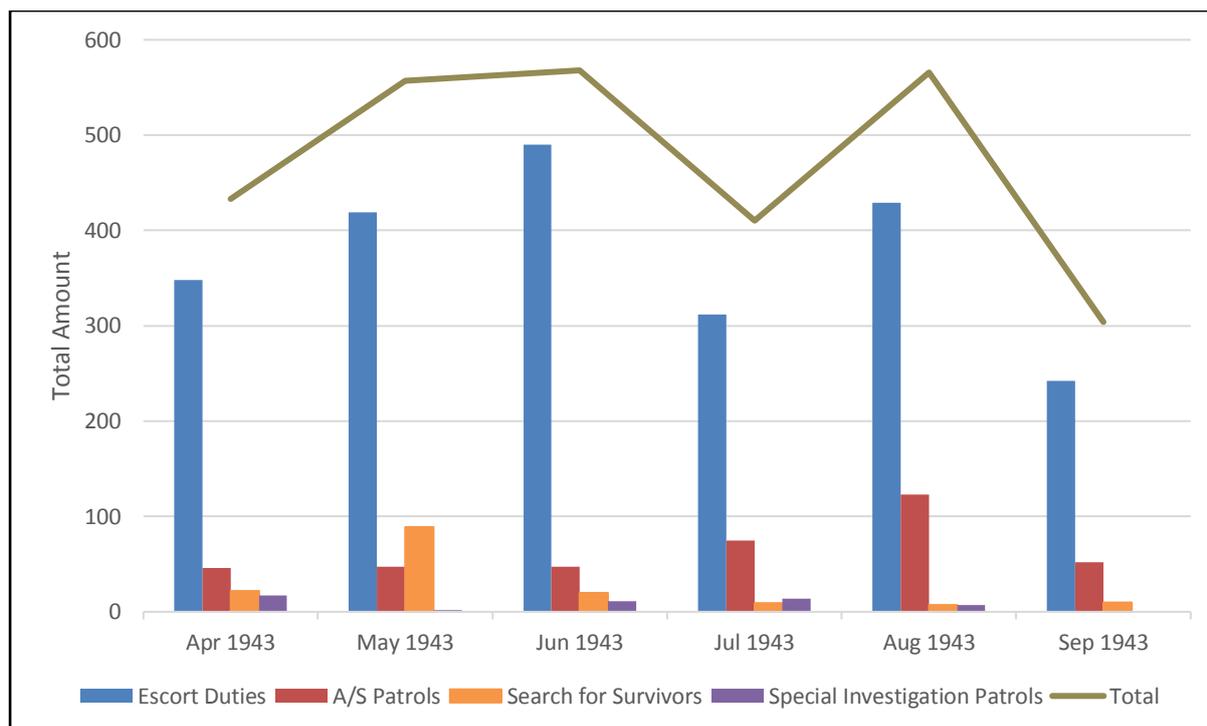
proved the real value of coastal aerial escorts.⁵⁷¹ From August to October, two occurrences prompted the number of coastal air patrols to decrease exponentially. They were the marked decrease in merchant sinkings along the South African coast, and the apparent withdrawal of U-boats from operations in South African waters (see Graph 5.4).



Map 5.3: Extent of air cover available to convoys along the African coastline, 1943⁵⁷²

⁵⁷¹ TNA, AIR 9/190, Anti U-boat Warfare – African Shipping. *Anti-U-boat protection in the Cape Area, 9 Jun 1943*; DOD Archives, CSD, Box 43, File: SANF Anti-Submarine Warfare Committees. *U-boat Warfare in the South Atlantic – Analysis of Attack by U-boat, 10 Jun 1943*.

⁵⁷² TNA, AIR 9/190, Anti U-boat Warfare – African Shipping. *Memorandum by the Secretary of State for Air re Anti-submarine air protection of convoys on the west coast of Africa and the Indian Ocean, 25 Jan 1943*. Map drawn by the author, from information contained in the afore-mentioned document.



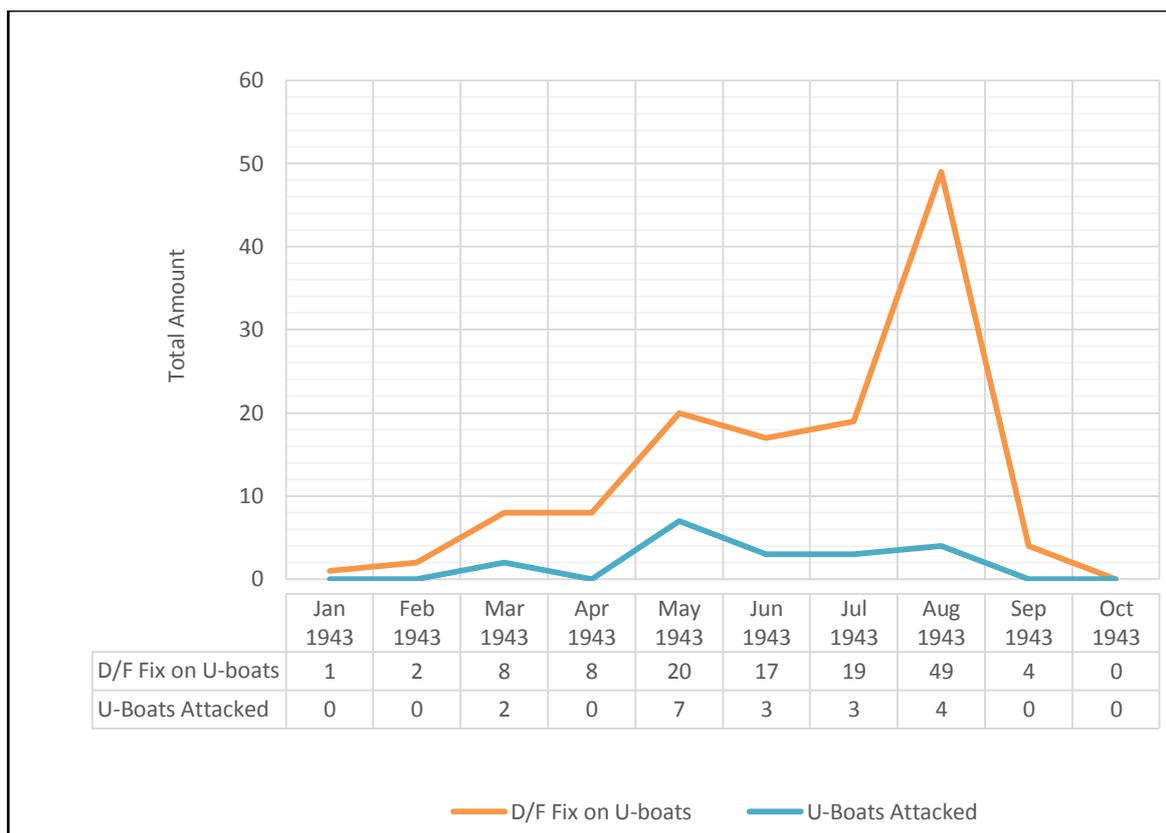
Graph 5.4: Total number of coastal air patrols off the South African coastline, 1943⁵⁷³

There was thus no longer an operational need to provide continuous air cover along the South Africa coast, especially since all convoys in these waters ceased on 16 September. Between April and September, at least 2838 coastal air patrols took place along the South African coast. Their breakdown of sorties was as follows: escort duties – 78.92%; A/S patrols – 13.74%; searches for survivors – 5.53%; and special investigation patrols – 1.79%.⁵⁷⁴ The changing operational situation also prompted the British authorities to withdraw all RAF and FAA squadrons in South Africa, except for No. 262 RAF Squadron which continued to be based at Durban with a detachment at Langebaan.⁵⁷⁵

⁵⁷³ TNA, ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, Apr 1943*; TNA, ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, May 1943*; TNA, ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, Jun 1943*; TNA, ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, Jul 1943*; TNA, ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, Aug 1943*; TNA, ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, Sept 1943*.

⁵⁷⁴ TNA, ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, Apr 1943*; TNA, ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, May 1943*; TNA, ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, Jun 1943*; TNA, ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, Jul 1943*; TNA, ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, Aug 1943*; TNA, ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, Sept 1943*.

⁵⁷⁵ TNA, ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, Oct 1943*.



Graph 5.5: Total number of D/F fixes and reported attacks on U-boats, 1943⁵⁷⁶

Last, the formation of a Combined Operations Room at Combined Headquarters in Cape Town, manned by members of both the UDF and South Atlantic Station, ensured unity of action throughout the planning and execution of ASW measures and operations in South African waters. The operational experience gained by both the South African and Allied air and naval forces throughout 1942 and 1943, furthermore assured that a swift, calculated, decision-making process underpinned the hunt for German U-boats still operational off the South African coast during the remainder of the war.⁵⁷⁷ By 1943,

⁵⁷⁶ TNA, ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, Jan 1943*; TNA, ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, Feb 1943*; TNA, ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, Mar 1943*; TNA, ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, Apr 1943*; TNA, ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, May 1943*; TNA, ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, Jun 1943*; TNA, ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, Jul 1943*; TNA, ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, Aug 1943*; TNA, ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, Sept 1943*; TNA, ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, Oct 1943*.

⁵⁷⁷ DOD Archives, UWH Civil, Box 339, File: Gordon Cumming U-boat material. *The Commander-in-Chief South Atlantic and eastern fleet, Report on the safety of shipping in South African water*, 30 March 1943; DOD Archives, Diverse, Group 1, Box 123, File: Coast 22 (O) Organisation general. *Letter from air headquarters East Africa to OC Advanced Operations Section air headquarters East Africa re operation control to be exercised by the Advanced Operations Section, air headquarters, East Africa, situated at Cape Town*, 11 May 1943.

the Combined Headquarters received ample warning from the Admiralty of the presence of U-boats travelling to and from their operational areas off South Africa and further afield. Additionally, throughout 1943, the High-Frequency/Direction Finding (HF/DF) stations belonging to the SO "Y" Organisation in South Africa obtained increasingly accurate plots of the U-boats operational along the Union's coast through intercepting their wireless transmissions (see Graph 5.5). This naturally allowed Combined Headquarters to allocate and dispatch the appropriate naval and air forces for offensive operations aimed at locating and destroying the U-boats active in South African waters.⁵⁷⁸

Despite the major improvements in ASW measures discussed supra, Tait and Somerville identified several matters relating to ASW that remained problematic. To some extent, these circumstances contributed to the continued loss of merchant shipping to U-boat operations in the Southern Oceans throughout 1943. First, it was argued that the quality and experience of convoy commanders employed in South African waters remained wanting throughout. Unfortunately, the cream of the RN officers regarded service with the South Atlantic Station as a backwater posting, far-removed from the 'real' naval war and not conducive to promotion. Tait and Somerville were only too aware that an experienced convoy commander, with adequate A/S vessels and staff under his command, proved crucial when under attack by U-boats.⁵⁷⁹

Second, the continued illumination of some coastal lights, such as the Cape Agulhas lighthouse, helped the U-boats to identify targets, and establish their positions along the South African coastline. A clear example was the sinking of the merchantman *Queen Anne* (4,937 tons) on 10 February 1943, which had been silhouetted by the illuminated beam coming from the Cape Agulhas lighthouse. After June 1942, only the lighthouses at Cape Point and Cape Agulhas remained fully lit, while the SAR&H ordered the extinguishing of the remaining non-essential coastal lights. All harbour, shore and street lights were also reduced in illumination and screened from seaward. By mid-February 1943, however, the remaining coastal lights in operation had been reduced in power and illumination.

By the end of September, Coastal Area Command had reviewed the blackout conditions enforced along the South African coast and drastically altered them. The improved operational conditions prompted Coastal Area Command to alter the blackout conditions greatly, and even suspend the blackouts at Port Elizabeth and East London

⁵⁷⁸ DOD Archives, CGS War, Box 265, File: Sitreps coastal area. *Most secret cypher between Coastcom and Dechief Fortcoms, 21 Aug 1943.*

⁵⁷⁹ DOD Archives, UWH Civil, Box 339, File: Gordon Cumming U-boat material. *The Commanders-in-Chief South Atlantic and Eastern Fleet, Report on the safety of shipping in South African waters, 30 Mar 1943.*

altogether. By 31 May 1945, all coastal lighting along the South African coastline reverted to its normal peacetime illumination strength.⁵⁸⁰

Third, during some stages, the SAAF and RAF aircraft, which provided cover for the convoys, travelled too far away from the ships they were protecting. As a result, a revised, close-escort programme came into being for aircraft accompanying convoys, whereby circuits of 20, 10 and 5 miles had to be maintained by the aircraft. This allowed for close air support to the convoy, while some of the aircraft conducted long-range reconnaissance ahead and to the flanks of the convoy in the search for U-boats.⁵⁸¹

Fourth, there were several improvements in shore–ship wireless transmissions, which was facilitated by the greater number of wireless stations available along the South African coast by the latter half of 1943. Despite this, communications between merchant shipping and shore-based establishments in the Union remained wanting. As a result, news of U-boat attacks were transmitted too late to activate the appropriate ASW measures.⁵⁸² Lastly, several of the convoy escorts operational in South African waters, predominantly South African trawlers, were too slow to conduct efficient A/S sweeps around the convoys, let alone keep up with the convoy itself. Their speed was thus a considerable risk to the protection of the convoys around the South African coast throughout the war.⁵⁸³

In July 1943, the Admiralty dispatched Capt D.C. Howard-Johnston RN, an expert who was shaping policy to deal with the new Type XXO high speed U-boats, to South Africa. He was to assist and advise the staff of the South Atlantic Station and Coastal Area Command on the conduct of A/S operations, as well as the control and training of these forces. Howard-Johnston arrived in South Africa on 28 July, and directly reported to the Combined Headquarters in Cape Town. Without delay, he acquainted himself with the state of A/S operations in the South African waters. During the course of his stay, Howard-Johnston visited all RN and SANF vessels employed on escort and A/S duties and each of the RAF and SAAF operational squadrons. He also called on all South

⁵⁸⁰ DOD Archives, CGS War, Box 38, File: Blackouts and lighthouses. *Harbour and Coast Lights, 19 Jun 1942*; DOD Archives, CGS War, Box 38, File: Blackouts and lighthouses. *Correspondence between Secretary of Defence and Minister of Justice re black-out conditions coastal area, 29 Sept 1943*; DOD Archives, CGS War, Box 38, File: Blackouts and lighthouses. *Letter from C-in-C South Atlantic to CGS, 31 May 1945*.

⁵⁸¹ DOD Archives, CFAD, Box 12, File: Cape Fortress Intelligence Summary. *Cape Fortress intelligence summary no. 10, 4 Dec 1942* (Appendix A – Anti-submarine warfare); DOD Archives, CFAD, Box 12, File: Intelligence – Attacks on U-boats and submarines. *Lecture on A/S warfare by Wing Commander Lombard, 22 Feb 1943*.

⁵⁸² DOD Archives, CGS War, Box 226, File: W.T. stations: Ship to shore & ship to aircraft. *Letter from Harlech to Smuts re Admiralty Policy with regard to wireless communication, 9 Mar 1943*.

⁵⁸³ DOD Archives, CSD, Box 25, File: SANF Escort Force exercises. *Proposed Atlantic convoy instructions re action to counter U-boats anti-ASDIC tactics*; DOD Archives, UWH Civil, Box 339, File: Gordon Cumming U-boat material. *The Commanders-in-Chief South Atlantic and Eastern Fleet, Report on the safety of shipping in South African waters, 30 Mar 1943*; DOD Archives, CGS War, Box 226, File: Wireless stations (communications with). *Secret note on the interception of illicit communications, 2 Nov 1939*.

African and British shore establishments, fortress commands, operational headquarters and training establishments situated along the South African coast between Simon's Town and St Lucia. During these visits, he readily discussed current tendencies in A/S operations. He additionally spent a considerable amount of time on talks, lectures and small tactical games for which he utilised the British A/S experience in the Western Approaches as an example. Over and above this, he issued a report to the Admiralty on his visit. The assessment included an evaluation of the South Atlantic Station from an A/S point of view – particularly at the strategic, operational and tactical levels of war.⁵⁸⁴

At the strategic level, Howard-Johnston was concerned that the Combined Headquarters in Cape Town controlled all convoys and A/S operations. The centralisation of control particularly perturbed him. He compared the control of operations at sea in the Mozambique Channel from Cape Town to that of the command over similar operations between Gibraltar and Sardinia from Plymouth. He argued that Durban was, in effect, the true operational centre along the South African coast.

The reinforcement of the South Atlantic Station by modern A/S vessels was recommended, along with the improved quality of air cover available across southern Africa. According to Howard-Johnston, both of the above, along with the wireless interceptions from the HF/DF stations, opened up the possibility of dedicated offensive operations aimed at the destruction of U-boats. At the operational level, Howard-Johnston was particularly impressed with the SO "Y" Organisation in South Africa. He commended the tireless efforts of the HF/DF stations in locating U-boats operational along the coast. Throughout August, the South Atlantic Station also experimented in fitting various RN vessels with HF/DF equipment. This greatly increased their offensive possibilities when working in conjunction with the shore-based HF/DF stations. During the month of his stay, three RN frigates, generally larger, faster and more seaworthy than corvettes, arrived at the South Atlantic Station. The HMS *Kale*, HMS *Tay* and HMS *Derg* were each fitted with the latest experimental HF/DF gear.

Howard-Johnston further stated that a series of combined operations had been instituted off the South African coast. During these operations, both aircraft and naval vessels had conducted sweeps of areas where U-boats would likely operate. While he was at Cape Town, two such operations occurred: Operation KITBAG and Operation HAVERSACK. Howard-Johnston deduced that the observed reduction in seaborne traffic in South African waters had opened up the ability of regular offensive action by air and

⁵⁸⁴ TNA, ADM 1/12643, Anti-Submarine Operations – South Atlantic Station. *Report of Captain Howard-Johnston's Visit to the Cape, Oct 1943*. For more on the critical contribution of Howard-Johnston in terms of anti-submarine warfare see Llewellyn-Jones, *The Royal Navy and Anti-Submarine Warfare, 1917-49*.

surface forces without depriving merchant shipping of the nominal forces required for escorting convoys.⁵⁸⁵

Howard-Johnston did not spare the South Atlantic Station on his criticism of the alarming state of affairs prevalent at a tactical level. His principle concern was that the surface escorts, particularly the SANF vessels, lacked adroitness when a U-boat attack on a convoy commenced. Moreover, he was alarmed at the slow speed of these vessels, as well as the outdated nature of their A/S equipment. Leaving no doubt as to his opinion, he argued that there was no appropriate strategic policy with regard to ASW, and that the rudimentary tactical policy in place was largely based on the Atlantic Convoy Instructions of 1943. It was thus a policy altogether unsuited for South African waters and its unique operational conditions.

Howard-Johnston was particularly alarmed that this state of affairs continued to exist after the three years of naval war, and two separate U-boat offensives off the South African coast. He pointed out the need for the appointment of an A/S Officer on the staff of the South Atlantic Station to coordinate all A/S work, as well as regular visits by officers with practical A/S experience to help with training and operations.

Under Howard-Johnston's watch, a tactical policy applicable to local operational circumstances was drawn up. In brief, the tactical policy focussed on avoiding attacks by U-boats as far as possible through appropriate A/S measures. At the same time, the surface and air units would be informed of the appropriate offensive actions to take in the event of an attack on a U-boat. Howard-Johnston was satisfied that most of the recommendations which he made to Tait and his staff were well received, and subsequently put into action in South African waters. One of the immediate results of the improvements in ASW during the latter half of 1943 stands out. It is the location and destruction of *U-197* towards the end of August, which coincided with Howard-Johnston's visit to the Union.⁵⁸⁶

Between 16 and 18 August 1943, a number of HF/DF stations in South Africa picked up several wireless transmissions sent between the *BdU*, *U-181* (Lüth), *U-197* (Bartels) and *U-196* (Kentrat). The sole purpose of these indiscriminate wireless transmissions was to arrange a routine rendezvous between the three U-boats for the exchange of a new secret cypher called 'Bellatrix', as well as for further operational instructions. On 19 August, *U-181* met *U-197* in an area approximately 100 miles to the south of Cape St Marie in Madagascar. Lüth subsequently took it upon himself to meet up with Kentrat 280 miles south-west of his current position. The two U-boats met the following day, during which they picked up a wireless transmission from Bartels stating that an aircraft had attacked him. It was the Combined Headquarters in Cape Town

⁵⁸⁵ TNA, ADM 1/12643, Anti-Submarine Operations – South Atlantic Station. *Report of Captain Howard-Johnston's Visit to the Cape, Oct 1943.*

⁵⁸⁶ TNA, ADM 1/12643, Anti-Submarine Operations – South Atlantic Station. *Report of Captain Howard-Johnston's Visit to the Cape, Oct 1943.*

which had utilised the former wireless interceptions to accurately pinpoint the position of *U-197* in the southern extremity of the Mozambican channel. The location of the U-boat was fixed to an operational area approximately 250 miles south-west of Cape St Marie in Madagascar. Catalinas from No. 259 RAF Squadron in St Lucia were ordered to work at the limits of their endurance by joining the search for the U-boat. The aircraft subsequently rebased to Tular in south-western Madagascar, which they continued to use as a forward operating base throughout the operation.⁵⁸⁷



Fig 5.6: Robert Bartels – the commander of *U-197*⁵⁸⁸

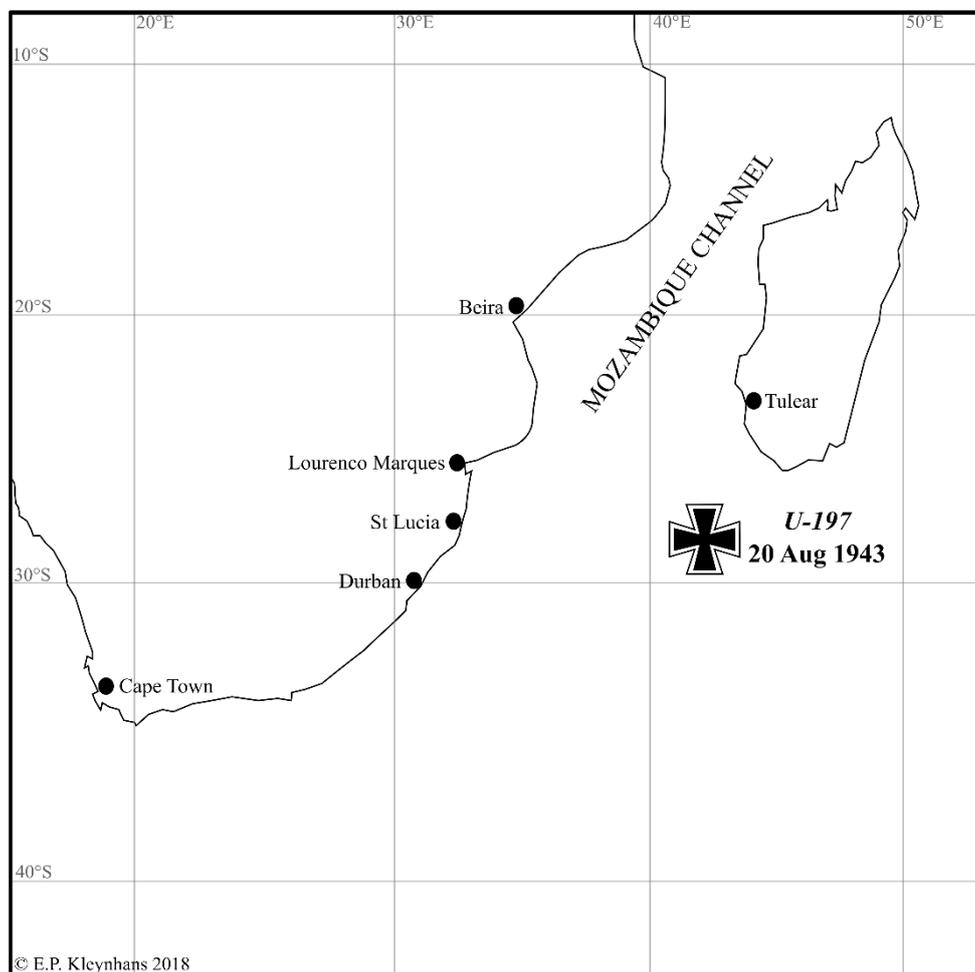
Shortly after midday on 20 August, Catalina C/259, piloted by Flt Lt O. Barnett, sighted *U-197*. The U-Boat had surfaced approximately 300 miles to the south-west of Cape St Marie. Barnett immediately launched an attack and succeeded in dropping at least six depth-charges on *U-197*. An unequivocal reply came from the U-boat in the form of machinegun and canon fire throughout the attack, though the Catalina received no damage. Barnett realised the success of his attack as the U-boat critically listed to port while leaking a substantial amount of diesel oil.⁵⁸⁹ The U-boat submerged for a brief while in the afternoon, whereafter it surfaced and once more tried to engage the Catalina. In the meanwhile, Barnett had dropped smoke- and flare-floats, while awaiting the arrival of more aircraft from St Lucia. Throughout the afternoon Barnett continued to circle *U-197*, keeping constant visual contact with the stricken U-boat. Later in the afternoon, shortly before dark, Catalina N/265, piloted by Flt Off C.E. Robin, joined Barnett and commenced a final onslaught on *U-197*. During this final attack, Robin made

⁵⁸⁷ Turner *et al.* *War in the Southern Oceans*, pp. 234-235.

⁵⁸⁸ <https://uboat.net/men/commanders/43.html> (Accessed 6 May 2018).

⁵⁸⁹ TNA, ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, Aug 1943*.

three runs during which six depth-charges managed to find their targets successfully. This final attack proved fatal, and Bartels and his U-boat disappeared below the surface for one last time, leaving only a large patch of diesel oil behind to confirm the successful kill (see Map 5.4).⁵⁹⁰



Map 5.4: Location of the sinking of *U-197*

While the sinking of *U-197* proved the first sole air success during the course of the naval war in the Southern Oceans,⁵⁹¹ it also highlighted the great strides made regarding ASW in these waters. The ASW measures in force by August 1943 certainly stand in stark contrast to those implemented during October 1942. The establishment of convoys, the provision of adequate air and naval escorts, as well as near continuous A/S and coastal air patrols along the South African coastline, had effectively robbed the U-boats of their initial operational advantage. This is evident through the near monthly reduction in the number of merchant sinkings in South African waters. While the U-boats still scored some operational successes, these were few and far between. More

⁵⁹⁰ Turner *et al.* *War in the Southern Oceans*, pp. 235–236.

⁵⁹¹ TNA, ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, Aug 1943*.

importantly, however, the UDF and South Atlantic Station had succeeded in securing control over the operational initiative in the Southern Oceans. This control was mainly imposed through the increasing interception and pinpointing of U-boat positions by the HF/DF stations in the Union. The sinking of *U-197* also ushered in an entirely new phase in the naval war, one where the UDF and South Atlantic Station moved over to the offensive and instituted a number of combined operations aimed at the destruction of U-boats.

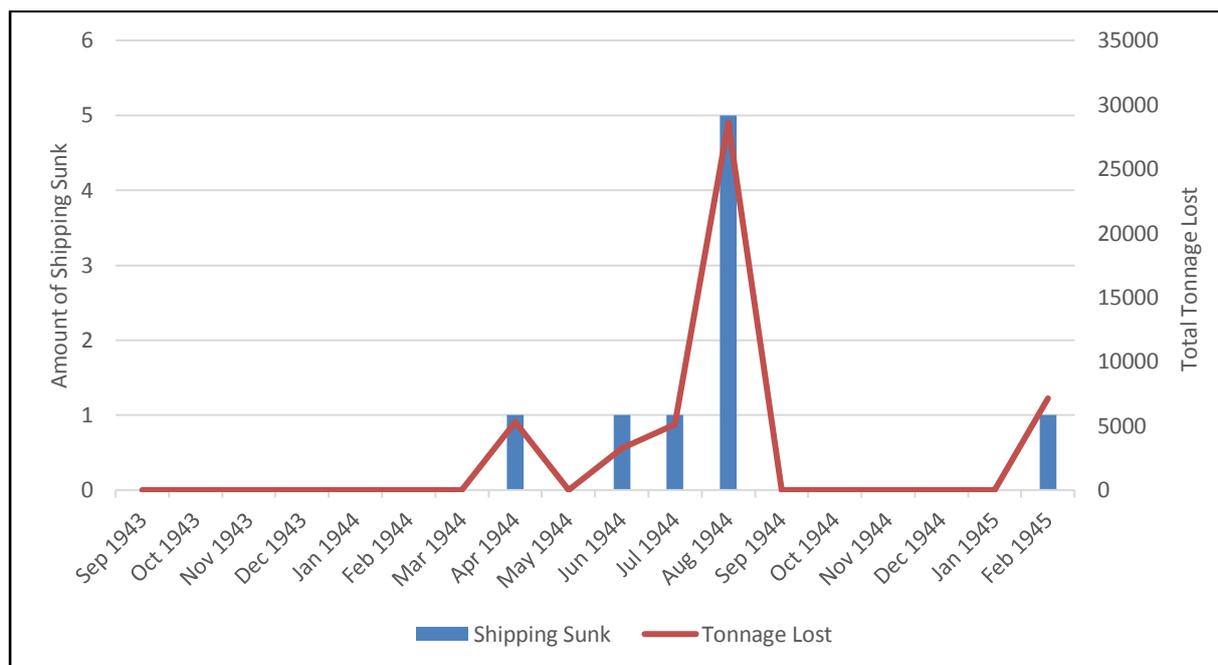
5.3 Reduced sinkings, combined operations, and the culmination of the naval war

The *BdU* ceased to regard the waters off the South African coast as a viable operational area from September 1943. It was initially argued by the *BdU* that the submarines earmarked for offensive operations in the Far East would inevitably pass through South African waters before reaching their far-eastern bases at Penang and Surabaya. This would provide the U-boats with ample opportunity to attack Allied merchant shipping along the South African coastline, which would take place during their journeys to and from their new operational areas. This line of argument is more or less accurate. However, one cannot separate the disregard shown by the *BdU* for the South African coast as an operational area from the drastically improved ASW measures in these waters. In point of fact, the ASW measures in place in the Southern Oceans by the latter half of 1943 had been so efficient that the U-boats found it increasingly difficult to operate successfully against merchant shipping. There were, however, exceptions to the rule, with nine merchantmen lost off the South African coast between March 1944 and February 1945 (see Graph 5.6).⁵⁹²

Stephen Roskill has a hypothesis about the triumph in the war against the U-boats. He asserts that the decisive victory was the result of the adoption of the largely defensive strategy of sailing merchant shipping in convoys, and providing such convoys with strong surface and air escorts. He further states that the British desire to assume the offensive against the U-boats during the first two years of the war was not well thought through and ultimately disastrous. The persistent employment of a large number of RN vessels to hunt U-boats in the vast oceans spaces, he argued, was counterproductive. This was because the vessels could do better by providing escort duties to the large number of ocean-going convoys. It is a known fact that these hunting groups achieved negligible successes during the naval war, especially since it led to the dispersal of the slender naval resources available to the Allies for ASW. Besides, the dispersal of these slender resources resulted in the ineffective escorting of convoys, which naturally led to heavy operational losses on the part of merchant shipping in particular. Furthermore, several tactical opportunities were missed to engage the U-boats which attacked the convoys. The failure to enter into combat was due to the lack

⁵⁹² DOD Archives, UWH Civil, Box 220, File: Union War Histories Translations 14a. *U-boat Operations of the Axis Powers in S.A. Waters compiled by Dr Jurgen Rohwer, 1954; Turner et al, War in the Southern Oceans*, pp. 238-255.

of sufficient escort forces. The initial belief that bomber aircraft could largely defeat the U-boat peril through strategic bombing campaigns was misconstrued. This was so particularly since focusing aerial attacks against the Axis submarine bases – rather than protecting and escorting convoys on the open sea – did not prove to yield the required operational results during the war. According to Roskill, the most effective way of defeating the U-boat peril was to focus the operational attention on the area in which the U-boats were most likely to attack merchant shipping, and then launch a series of combined operations aimed at locating and destroying said U-boats.⁵⁹³



Graph 5.6: Decreased merchant shipping losses in South African waters, 1943-1945⁵⁹⁴

From the end of August 1943, the primary concern of the South Atlantic Station was the interception and destruction of U-boats travelling between Germany and the Far East as they rounded the Cape of Good Hope. Tait and his staff realised that the chances of success in the pursuit of this endeavour was negligible. Yet they did profess that certain operational exigencies experienced by the U-boats while traversing the Cape of Good Hope worked in their favour. The large operational distances between Germany and the Far East, as well as the small reserve of fuel carried by each U-boat, meant that even moderate damage caused to a U-boat during an attack could ensure eventual operational results. Even if the A/S hunting forces did not obtain a straightforward kill, any attack on a U-boat ensured that it expended extra fuel. All told, the essence of these attacks was to harry the U-boats to a point of exhaustion. Gordon-Cumming makes an interesting assertion. He maintains that while both SANF and RN

⁵⁹³ Roskill, *The War at Sea: Volume I – The Defensive*, pp. 10-11.

⁵⁹⁴ Gordon-Cumming, *Official History of the South African Naval Forces*, pp. 287-299; DOD Archives, Map Collection, File: War in the Southern Oceans maps. *Chart and List of Ships Sunk Captured or Damaged in the Waters off Southern Africa, 1939-1945*.

vessels formed part of each of the carefully planned combined operations in South African waters, it was only SAAF and RAF aircraft that managed to locate the U-boats and attack them during the course of these operations. Nevertheless, the combined operations required a great deal of unity of action and purpose to ensure their success.⁵⁹⁵

By the latter half of 1943, the SAAF and RAF pilots involved in A/S sorties around the South African coast became somewhat adept at the tactical and operational intricacies that underpinned an aerial attack on a U-boat. A Cape Fortress Intelligence Summary of December 1942 highlights the fact that a pilot about to strike a U-boat has only a small window of time during which to decide how to approach the attack.

The intelligence summary identified six important factors that pilots had to consider during an assault on a U-boat. First, within fifteen seconds of diving, the submarine would have travelled at least 150 feet. Second, fifteen seconds after diving, the submarine would be at an average depth of 45 feet. Third, the conning-tower would have deviated a distance of 10 feet to either side, with the turning circle of the U-boat becoming sharper as time lapses. Fourth, the psychological reaction of a U-boat skipper is to crash-dive and turn either to port or starboard in an effort to put the greatest distance between him and the aircraft. Fifth, submarines are more likely to crash-dive as opposed to normal dive upon attack. And last, as a submarine is approximately 200 feet long, 20 feet wide, and 16 feet high, aircraft should set their depth charges to explode at a depth of 50 feet and then drop them at 30 foot intervals in order to ensure success during an attack. If pilots kept the above six factors into account, they were only required to worry about the time it would take their aircraft to reach the spot where the U-boat had dived, as this naturally affected the position where they could drop their depth-charges. The intelligence summary finally cautioned the pilots that not all U-boats dived when attacked by aircraft and that some preferred to fight it out with the aircraft using their AA guns.⁵⁹⁶

Under the auspices of the Commander Coastal Air Defences, A/S training for SAAF pilots in 1943 became more practical. The unique operational conditions along the South African coastline were a primary factor of this. In an A/S lecture delivered by a certain Wg Cdr Lombard in February 1943, the South African pilots were reminded of the importance of keeping a constant visual lookout while on A/S patrols. Lombard encouraged the pilots to establish a definite lookout system among their crews and to rotate the member on lookout every 30 minutes to avoid fatigue. The lecture furthermore dismissed the idea that locating a U-boat came down to the individual luck

⁵⁹⁵ Turner *et al*, *War in the Southern Oceans*, p. 240; Gordon-Cumming, *Official History of the South African Naval Forces*, p. 89.

⁵⁹⁶ DOD Archives, CFAD, Box 12, File: Cape Fortress Intelligence Summary. *Cape Fortress Intelligence Summary No. 10, 4 Dec 1942*; DOD Archives, CFAD, Box 12, File: Attacks on U-boats and submarines. *Circular from CCAD to Fortress Command and SAAF squadrons regarding U-boat attacks, 12 Jan 1943*.

of each aircraft crew. He reminded the pilots of that which experience had proven: that the most effective aircraft in terms of ASW were those whose crews were the most efficient and well-trained. The lecture further suggested that aircraft in patrols aimed at locating U-boats should fly at a maximum height of 5,000 feet, and depending on cloud cover, adjust their height to fly just below it. Pilots were also encouraged to use cloud cover to their advantage, and conceal their impending attack by only breaking cover two miles from the U-boat. The highly specialised nature of ASW, in general, was once more emphasised by Lombard, while he cautioned the pilots to remain continuously aware of the seriousness of the U-boat peril along the South African coast. Lombard, in conclusion, wished the pilots 'Good Hunting', and stated that "success will be yours if you keep yourself in constant training."⁵⁹⁷

The series of combined operations launched in South African waters from the latter half of 1943 arguably heralded in the culmination of the A/S operations off the South African coast for the remainder of the war. Between November 1943 and August 1944, there were at least eight such combined operations launched with the sole intention of locating and destroying U-boats traversing the Cape of Good Hope. Throughout this period, both South African and British naval, air and ground forces cooperated in the execution of the combined operations. The individual operations were: BARRAGE⁵⁹⁸ (9 Nov 1943); BUSTARD⁵⁹⁹ (3 Dec 1943); WOODCUTTER⁶⁰⁰ (4 Jan 1944); WICKETKEEPER⁶⁰¹ (8 Mar 1944); THROTTLE⁶⁰² (31 May 44); STEADFAST⁶⁰³ (12 Jun 1944); TRICOLOUR⁶⁰⁴ (5 Jul 1944); and VEHEMENT⁶⁰⁵ (4 Aug 1944) (see Table 5.4). These operations were the result of the increasing successes evolving from the interception of wireless transmissions of the U-boats by the HF/DF stations in the Union. Of these eight operations, only two, WICKETKEEPER and TRICOLOUR, managed to locate and engage U-boats.⁶⁰⁶ A detailed discussion of Operation WICKETKEEPER in particular, will reveal the unprecedented success of the combined operations along the

⁵⁹⁷ DOD Archives, Commander Fortress Air Defence (CFAD), Box 12, File: Attacks on U-boats and submarines. *Lecture on A/S warfare by Wing Commander Lombard, 22 February 1943.*

⁵⁹⁸ DOD Archives, Diverse, Group 1, Box 125, File: Barrage II. *Circular from C-in-C South Atlantic to GOC Coastal Area re Barrage II, 24 Nov 1943.*

⁵⁹⁹ DOD Archives, Diverse, Group 1, Box 125, File: Barrage II. *Operation Bustard ops order, 27 Nov 1943.*

⁶⁰⁰ DOD Archives, Diverse, Group 1, Box 125, File: Woodcutter. *Operation Woodcutter ops order, 1 Jan 1944.*

⁶⁰¹ DOD Archives, Diverse, Group 1, Box 125, File: Operation Wicketkeeper. *Operation Wicketkeeper, 8 Mar 1944.*

⁶⁰² DOD Archives, Diverse, Group 1, Box 126, File: Operation "Throttle". *Operation Throttle ops order, 30 May 1944.*

⁶⁰³ DOD Archives, Diverse, Group 1, Box 126, File: Operation "Steadfast". *Operation Steadfast ops order, 12 Jun 1944.*

⁶⁰⁴ DOD Archives, Diverse, Group 1, Box 126, File: Operation Tricolour (location + destruction U-boat). *Message from Admiralty to C-in-C SA re Operation Tricolour, 25 Jul 1944.*

⁶⁰⁵ DOD Archives, Diverse, Group 1, Box 123, File: Operation Vehement. *Operational order for Operation Vehement, 5 Aug 1944.*

⁶⁰⁶ Gordon-Cumming, *Official History of the South African Naval Forces*, pp. 89-91.

South African coast during the war. WICKETKEEPER was the only one of the operations during which a U-boat was successfully located, tracked, attacked and sunk.

	Operation WICKETKEEPER	Operation TRICOLOUR
Period	8-11 March 1944	5-8 July 1944
Target	One to three German U-boats	German U-boat
Location	39°S;33°E (westbound) 35°S;2215°E (westbound) 38°30'S;08°30'E (southbound)	32°00'S;36°30'E
Object	Location + destruction of U-boats	Location + destruction of U-boat
Naval Forces	HMS <i>Lady Elsa</i> HMS <i>Lewes</i> HMS <i>Norwich City</i> HMSAS <i>Southern Barrier</i> HMSAS <i>Roodepoort</i>	HMS <i>Pathfinder</i> HMSAS <i>Turffontein</i> HMSAS <i>Immortelle</i> HMSAS <i>Sonneblom</i> HMSAS <i>Vereeniging</i>
Air Forces	22 SAAF Sqn (Mtubatuba) 23 TBR SAAF Sqn (Phesantekraal) 25 SAAF Sqn (Port Elizabeth) 27 TBR SAAF Sqn (Phesantekraal) 262 RAF Sqn(Langebaan)	RAF Catalinas SAAF Venturas
Target Located	Yes, visually and through D/F on several occasions	Yes, visually and through D/F
Target Engaged	Yes, <i>U-178</i> depth-charged by a Ventura on 8 March, and <i>UIT-22</i> strafed and depth-charged throughout 11 March	Yes, engaged on two separate occasions by aircraft during which U-boat was strafed and depth-charged
Outcome	<i>UIT-22</i> successfully sunk	Unidentified U-boat severely damaged, not sunk

Table 5.4: Comparison between Operations WICKETKEEPER and TRICOLOUR⁶⁰⁷

By the beginning of March 1944, the operational conditions off the South African coast once more changed. Both the UDF and South Atlantic Station had been lulled into a false sense of security since September 1943. As a result of this feeling of safety, there was a marked reduction in the number of coastal air patrols along the seaboard. Independent sailings between Cape Town and Durban were also reintroduced. The operational conditions, however, soon underwent change. In November 1943, the *BdU* ordered *U-178* (Spahr), then based at Penang in the Far East, to return to Europe. It was to expend its torpedoes on the voyage home across the Indian Ocean. By the end of December, *U-178* had refuelled from the *Charlotte Schliemann* 200 miles to the south of Mauritius. It had then travelled onwards with the explicit aim of making good a rendezvous with *UIT-22* (Wunderlich) to the south of Cape Town. While journeying south, American aircraft attacked *UIT-22* near Ascension Island and caused considerable damage and a loss of fuel. The planned meeting between *U-178* and *UIT-22*

⁶⁰⁷ DOD Archives, Diverse, Group 1, Box 125, File: Operation Wicketkeeper. *Operation Wicketkeeper, 8 Mar 1944*; DOD Archives, Diverse, Group 1, Box 126, File: Operation Tricolour (location + destruction U-boat). *Message from Admiralty to C-in-C SA re Operation Tricolour, 25 Jul 1944*.

was the result of this attack, with Spahr ordered to refuel Wunderlich's damaged U-boat.⁶⁰⁸



Fig 5.7: Karl Wunderlich – the commander of *UIT-22*⁶⁰⁹

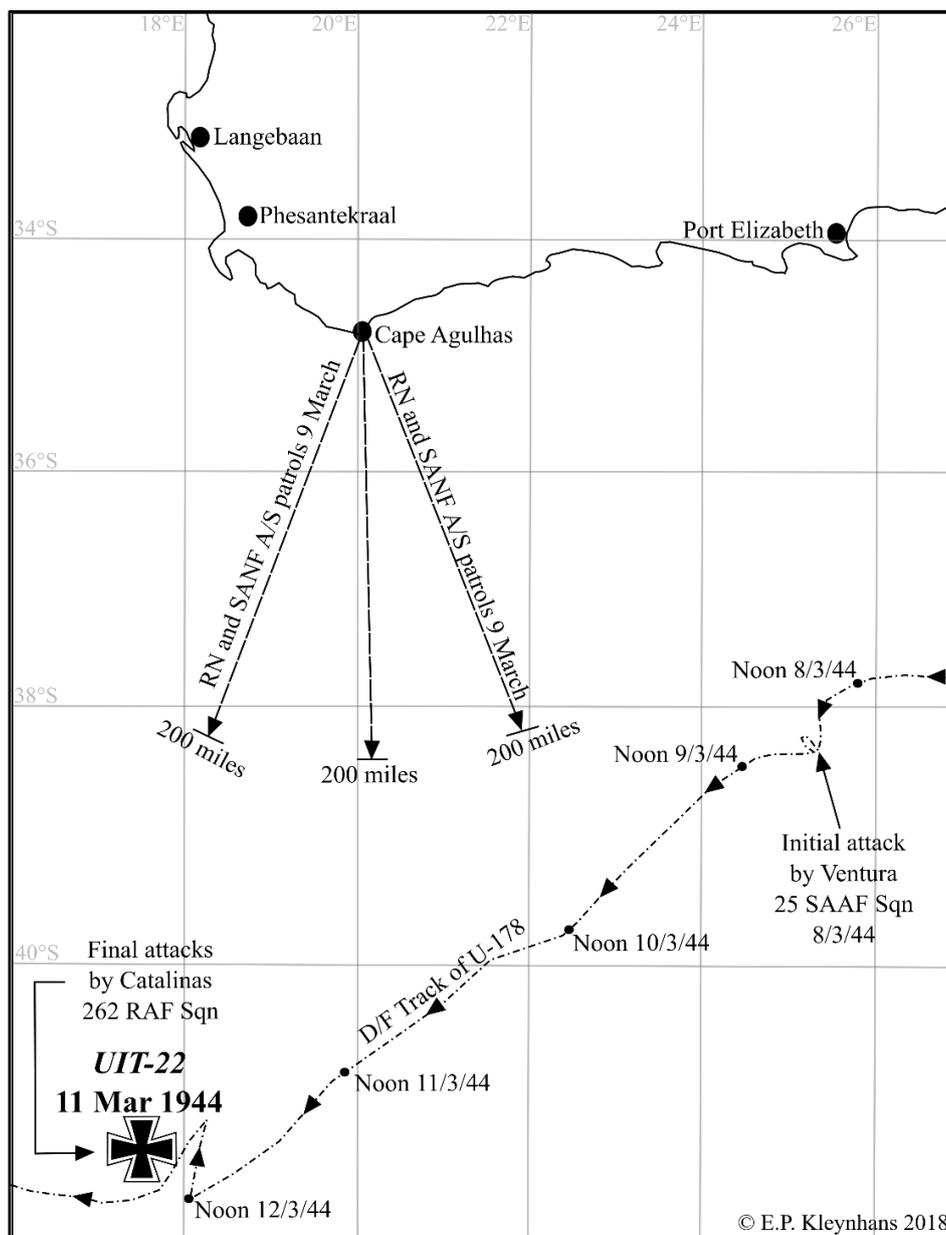
On 5 March, the HF/DF stations in the Union established such a good fix on the indiscriminate wireless transmissions of *U-178*, that the UDF and South Atlantic Station ordered an immediate A/S operation with the sole aim of locating and destroying the westbound U-boat. The combined operation, with the appropriate codename WICKETKEEPER, started on 8 March. It saw sterling cooperation between both British and South African naval, air and ground forces (see Map 5.5).⁶¹⁰ Two SANF vessels, HMSAS *Southern Barrier* and HMSAS *Roodepoort*, immediately left Cape Town and proceeded to patrol an area roughly 140 miles south-south-west of Cape Agulhas. Concurrently, HMS *Lady Elsa*, HMS *Lewes* and HMS *Norwich City* extended their patrol 60 miles further south. Meanwhile, several SAAF and RAF aircraft flew A/S patrols in the hope of locating *U-178*. On 8 March, a Ventura from No. 25 SAAF Squadron sighted *U-178* approximately 350 miles to the south of Port Elizabeth. The aircraft attacked *U-178* with five depth-charges after it had dived. The U-boat, however, received no

⁶⁰⁸ Turner *et al*, *War in the Southern Oceans*, pp. 242-243.

⁶⁰⁹ <https://uboat.net/men/commanders/1383.html> (Accessed 6 May 2018).

⁶¹⁰ DOD Archives, Diverse, Group 1, Box 125, File: Operation Wicketkeeper. *Operation Wicketkeeper*, 8 March 1944; DOD Archives, CGS War, Box 265, File: Sitreps coastal area. *Most secret Sitrep from Dechief Cape Town to Coastcom, 7 Mar 1944*; DOD Archives, Diverse, Group 1, Box 125, File: Operation Wicketkeeper. *Messages and Sitreps concerning Operation Wicketkeeper, Mar 1944*.

damage, and Spahr continued his journey to the intended rendezvous with an increased sense of vigilance after the attack.⁶¹¹



Map 5.5: Operation WICKETKEEPER and the sinking of *UIT-22*

The staff of the South Atlantic Station correctly judged that the intensive aerial patrols would coerce Spahr into travelling further away from the coast. They thus ordered all aircraft involved in WICKETKEEPER to extend their patrols 60 miles further south and west over the following days. On the morning of 11 March, a Catalina from No. 262 RAF Squadron operating out of Langebaan, spotted something 600 miles to the

⁶¹¹ DOD Archives, Diverse, Group 1, Box 125, File: Operation Wicketkeeper. *Operation Wicketkeeper, 8 Mar 1944*; DOD Archives, SAAF War Diaries, Box 125, File: A3 (25 Sqn Jul '43 – Mar '44). *25 Squadron SAAF War Diary Mar 1944*; DOD Archives, SAAF War Diaries, Box 125, File: A3 (25 Sqn Jul '43 – Mar '44). *25 Squadron SAAF War Diary Mar 1944, Secret UBAT report (Appendix B)*.

south of Cape Point. The aircraft, piloted by Flt Lt F.T. Roddick, identified *UIT-22*, and not *U-178* as expected. Roddick initiated an attack on *UIT-22* post-haste. Wunderlich, showing no intention to dive, responded with a salvo of anti-aircraft fire from his U-boat. During the ensuing attack, Roddick managed to drop five depth-charges on *UIT-22* which all met their intended target. While listing heavily, *UIT-22* submerged amidst a large patch of oil. After a few minutes, the U-boat once more surfaced, but accurate machinegun fire from Roddick compelled Wunderlich to dive once more. During the attack, Roddick's Catalina received some damage from the accurate anti-aircraft fire laid down by Wunderlich, and he soon had to return to base. Two more Catalinas relieved Roddick, and when *UIT-22* surfaced for one last time, Flt Lt A.H. Surrige and Flt Lt E.S.S. Nash simultaneously attacked the U-boat with depth-charges and machinegun fire.⁶¹² The fate of *UIT-22* was hence sealed. Spahr, in a fitting conclusion, best described the deteriorating operational conditions for the U-boats in South African waters when he answered his own question: "Where is one safe nowadays on the high seas? Nowhere."⁶¹³



Fig 5.8: Flt Lt Nash homing in on *UIT-22* during the final attack⁶¹⁴

⁶¹² DOD Archives, SAAF War Diaries, Box 124, File: A4 (23 Sqn Jan–Dec 1944). *23 Squadron SAAF war diary Mar 1944*; DOD Archives, SAAF War Diaries, Box 127, File: D2 (262 Squadron Sept 42 – May 44). *262 Squadron RAF war diary Mar 1944*; DOD Archives, SAAF War Diaries, Box 127, File: D2 (262 Squadron Sept 42 – May 44). *262 Squadron RAF war diary Mar 1944, Secret UBAT report – Flt Lt Roddick (Appendix)*; DOD Archives, SAAF War Diaries, Box 182, File: A1 (SAAF war diary CCAD). *CCAD coastal area headquarters war diary Mar 1944*; DOD Archives, SAAF War Diaries, Box 122, File: A4 (22 Sqn Jan – May 1944). *22 Squadron SAAF war diary Mar 1944*; Turner *et al*, *War in the Southern Oceans*, pp. 243–244.

⁶¹³ Turner *et al*, *War in the Southern Oceans*, p. 245.

⁶¹⁴ DOD Archives, Photographic Repository. 781004773 – *F/Lt E.S.S. Nash attacking U-Boat Uit22 with his Catalina Aircraft*.

The fact that only nine merchantmen were lost in South African waters between April 1944 and February 1945 bears testimony to the efficiency of the combined operations in the Southern Oceans, particularly since these operations removed the operational initiative from the U-boats. For the remainder of the war, A/S activities off South Africa were limited to the combined operations mentioned before. Moreover, the Admiralty, in particular, was very pleased with the successes of ASW off the Union's coast. In a mid-1944 message to Tait, after the apparent success during Operation TRICOLOUR, they stated "... [as] this is the second consecutive operation in which a U-boat passing through your area has been successfully located and probably destroyed... [it] reflects [positively on] the high standard of operational control."⁶¹⁵ During the remainder of the war, the South Atlantic Station busied itself with continuous training and A/S exercises involving all RN and SANF vessels and shore establishments, as well as RAF and SAAF squadrons.⁶¹⁶

It is Pierre van Ryneveld, however, who has the final word on the sterling cooperation that existed between the South Atlantic Station and the greater UDF in the pursuit of the ASW off the South African coast between 1942 and 1944. In a personal letter to Tait, shortly before his departure as C-in-C South Atlantic Station, Van Ryneveld writes:

I wish to convey the deep appreciation of the SANF for your generous tribute. In the relinquishment of your command the SANF feel that they are indeed losing a friend whose sympathetic guidance has been of inestimable value to the service. I cannot let this opportunity pass without paying tribute to your services to the UDF from the Army and Air Force angle. I am not unmindful of the fact that it was due entirely to your wisdom and initiative that the Combined Headquarters of Coastal Areas was brought into being. It is this step that proved such a major factor in the cooperation and smooth working of the combined staffs of the Royal Navy and Coastal Area of the UDF, and [which has] been instrumental in promoting the general efficiency in guarding the coasts of the Union.⁶¹⁷

Conclusion

Before the commencement of the first sustained German U-boat offensive off the South African coast, there prevailed a somewhat uninspired attitude in the Union towards ASW. The fact that the South African and British naval authorities professed that they would only become aware of the presence of U-boats off South Africa upon receipt of

⁶¹⁵ DOD Archives, Diverse, Group 1, Box 126, File: Operation Tricolour (location + destruction U-boat). *Message from Admiralty to C-in-C SA re Operation Tricolour, 25 Jul 1944.*

⁶¹⁶ TNA, ADM 1/17587, A/S Organisation in South Africa. *Report on the A/S Organisation in South Africa by Lt Cdr R.N. Hankey, 16 Apr 1945.*

⁶¹⁷ DOD Archives, Diverse, Group 1, Box 123, File: Organisation – General. *Personal correspondence from CGS to C-in-C South Atlantic, 2 Jun 1944.*

the first reports of their attacks, points this out to a degree. Once these attacks materialised, and upon the activation of the appropriate Allied ASW defensive measures, the Eisbär group steadily lost its initial operational edge. This advantage had, of course, been gained during their surprise attacks of October 1942.

There was a marked evolution in ASW measures employed in South African waters between October 1942 and August 1943. These measures have a direct correlation with the sharp decline in the number of merchants lost in said waters. There were several main developments concerning ASW. These involved the establishment of group sailings and escorted convoys along the Union's coast; the provision of adequate surface and air escorts for these convoys; and the introduction of regular surface and air A/S patrols. Other signs of progress included the increasing effectiveness of the HF/DF stations in pinpointing the location of U-boats operational along coast; and the establishment of a Combined Operations Room at the Combined Headquarters in Cape Town, which formalised and centralised control over all ASW measures and operations in South Africa. Finally, combined operations were introduced from the end of 1943 with the explicit purposes of locating and destroying U-boats.

These ASW measures ensured that the UDF and the South Atlantic Station regained the operational initiative and control over South African territorial waters and the vital shipping lanes that passed through it. It is important to realise that without British materiel and operational support regarding ASW, the South African authorities could hardly have achieved any notable successes owing to a lack of trained personnel and outdated equipment. Providentially, both the UDF and the South Atlantic Station made a stark realisation. They became aware of the fact that only through a continuous process of evaluating the theoretical and operational approaches to ASW – due to the ever-changing operational exigencies – could success in the naval war against U-boats be guaranteed. The outcome was that both South African and British military personnel received constant training concerning ASW. The training often came from British A/S experts. This ensured that the personnel kept abreast of the evolution of ASW.

The best criterion by which to judge the successes of ASW in South African waters, however, remains the sinking of the three German U-boats in the Southern Oceans between 1942 and 1944. The sinkings of *U-179*, *U-197* and *UIT-22*, arguably occurred at the beginning, at the height, and at the end of the German U-boat offensives in South African waters. They thus positively reflect on the vast improvements made regarding ASW in these waters. Ironically, however, these were British operational successes. No South African naval or air unit was involved in any of the three final acts that resulted in the sinkings of the U-boats in South African waters. South Africa thus wholly relied on British naval and air support to help secure its territorial waters, as well as the strategic shipping lanes that passed around its coastline.

Conclusion

The purpose of this study is to provide a critical, comprehensive analysis of the Axis and Allied maritime operations around the southern African coast between 1939 and 1945. In doing so, it introduces a fresh, in-depth discussion of the topic, based on extensive archival research in South Africa and the United Kingdom, as well as a wealth of secondary source material. The broad topic has been investigated using a number of research objectives that focussed on specific aspects related to the greater maritime war waged off the South African coast. These particular aspects encompass the rival Axis and Allied maritime strategies in the Southern Oceans, the development of the South African coastal defence system, the Axis maritime operations, the maritime intelligence war, and, finally, the anti-submarine (A/S) war waged off the southern African coast during the Second World War. This is the first study to attempt an analysis of these characteristics of the maritime war.

For the full extent of these Axis and Allied maritime strategies in South African waters to be grasped, one has to accept that shipping forms the foundation of understanding the rival maritime strategies. The availability of merchant shipping for key imports and exports to and from the Union proved crucial to the continued functioning of the South African war economy between 1939 and 1945. Sourcing this shipping, however, proved immensely problematic. This was because South Africa often desired more imports than the Allied shipping programmes could provide. The introduction of a number of control measures, such as a priority rating system and the establishment of the Combined Shipping Adjustment Board, helped to incrementally ease the Union's wartime shipping problems to manageable proportions.

The strategic location of South Africa astride the main maritime trade routes around the Cape of Good Hope ensured that a large number of naval and merchant vessels visited its harbours throughout the war. The Union naturally had to exercise control over all the shipping which visited its ports. At the same time, it had to make adequate provision for the victualling and repair of all naval and merchant vessels calling at Union harbours. The establishment of the South African Ports Allocation Executive and the appointment of the Controller of Ship Repairs helped the South African authorities to exercise adequate control over the large numbers of naval and merchant shipping visiting its ports. The South African contribution to the larger Allied war effort in this regard continues to remain under-appreciated.

The outbreak of the Second World War coincided with the South African desire to gain complete control over its naval and coastal defences. South Africa was determined to realise this desire on both political and military levels, though the practical realities of this naval determinism only came into effect after the establishment of the Seaward Defence Force (SDF) in January 1940. The war naturally created an opportunity, and served as a catalyst, for the Union to successfully address

the question of control over its naval and coastal defences. The matter of control of Simon's Town, however, was deferred until well into the 1950s. Even though the SDF and South African Naval Forces (SANF) to a minimal degree served with exception in South Africa's naval and coastal defence, the Union never truly exercised complete maritime control over its territorial waters. Throughout the war, South Africa had to rely on the British Admiralty for operational, technical, administrative and logistic support. This support was needed to realise and maintain command of South African territorial waters and the maritime trade routes passing along its coastline.

While the Royal Navy (RN) retained command of the high seas, it relinquished control of the South African ports and coasts to the SDF and SANF. South Africa simply wasn't in a position to exercise any command over its territorial waters during the war. In point of fact, it was the RN that conducted the majority of offensive and defensive wartime naval operations in South African waters.

The South Africans, however, demonstrated both willingness and ingenuity to adapt to each peculiar operational circumstance. These qualities, and their ability to learn the appropriate lessons, made up for any deficiencies regarding expertise, personnel or equipment throughout the war. By August 1945, South Africa had created a comprehensive system of naval and coastal defences, which helped the Allied forces to realise command at sea in the Southern Oceans. The true measure of the effectiveness of the South African naval and coastal defences was the occurrence of the Axis maritime operations along its coastline, which reached a peak between October 1942 and August 1943.

Both the *Oberkommando der Marine (OKM)* and the *Seekriegsleitung (SKL)* realised the strategic importance of the Cape Town/Freetown shipping route. They maintained that far-flung operations in the Southern Oceans could prove feasible if there was sufficient sinking potential to justify such distant naval operations. The Axis naval forces effectively operated off the South African coast between 1939 and 1945, with the main operations occurring from June 1942 to August 1943. By the end of the war, the Axis maritime operations accounted for 158 ships sunk in South African waters. This amounted to a staggering 910,638 tons of merchant and naval shipping lost. Of this number, naval mines accounted for 1.23% (11,211 tons), raiders/warships for 13.70% (124,803 tons), and submarines for an astonishing 85.06% (774,624 tons) of all shipping lost. When the figures in South African waters are isolated, the results seem impressive. However, when compared to the global outcome of the Axis maritime operations, the sinking results in South African waters are far less significant. In fact, the losses to Axis maritime operations in South African waters form a mere 5.15% of the global losses to Axis maritime operations.

The success of the Axis maritime operations in South African waters cannot be quantified in percentages and mere tonnage lost. Axis triumphs should rather be

evaluated in terms of the strategic effect that they created during the war. Their operations succeeded in causing a notable amount of inconvenience and anxiety for the Allies. Above all, the principal aim was achieved. This involved destroying shipping and forcing the adoption of convoys. The Axis powers also created a grim economic and financial set of circumstances for the Allies by forcing the deployment of strong naval forces to protect vast sea routes. From October 1942, the operational conditions in South African waters deteriorated considerably due to South African and Allied anti-submarine (A/S) operations. As a matter of fact, by August 1943, the *SKL* and *Befehlshaber der U-Boote (BdU)* ceased to consider South African waters as a viable operational area with sufficient sinking potential to justify such distant operations.

The maritime intelligence war waged in southern Africa during the Second World War informed both the Axis maritime operations and Allied countermeasures to some degree. The maritime intelligence war was, however, incredibly complex in nature, and involved multiple role-players.

The Axis influence on the maritime intelligence war in southern Africa proved negligible from the start. The initial contacts established between Germany and the Ossewabrandwag were haphazard in nature. This was principally a consequence of the German desire to establish contact with the leader of the official parliamentary opposition – D.F. Malan – rather than Hans van Rensburg. These initial contacts also had no immediate bearing on the maritime war in South African waters. It was indeed only Hans Rooseboom, and later Lothar Sittig, who had some degree of an influence on the maritime intelligence war in South Africa. Both agents at various stages passed along shipping intelligence to Berlin via the Trompke Network in Lourenço Marques, although the value of this intelligence was questionable.

Once Sittig established direct contact with Berlin, he was able to transmit both political and military intelligence without interference from the German Embassy in Lourenço Marques. Moreover, the operational value of the military intelligence passed along by Sittig to Berlin remained exceedingly questionable. This was a result of the shipping intelligence being largely outdated by the time it was transmitted to Berlin. Apart from this complication, two-way transmissions between Sittig and Berlin were only established in July 1943, shortly before the *SKL* and *BdU* ceased to consider South African waters as a viable operational area. The shipping intelligence passed on to Berlin by the FELIX Organisation after July 1943 thus held no direct operational value to Karl Dönitz and his U-boat Commanders for the remainder of the war.

The Cape Naval Intelligence Centre (CNIC) proved to be the leading role player in the Allied maritime intelligence war fought in southern Africa between 1939 and 1945. Located in Cape Town, the CNIC formed a vital link in the overall Allied maritime intelligence organisation during the war. It presided over both operational intelligence and counterintelligence in the Cape Intelligence Area. The various sub-departments of

the CNIC in Cape Town worked in unison during the prosecution of the naval war. These included tracking, operational intelligence, security, and naval press relations and censorship. The “Y” Organisation in South Africa, and in particular its High-Frequency/Direction Finding (HF/DF stations), proved indispensable in pinpointing the locations of all Axis naval vessels in South African waters. It also listened in on the illicit wireless transmissions in the Union and Mozambique. The successes of the A/S operations in the Southern Oceans are without a doubt directly related to the operational successes of the “Y” Organisation.

Before the onset of the first sustained German U-boat offensive off the South African coast in 1942, there existed a clear attitude of indifference in the Union with regards to anti-submarine warfare (ASW). The fact that the South African and British naval authorities disclosed that they would only become aware of the presence of U-boats in the Southern Oceans upon receipt of the first reports of their attacks, highlights this indifference to some degree. Once these naval attacks materialised, however, and upon the activation of the appropriate Allied ASW measures, the *Eisbär* group steadily lost the inceptive operational advantage gained during their surprise attacks of October 1942.

Moreover, there was a growing sophistication in the ASW measures employed in South African waters between October 1942 and August 1943. These measures furthermore had a direct correlation with the sharp decline in the observed loss of merchantmen in these waters. The main developments concerning ASW were the establishment of group sailings and escorted convoys along the Union’s coast; the provision of adequate surface and air escorts for these convoys; the introduction of regular surface and air A/S patrols, and the increasing effectiveness of the HF/DF stations in pinpointing the location of U-boats operational along the coast. Additionally, the establishment of a Combined Operations Room in Cape Town formalised and centralised control over all ASW measures and operations in the Southern Oceans. The introduction of combined operations from the end of 1943 – with the explicit purpose of locating and destroying U-boats operating along the South African coast – was the final development regarding ASW in these waters.

Thanks to these ASW measures, the Union Defence Force (UDF) and the RN’s South Atlantic Station had regained the operational initiative and control over South African territorial waters and the associated vital shipping lanes by the end of 1943. However, without British materiel and operational support, the South African defence authorities could hardly have achieved any notable ASW successes. This was due to a lack of the trained personnel and their outdated equipment. The UDF and the South Atlantic Station did nonetheless make an important realisation. They understood that success in the naval war could only be achieved through a continuous process of evaluating the theoretical and operational approaches to ASW due to the ever-changing operational exigencies in the Southern Oceans. As a result, both South African and

British naval personnel received constant training concerning ASW, often from British A/S experts. This ensured that they kept abreast of global developments associated with ASW.

The best measure of success regarding ASW in South African waters remains the sinking of the three German U-boats between 1942 and 1944. The sinkings of *U-179*, *U-197* and *UIT-22*, which arguably occurred at the start, the height, and at the termination of the German U-boat offensives in South African waters, positively reflects on the vast improvements made regarding ASW in these waters. These sinkings were, however, British operational successes, for no South African naval or air units were involved in any of the three final acts that resulted in the sinkings of these U-boats. South Africa thus wholly relied on British naval and air support to secure its territorial waters and the strategic shipping lanes that passed around its coastline.

When evaluating the all-encompassing nature of the Axis and Allied maritime operations around the southern Africa coast during the war, several concrete conclusions can be drawn. First and foremost, Neidpath was indeed correct when he stated that the three keys for continued control over the Indian Ocean was British possession of the Cape of Good Hope, Aden and Singapore. Moreover, continued Allied control over Gibraltar, Egypt and the Middle East was also crucial, largely because it guarded access over the principal maritime trade routes passing through the Mediterranean to the Atlantic and Indian oceans. The Italian entry into the war in June 1940, and the concomitant closure of the strategic Mediterranean shipping route soon thereafter, along with the Japanese and American entry into the war in December 1941, and the fall of Singapore in February 1942, combined to create a dire military, economic and logistical situation for the greater Allied war effort. Control over the remaining two keys to the Indian Ocean, Aden and the Cape of Good Hope, thus assumed levels of strategic importance, largely due to the observed interconnectivity of the Allied war effort. Axis and Allied naval operations in the Atlantic Ocean during the 'Battle of the Atlantic' did also not occur in a vacuum, but had a marked influence of the naval war in the Indian and Pacific oceans at a strategic and operational level. The maritime trade routes rounding the Cape of Good Hope, which linked both the Atlantic and Indian oceans as well a key military theatres with one another, immediately became crucial to the larger Allied war effort. The Union of South Africa and the vital maritime trade routes that rounded its coast remained crucial to the Allied war effort until the reopening of the Mediterranean shipping route in 1943. The important contribution of South Africa to the larger Allied war effort in this regard, however, continues to remain underappreciated.

Second, the principal Axis maritime operations, which occurred between October 1942 and August 1943, actually coincided with the period during which there was a marked decline in merchant and naval vessels calling at South African ports (see Graph 1.8, page 34). The apparent sinking potential that South African waters held during

1942, and which initially prompted the *OKM* and *SKL* even to consider such distant naval operations, was thus an anomaly. In fact, the height of the sinking potential in South African waters occurred during the 1940/1941 fiscal year, when 11,082 merchant and naval vessels, totalling some 46,831,026 gross tons, called at Union ports.

Third, it remains unsurprising that the *OKM* and *SKL* failed to obtain accurate naval intelligence detailing the unique shipping conditions in the Southern Oceans. The fact that two-way transmissions between Lothar Sittig and Berlin only realised in July 1943, coupled with the questionable operational value of the naval intelligence transmitted to Berlin, serves as ample evidence to highlight the ineffective nature of the Axis intelligence network in southern Africa. The Trompke Network in Lourenço Marques, and the FELIX Organisation in South Africa, thus had a negligible impact on the Axis maritime operations in the Southern Oceans.

Fourth, even though the war served as the catalyst for South Africa to obtain complete authority over its naval and coastal defences, the Union never truly exercised total control over its maritime domain. South Africa had neither the operational capacity nor naval expertise needed to realise complete command of its territorial waters. It thus had to rely on the Admiralty for operational, technical, administrative and logistic support throughout the war. It was, in fact, the RN that conducted the majority of offensive and defensive naval operations in South African waters during the war. Nevertheless, by the end of the war, South Africa had created a comprehensive system of naval and coastal defences, which helped the Allied forces to realise its command of the Southern Oceans. More importantly, South Africa realised complete control over its maritime and coastal defences during the war.

Despite the impressive nature of the Union's naval and coastal defences, their deterrent value throughout the war remains debatable. It is true that the Axis naval forces never directly attacked a South African port during the war. This fact should, however, preferably be ascribed to the principal aim of the Axis maritime operations in the Southern Oceans, rather than to the deterrent value of the naval and coastal defences. Moreover, when considering that neither the fixed coastal nor naval defences ever fired a shot in anger during the war, their apparent deterrent value is somewhat negated. This begs the question whether there was not an over investment in the South African coastal and naval defences during the war. The available resources might well have been applied elsewhere to better serve the Allied war effort.

Fifth, in general, however, the UDF emerged from the war far stronger and better equipped in terms of its naval and coastal defences. The Second World War, in fact, served as the catalyst for this marked change, with Britain providing key military equipment and assistance to the UDF throughout the war. The Army and the Air Force also naturally benefited from the war in terms of the procurement of modern arms and aircraft. This far-sightedness should well be accredited to Smuts, who continuously

pressed for greater South African participation in the larger Allied war effort. The result of this increased participation could to a large degree be measured in the transformation of the UDF from an ageing peacetime defence force in 1939, to one that could project offensive power across the African subcontinent and further afield by the cessation of hostilities in 1945. Moreover, the wartime experience of South African sailors, airmen and soldiers served the UDF well after the war, as South Africa assumed a far greater role in safeguarding its own sovereignty.

Sixth, the success of the Axis maritime operation in the Southern Oceans remains contentious. The *OKM* and *SKL* maintained that far-flung operations in South African waters could be justified through sufficient sinking potential and operational successes. Nevertheless, the sinking results are not as convincing (see Table 3.14, page 121). There is, in fact, an apparent disconnect between the sinking potential and actual sinking results obtained by the Axis naval forces in South African waters during the war (see Table 3.14, page 121; Graph 1.8, page 34).

The success of the Axis maritime operations in South African waters is, however, best evaluated with regards to the strategic effect that it created. Moreover, these far-flung operations achieved their principal aim – that of destroying merchant shipping, forcing the adoption of convoys, and creating an adverse economic and financial position for the Allies. Besides this, it also compelled the RN to deploy strong naval forces to protect vast sea global trade routes, as well as those passing around the Cape of Good Hope. As the operational conditions in South African waters steadily deteriorated during the latter half of 1942, the *SKL* and *BdU* ceased to consider South African waters as a viable operational area with sufficient sinking potential needed to justify the distant naval operations.

Seventh, the Allied intelligence network in southern Africa proved instrumental in the successful pursuit of the maritime war in the Southern Oceans. The CNIC formed an indispensable link in the overall Allied maritime intelligence organisation during the war. It did so by presiding over both operational intelligence and counterintelligence in the Cape Intelligence Area. The untiring efforts of the “Y” Organisation in South Africa during the war, prevented the Axis naval forces from ever gaining the operational upper hand in the Southern Oceans. The successes of the A/S operations in the Southern Oceans also has a direct correlation with the wartime operational successes of the “Y” Organisation in South Africa.

Finally, the sinking of the three German U-boats in South African waters between 1942 and 1944 remained the optimal way to ascertain ASW successes in the Southern Oceans. These sinkings also positively reflect on the vast improvements made regarding ASW in the Southern Oceans. It is, however, an undeniable reality that these sinkings remained British operational successes, and they should thus be evaluated as such. South Africa was entirely reliant on British naval and air support to secure its territorial

waters and the strategic shipping lanes around the Cape of Good Hope. Without such support – and due to its lack of trained personnel and outdated equipment – the South African military authorities could hardly have achieved any significant ASW successes. The evolution of ASW measures in the Southern Oceans ultimately culminated in denying the Axis naval forces from obtaining the operational initiative and control in South African waters.

In conclusion, this dissertation demonstrates the all-encompassing nature and extent of the maritime war waged off southern Africa during the Second World War. This study further finds that the Axis and Allied maritime operations in the Southern Oceans were extremely complex in nature, especially when considering the several strategic, military and economic aspects that underpinned them. In gaining an understanding of these complex operations, the dissertation draws together several of the interrelated aspects that have formed the foundation of the maritime war waged off the South African coast. In doing so, this study builds on several previous studies. These analyses have generally not succeeded in recognising the apparent interrelatedness. Instead, they have provided only a compartmentalised discussion on single aspects associated with the maritime war.

This study is novel in that it provides an unrivalled analysis of the Axis and Allied maritime operations in South African waters during the war. While addressing several previously disregarded aspects of the South African involvement in the Second World War, the dissertation definitely refocuses attention on the importance of the maritime trade routes passing along the South African coastline. The current importance of these trade routes, along with the accompanying issues of maintaining command at sea along the entire African coastline, are demonstrated by growing concerns over maritime insecurity in the Southern Oceans during the twenty-first century.

Sources

1. **BOOKS**

Agar-Hamilton, J., and Turner, L., *Crisis in the Desert, May-June 1942* (Cape Town, 1952).

Agar-Hamilton, J., and Turner, L., *The Sidi Rezegh Battles, 1941* (Cape Town, 1957).

Austin, B.A., *Schonland: Scientist and Soldier: From lightning on the veld to nuclear power at Harwell: the life of Field Marshal Montgomery's scientific adviser* (Florida: CRC Press, 2001).

Ball, S., *The Bitter Sea: The Struggle for Mastery in the Mediterranean, 1935-1949* (London: Harper, 2009).

Batchelor, J. and Batchelor, C.C., *The Complete Encyclopedia of Submarines 1578-2006* (Lisse: Rebo International, 2009).

Bird, K.W., *Erich Raeder: Admiral of the Third Reich* (Maryland: Naval Institute Press, 2013).

Black, J., *War in the New Century* (London: Continuum, 2001).

Black, J., *Rethinking Military History* (Abingdon: Routledge, 2004).

Blanke, R., *et al*, *Germany and the Second World War: Volume IX/I: German Wartime Society 1939–1945: Politicization, Disintegration, and the Struggle for Survival* (Oxford: Clarendon, 2008).

Boog, H., *et al*, *Germany and the Second World War: Volume IV: The Attack on the Soviet Union* (Oxford: Clarendon, 1998).

Boog, H., *et al*, *Germany and the Second World War: Volume VI: The Global War* (Oxford: Clarendon, 2001).

Boog, H., *et al*, *Germany and the Second World War: Volume VII: The Strategic Air War in Europe and the War in the West and East Asia 1943–1944/5* (Oxford: Clarendon, 2006).

Boyd, A., *The Royal Navy in Eastern Waters: Linchpin of Victory 1935-1942* (Maryland: Naval Institute Press, 2017).

Brown, A.C., *A History of Scientific Endeavour in South Africa* (Cape Town: Royal Society of South Africa, 1977).

Brown, J.A., *Gathering of Eagles: The Campaigns of the South African Air Force* (Cape Town: Purnell, 1970).

Brown, J.A., *Eagles Strike: The Campaigns of the South African Air Force* (Cape Town: Purnell, 1974).

- Burman, J., and Levin, S., *The Saldanha Bay Story* (Cape Town: Human & Rousseau, 1974).
- Busch, H., *U-Boats at War* (London: Putnam, 1955).
- Chiari, B., *et al*, *Germany and the Second World War: Volume IX/II: German Wartime Society 1939–1945: Exploitation, Interpretations, Exclusion* (Oxford: Clarendon, 2014).
- Churchill, W.S., *The Second World War, Vol. IV: The Hinge of Fate* (London: Cassell & Co, 1950).
- Corbett, J.S., *Some Principles of Maritime Strategy* (London: Longmans Green, 1918).
- Deist, W. *et al*, *Germany and the Second World War: Volume I: The Build-up of German Aggression* (Oxford: Clarendon, 1990).
- Dimbleby, K.G., *Hostilities Only* (Cape Town: Unie-Volkspers, 1944).
- Doenitz, K., *Memoirs: Ten Years and Twenty Days* (Boston: De Capo Press, 1997).
- Dönitz, K., *Zehn Jahre und Zwanzig Tage* (Bonn: Athenäum-Verlag Junker und Dönhaupt, 1958).
- Feinstein, C.H., *An Economic History of South Africa: Conquest, Discrimination, and Development* (Cambridge: Cambridge University Press, 2005).
- Frieser, K., *et al*, *Germany and the Second World War: Volume VIII: The Eastern Front 1943-1944: The War in the East and on the Neighbouring Fronts* (Oxford: Clarendon, 2007).
- Gardner, W.J.R., *Decoding History: The Battle of the Atlantic and Ultra* (London: MacMillan Press, 1999).
- Gordon-Cumming, H.R., *Official History of the South African Naval Forces during the Second World War (1939-1945)* (Simon's Town: Naval Heritage Society of South Africa, 2008).
- Hancock, W.K. and Gowing, M.M., *History of the Second World War – United Kingdom Civil Series: British War Economy* (London: Her Majesty's Stationary Office, 1949).
- Harris, C.J., *War at Sea: South African Maritime Operations During World War II* (Johannesburg: Ashanti, 1991).
- Hashimoto, M., *Sunk: The Story of the Japanese Submarine Fleet, 1942-1945* (London: Cassell & Co, 1954).
- Hay, S., *History of the R.N.V.R. South African Division* (Cape Town: Juta, 1920).
- Hinsley, F.H., *et al*, *British Intelligence in the Second World War, Volume 1: Its Influence on Strategy and Operations* (London: H.M. Stationery Office, 1979).

Hinsley, F.H., *et al*, *British Intelligence in the Second World War, Volume 2: Its Influence on Strategy and Operations* (London: H.M. Stationery Office, 1981).

Hinsley, F.H., *et al*, *British Intelligence in the Second World War, Volume 3 (Part 1): Its Influence on Strategy and Operations* (London: H.M. Stationery Office, 1984).

Hinsley, F.H., *et al*, *British Intelligence in the Second World War, Volume 3 (Part 2): Its Influence on Strategy and Operations* (London: H.M. Stationery Office, 1988).

Hinsley, F.H., *et al*, *British Intelligence in the Second World War, Volume 4: Security and Counter-Intelligence* (London: H.M. Stationery Office, 1990).

Hinsley, F.H., *et al*, *British Intelligence in the Second World War, Volume 5: Strategic Deception* (London: H.M. Stationery Office, 1990).

Howarth, S. and Law D. (eds.), *The Battle of the Atlantic 1939-1945: the 50th anniversary International Naval Conference* (University of Michigan: Greenhill, 1994).

Jacobs, F.J., *et al*, *South African Corps of Signals* (Pretoria: SAW Dokumentasiediens, 1975).

Johnston-White, I.E., *The British Commonwealth and Victory in the Second World War* (London: Palgrave Macmillan, 2017).

Katz, D.B., *South Africans versus Rommel: The Untold Story of the Desert War in World War II* (Maryland: Stackpole, 2017).

Keegan, J., *Battle at Sea: From Man-of-War to Submarine* (London: Pilmico, 1988).

Kennedy, G., *Britain's War at Sea, 1914-1918: The war they thought and the war they fought* (Basingstoke: Routledge, 2016).

Kennedy, G., *The Royal Navy and Imperial Defence, 1919-1945* (London: Routledge, 2008).

Kennedy, P.M., *The Rise and Fall of British Naval Mastery* (New York: Humanity Books, 1986).

Koorts, L., *DF Malan and the Rise of Afrikaner Nationalism* (Cape Town: Tafelberg Publishers, 2014).

Kroener, B.R., *et al*, *Germany and the Second World War: Volume V/I: Organization and Mobilization of the German Sphere of Power: Wartime Administration, Economy, and Manpower Resources 1939–1941* (Oxford: Clarendon, 2000).

Kroener, B.R., *et al*, *Germany and the Second World War: Volume V/II: Organization and Mobilization of the German Sphere of Power: Wartime Administration, Economy, and Manpower Resources 1942–1944/5* (Oxford: Clarendon, 2003).

Lambert, A.D., *War at Sea in the Age of Sail* (London: Cassell, 2000).

- Lambert, A.D., *A Naval History of Great Britain* (London: Conway, 2002).
- Lambert, A.D., *Naval History 1850-Present* (Aldershot: Ashgate, 2007).
- Leighton, R.M., and Coakley, R.W., *Global Logistics and Strategy, 1940-1943* (Washington: US Army Centre of Military History, 1995).
- Llewellyn-Jones, M., *The Royal Navy and Anti-Submarine Warfare, 1917-49* (London: Routledge, 2014).
- Mahan, A.T., *Naval Strategy: Compared and Contrasted with the Principles and Practise of Military Operations on Land* (London: Sampson Low, Marston & Company, 1911).
- Mahncke, J.O.E.O., *U-Boats & Spies in Southern Africa: Anecdotes, Legends, Stories* (Cape Town: New Voices Publishing, 2008).
- Maier, K.A., *et al, Germany and the Second World War: Volume II: Germany's Initial Conquests in Europe* (Oxford: Clarendon, 1991).
- Malherbe, E.G., *Never a Dull Moment* (Cape Town: Howard Timmins, 1981).
- Martin, H.J., and Orpen, N., *Eagles Victorious: The Operations of the South African Forces over the Mediterranean and Europe, in Italy, the Balkans and the Aegean, and from Gibraltar and West Africa* (Cape Town: Purnell, 1977).
- Martin, H.J., and Orpen, N., *South Africa at War: Military and Industrial Organization and Operations in connection with the conduct of the War, 1939-1945* (Cape Town: Purnell, 1979).
- Marx, C., *Oxwagon Sentinel: Radical Afrikaner Nationalism and the History of the Ossewabrandwag* (Pretoria: Unisa Press, 2008).
- Murray, W., and Millett, A.R., *A War to be Won: Fighting the Second World War* (Cambridge, Massachusetts: Harvard University Press, 2001).
- Neidpath, J., *The Singapore Naval Base and the Defence of Britain's Eastern Empire, 1919-1941* (Oxford: Clarendon Press, 1981).
- Orpen, N., *East Africa and Abyssinian Campaigns* (Cape Town, 1968).
- Orpen, N., *War in the Desert* (Cape Town: Purnell, 1971).
- Orpen, N., *Victory in Italy* (Cape Town: Purnell, 1975).
- Orpen, N., and Martin, H.J., *Salute the Sappers, Part 1* (Johannesburg: Sappers Association, 1981).
- Orpen, N., and Martin, H.J., *Salute the Sappers, Part 2* (Johannesburg: Sappers Association, 1982).
- Postan, M.M., *History of the Second World War – United Kingdom Civil Series: British War Production* (London: Her Majesty's Stationary Office, 1952).

- Potter, E.B., and Nimitz, C.W., *Sea Power, A Naval Power* (Englewood Cliffs: Prentice Hall, 1960).
- Pound, R., *Evans of the Broke: A Biography of Admiral Lord Mountevans KCB, DSO, LLD* (London: Oxford University Press, 1963).
- Radley W., and Radley, M., *Twee Poorte: Oorlogservaringe van Twee Suid-Afrikaners Gedurende die Tweede Wêreldoorlog* (Unpublished Manuscript, 1979).
- Raeder, E.J.A., *Grand Admiral: The Personal Memoirs of the Commander in Chief of the German Navy from 1935 until the final break with Hitler in 1943* (Boston: Da Capo Press, 2001).
- Rooseboom, H., *Die Oorlog Trap My Vas* (Johannesburg: Voortrekkerpers, 1940).
- Roskill, S.W., *The War at Sea: Volume I – The Defensive* (London: HM Stationary Office, 1954).
- Roskill, S.W., *The War at Sea: Volume II – The Period of Balance* (London: HM Stationary Office, 1956).
- Roskill, S.W., *The War at Sea: Volume III – The Offensive (Part I)* (London: HM Stationary Office, 1960).
- Roskill, S.W., *The War at Sea: Volume III – The Offensive (Part II)* (London: HM Stationary Office, 1961).
- Roskill, S.W., *A Merchant Fleet in War 1939-1945* (London: Collins, 1962).
- Rosler, E., *The U-boat: The Evolution and Technical History of German Submarines* (Maryland: Naval Institute Press, 1982).
- Savas, T.P., *Silent Hunters: German U-Boat Commanders of World War II* (Maryland: Naval Institute Press, 2003).
- Schreiber, G., et al, *Germany and the Second World War: Volume III: The Mediterranean, South-East Europe, and North Africa 1939–1942* (Oxford: Clarendon, 1995).
- Slader, J., *The Fourth Service: Merchantmen at War 1939-45* (Wimborne Minster: New Guild, 1995).
- Smith, K., *Conflict over Convoys: Anglo-American Logistics Diplomacy in the Second World War* (Cambridge: Cambridge University Press, 1996).
- Spong, H., Osborne R. and Grover, T., *Armed Merchant Cruisers 1878-1945* (Windsor: World Ship Society, 2017).
- Stewart, A., *The First Victory: The Second World War and the East Africa Campaign* (London: Yale University Press, 2016).
- Strachan, H., *European Armies and the Conduct of War* (London: Routledge, 1993).

- Strydom, H., *Vir Volk en Führer: Robey Leibbrandt & Operation Weissdorn* (Cape Town: Jonathan Ball, 1983).
- Tarrant, V.E., *The U-boat Offensive 1914–1945* (London: Arms and Armour Press, 1989).
- Till, G., *Seapower: A Guide for the Twenty-First Century* (Abingdon: Routledge, 2018).
- Turner, L.C.F, Gordon-Cumming, H.R. and Betzler, J., *War in the Southern Oceans, 1939-1945* (Cape Town: Oxford University Press, 1961).
- Union Office of Census and Statistics, *Official Yearbook of the Union of South Africa and of Basutoland, Bechuanaland Protectorate and Swaziland, No. 23, 1947* (Government Printer, Pretoria, 1948).
- US Navy Department, *United States Naval Administration in World War II: History of Convoy and Routing* (Washington: Navy Department, 1945).
- Van der Waag, I.J., *A Military History of Modern South Africa* (Jeppestown: Jonathan Ball, 2015).
- Van der Schyff, P.F., *Die Ossewa-Brandwag en die Tweede Wêreldoorlog* (Potchefstroom: PU vir CHO, 1983).
- Van der Schyff, P.F., *Geskiedenis van die Ossewa-Brandwag* (Potchefstroom: PU vir CHO, 1984).
- Van Rensburg, J.F.J., *Their Paths Crossed Mine: Memoirs of the Commandant-General of the Ossewa-Brandwag* (South Africa: Central News Agency, 1956).
- Visser, G.C., *OB: Traitors or Patriots?* (Johannesburg: MacMillan, 1976).
- Vreÿ, F. and Mandrup, T., *Towards Good Order at Sea: African Experiences* (Stellenbosch: SUN MeDIA, 2015).
- Whinney, R., *The U-Boat Peril: An Anti-Submarine Commander's War* (London: Arrow Books, 1989).
- Woodburn Kirby, S., et al, *The War against Japan: The Loss of Singapore* (Vol. I) (London: H.M. Stationery Office, 1957).
- Woodburn Kirby, S., et al, *The War against Japan: India's Most Dangerous Hour* (Vol. II) (London: H.M. Stationery Office, 1958).
- Woodburn Kirby, S., et al, *The War against Japan: The Decisive Battles* (Vol. III) (London: H.M. Stationery Office, 1961).
- Woodburn Kirby, S., et al, *The War against Japan: The Reconquest of Burma* (Vol. IV) (London: H.M. Stationery Office, 1965).
- Woodburn Kirby, S., et al, *The War against Japan: The Surrender of Japan* (Vol. V) (London: H.M. Stationery Office, 1969).

2. **THESES**

Albertyn, Y., *Upsetting the Applegart: Government and Food Control in the Union of South Africa during World War II c. 1939-1948*. Master's Thesis, Stellenbosch University, 2014.

Cousineau, S., *Ruthless War: A Comparative Analysis of German and American "Unrestricted" Submarine Warfare in the Second World War*. Doctoral Thesis, University of Calgary, 2007.

Fokkens, A.M., *The Role and Application of the Union Defence Force in The Suppression Of Internal Unrest, 1912 – 1945*. MMil Thesis, Stellenbosch University, 2006.

Garcia, A., *Manoeuvre Warfare in the South African Campaign in German South West Africa during the First World War*. MA Thesis, University of South Africa, 2015.

Horn, K., *South African prisoner-of-war experience during and after World War II: 1939 – c.1950*. PhD Thesis, Stellenbosch University, 2012.

Katz, D.B., *Sidi Rezegh and Tobruk: Two South African Military Disasters Revisited, 1941-1942*. MMil Thesis, Stellenbosch University, 2014.

Monama, F.L., *Wartime Propaganda in the Union of South Africa, 1939-1945*. PhD Thesis, Stellenbosch University, 2014.

3. **JOURNAL ARTICLES & BOOK CHAPTERS**

Austin, B.A., 'The South African Corps of Scientists' in *Military History Journal*, 14(1), 2007. (<http://samilitaryhistory.org/vol141ba.html>).

Austin, B.A., 'On the Development of Radar in South Africa and Its Use in the Second World War' in *The Radio Science Bulletin*, 358, 2016, pp. 69-81.

Bisset, W.M., 'Coast Artillery in South Africa' in Nöthling, C.J. (ed), *Ultima Ratio Regum* (Pretoria: SADF Military Information Bureau, 1987), pp. 333-357.

Bisset, W.M., 'Unpublished Chapters from the Official History of the SA Naval Forces during the Second World War' in *Scientia Militaria*, 1992, 22(1), pp. v-52.

Brodie B., 'New Tactics in Naval Warfare' in *Foreign Affairs*, 24(2), 1946, pp. 210-223.

Brown, C.A., 'African Labor in the Making of World War II' in Byfield, J.A., Brown, C.A., Parsons, T., and Sikainga, A.A. (eds.), *Africa and World War II* (New York: Cambridge University Press, 2015), pp. 43-70.

Byfield, J.A., 'Producing for the War' in Byfield, J.A., Brown, C.A., Parsons, T., and Sikainga, A.A. (eds.), *Africa and World War II* (New York: Cambridge University Press, 2015), pp. 24-42.

- Carroll, F.M., 'The First Shot was the Last Straw: The Sinking of the T.S.S. Athenia in September 1939 and British Naval Policy in the Second World War' in *Diplomacy & Statecraft*, 20, 2009, pp. 403-413.
- Clarence-Smith, W.G., 'Africa's "Battle for Rubber" in the Second World War' in Byfield, J.A., Brown, C.A., Parsons, T., and Sikainga, A.A. (eds.), *Africa and World War II* (New York: Cambridge University Press, 2015), pp. 162-182.
- Close, R.W., 'South Africa's Part in the War' in *World Affairs*, 106(3), 1943, pp. 184-187.
- Dedering, T., 'Air Power in South Africa, 1914-1939' in *Journal of Southern African Studies*, 41(3), 2015, pp. 451-465.
- Dörning, W.A., 'The West and the Cape Sea Route' in *Militaria*, 9(3), 1979, pp. 46-52.
- Dumett, R., 'Africa's Strategic Minerals During the Second World War' in *The Journal of African History*, 26(4), 1985, pp. 381-408.
- Ellis, J., 'Oswald Pirow's Five-Year Plan for the Reorganisation of the Union Defence Force, 1933-1939' in *Scientia Militaria*, 30(2), 2000, pp. 221-234.
- Faulkner, M., 'The Kriegsmarine, Signals Intelligence and the Development of the B-Dienst Before the Second World War' in *Intelligence and National Security*, 25(4), pp. 521-546.
- Fedorowich, E.K., 'German Espionage and British Counter-Intelligence in South Africa and Mozambique, 1939-1944' in *The History Journal*, 48(1), 2005, pp. 209-230.
- Fokkens, A.M., 'Afrikaner Unrest within South Africa during the Second World War and the measures taken to suppress it' in *Journal for Contemporary History*, 37(2), 2012, pp. 123-142.
- Furlong, P., 'Allies at War? Britain and the 'Southern African Front' in the Second World War' in *South African Historical Journal*, 54(1), 2009, pp. 16-29.
- Gomm, N. 'South Africa's Electronic Shield' in *Military History Journal*, 2(3), 1972. (<http://samilitaryhistory.org/vol023go.html>).
- Grey, J., "Standing Humbly in the Ante-Chambers of Clio': the Rise and Fall of Union War Histories' in *Scientia Militaria*, 30(2), 2000, pp. 253-266.
- Hammond, R., 'British Policy on Total Maritime Warfare and the Anti-Shipping Campaign in the Mediterranean, 1940-1944' in *The Journal of Strategic Studies*, 36(6), 2013, pp. 789-814.
- Harrison, E.D.R., 'On Secret Service for the Duce: Umberto Campini in Portuguese East Africa, 1941-1943' in *The English Historical Review*, 122(499), 2007, pp. 1318-1349.

- Harrison, E.D.R., 'British Radio Security and Intelligence, 1939-43' in *The English Historical Review*, 124(506), 2009, pp. 53-93.
- Henshaw, P.J., 'Britain, South Africa and the Sterling Area: Gold Production, Capital Investment and Agricultural Markets, 1931-1961' in *The Historical Journal*, 39(1), 1996, pp. 197-223.
- Herwig, H.H., 'The Failure of German Sea Power, 1914-1945: Mahan, Tirpitz, and Raeder Reconsidered' in *The International History Review*, 10(1), 1988, pp. 68-105.
- Hewitt, F.J. 'South Africa's role in the development and use of Radar in World War II' in *Military History Journal*, 3(3), 1975. (<http://samilitaryhistory.org/vol033fh.html>).
- Hewitt, F.J., 'Basil Schonland: Memories of the man at work' in *South African Journal of Science*, 98, 2002, pp. 11-13.
- Hughes, W.P., 'Naval Operations: A Close Look at the Operational Level of War at Sea' in *Naval War College Review*, 65(3), 2012, pp. 23-46.
- Jackson, A., 'The Empire/Commonwealth and the Second World War' in *The Round Table*, 100(412), 2011, pp. 65-78.
- Katz, D.B., 'A Case of Arrested Development: The Historiography Relating to South Africa's Participation in the Second World War' in *Scientia Militaria*, 40(3), 2012, pp. 280-317.
- Katz, M., 'A Case Study in International Organisation' in *Harvard Business Review*, 25(1), 1946, pp. 1-20.
- Khan, D., 'Codebreaking in World Wars I and II: The Major Successes and Failures, their Causes and their Effects' in *The Historical Journal*, 23(3), 1980, pp. 617-639.
- Khan, R.A., 'Strategic Role of the Indian Ocean During Second World War' in *Pakistan Horizon*, 35(2), 1989, pp. 39-50.
- King, E.J., 'The Role of Sea Power in International Security' in *Proceedings of the Academy of Political Science*, 21(3), 1945, pp. 79-86.
- Kleynhans, E.P. "Good Hunting": German Submarine Offensives and South African Countermeasures off the South African Coast during the Second World War, 1942-1945' in *Scientia Militaria*, 44(1), 2016, pp. 168-189.
- Lautenschlager, K., 'The Submarine in Naval Warfare, 1901-2001' in *International Security*, 11(3), 1986-1987, pp. 94-140.
- Lewis, W.A., 'The Inter-Relations of Shipping Freights' in *Economica*, 8(29), 1941, pp. 52-76.

- Malyon, B.H., 'South African Shipping' in *Journal of the Royal African Society*, 36(145), 1937, pp. 438-446.
- Mangin, G. and Lloyd, S., 'The Special Signal Services (SSS)' Shield' in *Military History Journal*, 11(2), 1998. (<http://samilitaryhistory.org/vol112ml.html>).
- Martin, W.G., 'The Making of an Industrial South Africa: Trade and Tariffs in the Interwar Period' in *The International Journal of African Historical Studies*, 23(1), 1991, pp. 59-85.
- Marx, C., 'Dear Listeners in South Africa': German Propaganda Broadcasts to South Africa, 1940 -1941' in *South African Historical Journal*, 27(1), 1992, pp. 148-172.
- McMahon, C.J., 'Maritime Trade Warfare: A Strategy for the Twenty-First Century?' in *Naval War College Review*, 70(3) 2017, pp. 15-38.
- Meyer, C.M., 'From Spices to Oil: Sea Power and the Sea Routes around the Cape' in *Militaria*, 18(2), 1988, pp. 1-11.
- Milner, M., 'The battle of the Atlantic' in *Journal of Strategic Studies*, 13(1), 1990, pp. 45-66.
- Monama, F.L., 'South African Propaganda Agencies and the Battle for Public Opinion during the Second World War, 1939-1945' in *Scientia Militaria*, 44(1), 2016, pp. 145-167.
- Moore, B., 'Unwanted Guests in Troubled Times: German Prisoners of War in the Union of South Africa, 1942-1943' in *The Journal of Military History*, 70(1), 2006, pp. 63-90.
- Peifer, D.C., 'Maritime Commerce Warfare: The coercive response of the weak?' in *Naval War College Review*, 66(2), 2013, pp. 83-109.
- Perry, H.S., 'The Wartime Merchant Fleet and Postwar Shipping Requirements' in *The American Economic Review*, 36(2), 1946, pp. 520-546.
- Potgieter, T.D., 'Maritime Defence and the South African Navy to the Cancellation of the Simon's Town Agreement' in *Scientia Militaria*, 30(2), 2000, pp. 159-182.
- Potgieter, T.D., 'Guiding the Seafarers: The South African Hydrographic Office and the Contribution of the Three Proteas' in *Scientia Militaria*, 40(3), 2012, pp. 147-176.
- Rohwer, J., 'Signal Intelligence and World War II: The Unfolding Story' in *The Journal of Military History*, 63, 1999, pp. 939-951.
- Roucek, J.S., 'The Geopolitics of the Mediterranean, I' in *The American Journal of Economics and Sociology*, 13(1), July 1953, pp. 347-354.
- Roucek, J.S., 'The Geopolitics of the Mediterranean, II' in *The American Journal of Economics and Sociology*, 13(1), October 1953, pp. 71-86.

- Stott, N.A., 'South Africa's secret war: The war against enemy submarines, 1939-1945' in *Military History Journal*, 11(1), 1998. Online Access (<http://www.samilitaryhistory.org/vol111ns.html>).
- Shear, K., 'Colonel Coetzee's War: Loyalty, Subversion and the South African Police, 1939-1945' in *South African Historical Journal*, 65(2), 2013, pp. 222-248.
- Stemmet, P.A., 'Mahan se Teorie van Seemag' in *Militaria*, 21(3), 1991, pp. 35-40.
- Steury, D.P., 'Naval Intelligence, the Atlantic Campaign and the Sinking of the Bismarck: A Study in the Integration of Intelligence into the Conduct of Naval Warfare' in *Journal of Contemporary History*, 22(2), 1987, pp. 209-233.
- Tembo, A., 'Rubber Production in Northern Rhodesia during the Second World War, 1942-1946' in *African Economic History*, 41, 2013, pp. 223-255.
- Thomas, M., 'Imperial backwater or strategic outpost? The British takeover of Vichy Madagascar, 1942' in *The Historical Journal*, 39(4), 1996, pp. 1049-1074.
- Uhlig, F., 'Fighting At and From the Sea: A Second Opinion' in *Naval War College Review*, 56(2), 2003, pp. 39-52.
- Van der Waag, I.J., 'The Union Defence Force Between the World Wars, 1919-1940' in *Scientia Militaria*, 30(2), 2000, pp. 183-219.
- Van der Waag, I.J., 'Contested Histories: Official History and the South African Military in the Twentieth Century' in Grey, J. (ed), *The Last Word? Essays on Official History in the United States and British Commonwealth* (Westport: Praeger, 2003), pp. 27-52.
- Van der Waag, I.J., 'The Thin Edge of the Wedge': Anglo-South African Relations, Dominion Nationalism and the Formation of the Seaward Defence Force in 1939-1940' in *Contemporary British History*, 24(4), 2010, pp. 427-449.
- Van der Waag, I.J., 'Smuts's Generals: Towards a First Portrait of the South African High Command, 1912-1948' in *War in History*, 18(1), 2011, pp. 33-61.
- Van der Waag, I.J., 'South African defence in the age of total war, 1900-1940' in *Historia*, 60(1), 2015, pp. 129-155.
- Van Deventer, M.C., 'Die Ontwikkeling van 'n Militêre Inligtingsvermoë Vir Die Unieverdedigingsmag, 1937-1943' in *Militaria*, 25(2), 1995, pp. 86-103.
- Visser, G.E., 'Anglo-South African Relations and the Erebus Scheme, 1936-1939' in *Scientia Militaria*, 35(1), 2007, pp. 68-98.
- Visser, G.E., 'Mutiny' on HMS Erebus, September 1939' in *War & Society*, 27(1), 2008, pp. 59-77.
- Visser, G.E., and Monama, F.L., 'Black workers, typhoid fever and the construction of the Berg River - Saldanha military water pipeline, 1942 - 1943' in *TD: The Journal for Transdisciplinary Research in Southern Africa*, 4(1), 2008, pp. 181-208.

Visser, G.E., Jacobs, A., and Smit, H., 'Water for Saldanha: War as an Agent of Change' in *Historia*, 53(1), 2008, pp. 130-161.

Wessels, A., 'South Africa and the War against Japan 1941-1945' in *Military History Journal*, 10(3), 1996. (<http://samilitaryhistory.org/vol103aw.html>).

Wessels, A., 'Die stryd teen Nippon: Suid-Afrika en Japan, 1941-1945' in *Journal for Contemporary History*, 30(3), 2005, pp. 222-241.

Wessels, A., 'The South African Navy and its Predecessors, 1910-2010: A Century of Interaction with Commonwealth Navies' in *Scientia Militaria*, 38(2), 2010, pp. 109-130.

4. GOVERNMENT PUBLICATIONS

4.1 Acts of Parliament

South Africa Defence Act (13 of 1912).

5. INTERNET SOURCES

German Naval History Website – Accessed on 5 June 2017. (<http://www.german-navy.de/kriegsmarine/ships/auxcruiser/index.html>).

Imperial Japanese Navy Website – Accessed on 24-27 April 2017. (<http://www.combinedfleet.com/>).

Regia Marina Italiana –Website Accessed on 9 May 2017. (<http://www.regiamarina.net/>)

Uboat.net – Website Accessed on 5 June 2017 (<https://uboaat.net/>).

6. ARCHIVAL SOURCES

6.1 Department of Defence Documentation Centre

6.1.1 Commander Fortress Air Defences

CFAD, Box 12, File: Cape Fortress Intelligence Summary. *Cape Fortress intelligence summary no. 10, 4 Dec 1942.*

CFAD, Box 12, File: Attacks on U-boats and submarines. *Circular from CCAD to Fortress Command and SAAF squadrons regarding U-boat attacks, 12 Jan 1943.*

CFAD, Box 12, File: Intelligence – Attacks on U-boats and submarines. *Lecture on A/S warfare by Wing Commander Lombard, 22 Feb 1943.*

6.1.2 Diverse (Group 1)

Diverse, Group 1, Box 123, File: Coast 22 (O) Organisation general. *Letter from air headquarters East Africa to OC Advanced Operations Section air headquarters East Africa re operation control to be exercised by the Advanced Operations Section, air headquarters, East Africa, situated at Cape Town, 11 May 1943.*

Diverse, Group 1, Box 123, File: Organisation – General. *Personal correspondence from CGS to C-in-C South Atlantic, 2 Jun 1944.*

Diverse, Group 1, Box 123, File: Operation Vehement. *Operational order for Operation Vehement, 5 Aug 1944.*

Diverse, Group 1, Box 125, File: Barrage II. *Circular from C-in-C South Atlantic to GOC Coastal Area re Barrage II, 24 Nov 1943.*

Diverse, Group 1, Box 125, File: Barrage II. *Operation Bustard ops order, 27 Nov 1943.*

Diverse, Group 1, Box 125, File: Woodcutter. *Operation Woodcutter ops order, 1 Jan 1944.*

Diverse, Group 1, Box 125, File: Operation Wicketkeeper. *Operation Wicketkeeper, 8 Mar 1944.*

Diverse, Group 1, Box 125, File: Operation Wicketkeeper. *Messages and Sitreps concerning Operation Wicketkeeper, Mar 1944.*

Diverse, Group 1, Box 126, File: Coastal appreciations general. *A Japanese attack on South Africa: An appreciation from the enemy point of view, 29 Sept 1942.*

Diverse, Group 1, Box 126, File: Coastal appreciations general. *Most secret communication between DECHIEF and OPPOSITELY regarding the scales of attack by sea and air in South African waters, 8 Apr 1943.*

Diverse, Group 1, Box 126, File: Operation “Throttle”. *Operation Throttle ops order, 30 May 1944.*

Diverse, Group 1, Box 126, File: Operation “Steadfast”. *Operation Steadfast ops order, 12 Jun 1944.*

Diverse, Group 1, Box 126, File: Operation Tricolour (location + destruction U-boat). *Message from Admiralty to C-in-C SA re Operation Tricolour, 25 Jul 1944.*

Diverse, Group 1, Box 127, File: Appreciations navy. *C-in-C South Atlantic appreciation of the naval situation in the Cape area, 4 Oct 1942.*

6.1.3 Chief of the General Staff (War)

CGS War, Box 38, File: Coast Defence Guns. *Secret Proposal for the Modernisation of Coast Defences, 22 Jun 1938.*

CGS War, Box 38, File: Coast Defence Equipment. *Secret Policy on Coast Defence, 16 Sept 1939.*

CGS War, Box 38, File: Port and Dock Security Measures. *Extract from Col Webster's report on security at the Port of Cape Town, undated (probably Jun 1940).*

CGS War, Box 38, File: Port and Dock Security Measures. *Memorandum of Meeting held at DHW re Docks Field Security, 15 Oct 1942.*

CGS War, Box 38, File: Port and Dock Security Measures. *Notes of meeting held at DHQ in connection with the proposed formation of a Port Security Unit, 15 Oct 1942.*

CGS War, Box 38, File: Blackouts and lighthouses. *Correspondence between Tait and Van Ryneveld re coastal blackouts, 19 Jun 1942.*

CGS War, Box 38, File: Blackouts and lighthouses. *Circular from Office of the C-in-C South Atlantic Station (Tait) to Naval Liaison Officers at Durban, East London, Port Elizabeth and Cape Town re harbour and coast lights, 19 Jun 1942.*

CGS War, Box 38, File: Blackouts and lighthouses. *Correspondence between Secretary of Defence and Minister of Justice re black-out conditions coastal area, 29 Sept 1943.*

CGS War, Box 38, File: Blackouts and lighthouses. *Letter from C-in-C South Atlantic to CGS, 31 May 1945.*

CGS War, Box 122, File: Raiders. *Secret report on possible operation of Italian submarines in the Indian Ocean, 3 Jul 1940.*

CGS War, Box 122, File: Raiders. *Most secret cable between DECHIEF and COASTCOM re sinking of German submarine off Cape Town, 9 Oct 1942.*

CGS War, Box 226, File: Wireless stations (communications with). *Secret note on the interception of illicit communications, 2 Nov 1939.*

CGS War, Box 226, File: W.T. stations: Ship to shore & ship to aircraft. *Letter from Harlech to Smuts re Admiralty Policy with regard to wireless communication, 9 Mar 1943.*

CGS War, Box 265, File: Sitreps coastal area. *Most secret cypher between Coastcom and Dechief Fortcoms, 21 Aug 1943.*

CGS War, Box 265, File: Sitreps coastal area. *Most secret Sitrep from Dechief Cape Town to Coastcom, 7 Mar 1944.*

6.1.4 Chief of the General Staff (Group 2)

CGS, Group 2, Box 209, File: CGS/367/13/9. *DCGS to Director of Training and Operations, 3 Aug 1939.*

6.1.5 Commander Seaward Defences

CSD, Box 15, File: Group sailing operations Union waters. *Note on commencement and ceasing of group sailings, 1944.*

CSD, Box 15, File: Policy (escort groups). *Note on commencement and ceasing of group sailings, 1944.*

CSD, Box 15, File: Policy (escort groups). *CSD Approval of exchange with RN of A/S vessels, 15 Nov 1943.*

CSD, Box 15, File: Policy (escort groups). *Personal correspondence between CSD and GOC coastal area re SANF vessels and A/S warfare, 30 Oct 1942.*

CSD, Box 15, File: Policy (escort groups). *Correspondence between CSD and SANOi/c Durban re SANF A/S vessels on escort duties, 28 Apr 1943.*

CSD, Box 15, File: Policy (escort groups). *Correspondence between CSD and SANOi/c Durban re participation of SANF vessels in convoy escorts from SA ports, 23 Jan 1943.*

CSD, Box 25, File: SANF Escort Force exercises. *Proposed Atlantic convoy instructions re action to counter U-boats anti-asic tactics.*

CSD, Box 43, File: SANF Anti-submarine Warfare Committees. *Minutes of A/S Subcommittee meeting coastal area headquarters, 12 Mar 1943.*

CSD, Box 43, File: SANF Anti-submarine Warfare Committees. *Report by Officer Commanding HMSAS Gannet re U-boat warfare in the South Atlantic, 10 Jun 1943.*

CSD, Box 43, File: SANF Anti-Submarine Warfare Committees. *U-boat Warfare in the South Atlantic – Analysis of Attack by U-boat, 10 Jun 1943.*

6.1.6 Secretary for Defence

DC, Box 1973, File DC 396/38: *SNO to Secretary for Defence, 28 Sept 1939.*

DC, Box 1973, File DC 396/38: *Secretary for Defence to SNO, 30 Sept 1939.*

6.1.7 Union War Histories (Civil)

UWH Civil, Box 1, File: *The Five-Year Defence Plan, 1947.*

UWH Civil, Box 12, File: SA War Economy 1939-1945. *Procurement of Supplies – SA Purchasing Organisation in USA.*

UWH Civil, Box 16, File: The War Time Shipping Problem. *Introduction and Background to the Shipping Crisis of 1942/1943.*

UWH Civil, Box 16, File: The War Time Shipping Problem. *Shipment of Union Government Cargo from the United Kingdom.*

UWH Civil, Box 16, File: The War Time Shipping Problem. *The Beginning of Shipping Control over Commercial Cargo.*

UWH Civil, Box 16, File: The War Time Shipping Problem. *Clearing the Accumulation of Commercial Cargo, and the commencement of Combined Shipping Adjustment Board Procedure, Jun-Dec 1942.*

UWH Civil, Box 16, File: The War Time Shipping Problem. *The Effect of Combined Shipping Procedure upon the Responsibilities of the Union High Commissioner's Office 1942-1944.*

UWH Civil, Box 23, File: SA Railways and Harbours Departmental Civil War History Vol VIII – Addenda to Volumes I and II Ports and Shipping. *Port Development.*

UWH Civil, Box 23, File: SA Railways and Harbours Departmental Civil War History Vol VIII – Addenda to Volumes I and II Ports and Shipping. *Memorandum on the Ship Repair Organisation.*

UWH Civil, Box 23, File: SA Railways and Harbours Departmental Civil War History Vol VIII – Addenda to Volumes I and II Ports and Shipping. *Establishment and Functioning of Controller of Ship Repairs.*

UWH Civil, Box 24, File: SA Railways and Harbours Departmental Civil War History Vol VIII. *Ports & Shipping.*

UWH Civil, Box 25, File: Shipping Repairs. *South Africa's Achievement in Wartime Shipping Repairs.*

UWH Civil, Box 35, File PO/29. *South African Purchasing Commission Inception and Organisation, 1940-1947.*

UWH Civil, Box 36. File: Shipping. *Statement of Shipments from the United Kingdom during the Period Jan to Dec 1943.*

UWH Civil, Box 60, File: C 38. *Wartime Shipping Problem.*

UWH Civil, Box 73, File: Year Book, Section XI. *Shipping.*

UWH Civil, Box 86, File: MS 11. *Coast Defence Policy, undated.*

UWH Civil, Box 107, File War/C/131: Coordination of Allied War Effort – Control of Supply and Shipping. *Telegram from Secretary of State for Dominion Affairs, London, to Minister for External Affairs, Cape Town, 27 Jan 1942.*

UWH Civil, Box 107, File War/C/131: Coordination of Allied War Effort – Control of Supply and Shipping. *Telegram from the Secretary of State for Dominion Affairs, London, to the Minister of External Affairs, Cape Town, 28 Jan 1942.*

UWH Civil, Box 107, File War/C/131: Coordination of Allied War Effort – Control of Supply and Shipping. *Telegram from High Commissioner, London, to Minister for External Affairs, Cape Town, 2 Mar 1942.*

UWH Civil, Box 108, File: Import Control. *Priority Rating.*

UWH Civil, Box 108, File: Import Control. *Shipping Term Allocation.*

UWH Civil, Box 110, File: Import Control. *Shipping Term System.*

UWH Civil, Box 110, File: Procurement. *Steel Shipment and Orders at Hand.*

UWH Civil, Box 110, File: Shipping. *Shipment of Steel Supplies.*

UWH Civil, Box 111, File: Import Control. *Certificates of Essentiality.*

UWH Civil, Box 111, File: Import Control. *Priority Rating Shipping.*

UWH Civil, Box 111, File: Shipping. *Position in 1945.*

UWH Civil, Box 112, File: Import Control. *Priority Rating in Relaxation to Shipping.*

UWH Civil, Box 113, File: Shipping – Shipping for July and August 1942. *Telegrams from South African Litigation, Washington to PrimeSec Pretoria, 22 Jul 1942.*

UWH Civil, Box 113, File: Shipping – Position in June 1942. *Telegram from Oppositely, London, to South African Litigation, Washington 17 Jun 1942.*

UWH Civil, Box 114, File: Priority Rating. *Backlog of Cargo from UK.*

UWH Civil, Box 220, File: Union War Histories Translations 14a. *U-boat Operations of the Axis Powers in S.A. Waters compiled by Dr Jurgen Rohwer, 1954.*

UWH Civil, Box 240, File 215: *Union Coast Defences. South African Naval Forces, 15 Aug 1940.*

UWH Civil, Box 312, File: Fuehrer Conferences on Naval Affairs 1942. *Report to the Fuehrer, made by the Commander-in-Chief, Navy the afternoon of 13 Feb 1942.*

UWH Civil, Box 312, File: Fuehrer Conferences on Naval Affairs 1942. *Report by the Commander-in-Chief Navy to the Fuehrer at Headquarters "Wolfsschanze" the evening of 12 Mar 1942.*

UWH Civil, Box 339, File: Gordon-Cumming U-Boat Material. *Miscellaneous notes, undated.*

UWH Civil, Box 339, File: Gordon-Cumming U-Boat Material. *South Atlantic Station War Diary, Oct 1942.*

UWH Civil, Box 339, File: Gordon-Cumming U-Boat Material. *Extract from Proceedings of U-boat Assessment Committee (Volume 9), Sept-Dec 1942.*

UWH Civil, Box 339, File: Gordon-Cumming U-Boat Material. *Report on U-boat Activities in South African Waters, Oct-Dec 1942.*

UWH Civil, Box 339, File: Gordon Cumming U-boat material. *The Commanders-in-Chief South Atlantic and Eastern Fleet, Report on the safety of shipping in South African waters, 30 Mar 1943.*

UWH Civil, Box 340, File: Long naval history. *Ships lost or damaged by enemy action in South African waters.*

UWH Civil, Box 341, File – U-Boat matters. *Questions and answers submitted by UWH section to Fregattenkapitän Gunter Hessler re U-boat warfare in South African waters.*

UWH Civil, Box 341, File: U-boat matters. *Report on experience gained by U-459 refuelling 15 U-boats, 21 March – 15 May 1942.*

UWH Civil, Box 341, File: U-boat matters. *Operation Order “Eisbär”, 1 Aug 1942.*

UWH Civil, Box 341, File: U-boat material. *Report on U-boat policy & ops in South African waters by Walter Meyer.*

UWH Civil, Box 341, File: U-boat material. *Extracts from war diary U-159 (Helmut Witte), 24 Aug 1942 – 5 Jan 1943.*

UWH Civil, Box 341, File – U-boat material. *Comments on war diary U 159 (Helmut Witte).*

UWH Civil, Box 341, File: U-boat matters. *Extract from letter from Carl Emmermann on Operation Eisbär, 17 Oct 1953.*

UWH Civil, Box 341, File – U-boat material. *Report on my experiences on board U-68 on voyage to Cape Town from middle of August to middle of December 1942 by Walter Meyer.*

UWH Civil, Box 341, File: U-boat matters. *Emmermann (U-172) on Operation Eisbär.*

UWH Civil, Box 342, File: Newspaper Articles Naval War. *‘Gold gab für man Bose’ in Muenchner Illustrierte, 13 Mar 1954.*

UWH Civil, Box 342, File: Newspaper Articles Naval War. R. Littell, *‘The Cruise of the Raider ATLANTIS’ in Readers Digest, Nov 1953, pp. 69-73.*

UWH Civil, Box 342, File: Translations of Extracts from German Books. *Schiff 16 (Atlantis) by Frank and Rogge.*

UWH Civil, Box 342, File: “Pinguin”. *Die Kaperfahrt des Hilfskreuzers “Pinguin” 1940/41 by Dr Hans Ulrich Roll – Meteorological officer of Pinguin.*

UWH Civil, Box 342, File: Translations of Extracts from German Books. *Das glückhafte Schiff Kreuzerfahrten des ADMIRAL SCHEER.*

UWH Civil, Box 392, File: UWH Translations of Captured German Documents – German-Japanese High Level Documents on Strategy and Tactics. *Minutes of meeting Chief SKL-Nomura, 17 Dec 1941.*

UWH Civil, Box 392, File: UWH Translations of Captured German Documents – German-Japanese High Level Documents on Strategy and Tactics. *1/SKL Appreciation of Situation, 18 Dec 1941.*

UWH Civil, Box 392, File: UWH Translations of Captured German Documents – German-Japanese High Level Documents on Strategy and Tactics. *Minutes Chief of Staff SKL to Chairman Military Commission of Tripartite Pact, 19 Dec 1941.*

UWH Civil, Box 392, File: UWH Translations of Captured German Documents – German-Japanese High Level Documents on Strategy and Tactics. *Copy of Military Agreement between Germany, Italy and Japan, 18 Jan 1942.*

UWH Civil, Box 392, File: UWH Translations of Captured German Documents – German-Japanese High Level Documents on Strategy and Tactics. *Report on discussion with Admiral Nomura from Chair Military Commission Tripartite Pact to Chief OKW, 17 Feb 1942.*

UWH Civil, Box 392, File: UWH Translations of Captured German Documents – German-Japanese High Level Documents on Strategy and Tactics. *Minutes of meeting between Admiral Nomura and Chief of Staff SKL, 27 Mar 1942.*

UWH Civil, Box 392, File: UWH Translations of Captured German Documents – German-Japanese High Level Documents on Strategy and Tactics. *Notes on main point of discussion Nomura-Fricke, 27 Mar 1942.*

UWH Civil, Box 392, File: UWH Translations of Captured German Documents – German-Japanese High Level Documents on Strategy and Tactics. *Minutes of meeting between C/SKL and Japanese Naval Liaison Staff, 8 Apr 1942.*

UWH Civil, Box 392, File: UWH Translations of Captured German Documents – German-Japanese High Level Documents on Strategy and Tactics. *Telegraphic report German Ambassador Tokyo to Reich Foreign Minister, 14 Apr 1942.*

UWH Civil, Box 392, File: UWH Translations of Captured German Documents – German-Japanese High Level Documents on Strategy and Tactics. *Minutes of meeting between Jodl, Nomura, Bansai at Fuehrer HQ, 8 Aug 1942.*

UWH Civil, Box 392, File: UWH Translations of Captured German Documents – German-Japanese High Level Documents on Strategy and Tactics. *Minutes of meeting Chief SKL-Nomura, 11 Aug 1942.*

6.1.8 Map Collection

File – War in the Southern Oceans maps. *Chart and List of Ships Sunk Captured or Damaged in the Waters off Southern Africa, 1939-1945.*

6.1.9 Photographic Archive

841000346 – *RAF Catalina of 262 Sqn.*

781004773 – *F/Lt E.S.S. Nash attacking U-Boat Uit22 with his Catalina Aircraft.*

6.1.10 South African Air Force War Diaries

SAAF War Diaries, Box 122, File: A4 (22 Sqn Jan – May 1944). *22 Squadron SAAF war diary Mar 1944.*

SAAF War Diaries, Box 124, File: A4 (23 Sqn Jan–Dec 1944). *23 Squadron SAAF war diary Mar 1944.*

SAAF War Diaries, Box 125, File: A3 (25 Sqdn Jul '43 – Mar '44). *25 Squadron SAAF War Diary Mar 1944.*

SAAF War Diaries, Box 125, File: A3 (25 Sqdn Jul '43 – Mar '44). *25 Squadron SAAF War Diary Mar 1944, Secret UBAT report (Appendix B).*

SAAF War Diaries, Box 127, File: D2 (262 Squadron Sept 42 – May 44). *262 Squadron RAF war diary Mar 1944.*

SAAF War Diaries, Box 127, File: D2 (262 Squadron Sept 42 – May 44). *262 Squadron RAF war diary Mar 1944, Secret UBAT report – Flt Lt Roddick (Appendix).*

SAAF War Diaries, Box 182, File: A1 (SAAF war diary CCAD). *CCAD coastal area headquarters war diary Mar 1944.*

6.2 South African National Museum of Military History

6.2.1 Masondo Reference Library – Photo Collection

SA Navy Photo Collection, *S.A. 410.*

SA Navy Photo Collection, *S.A. 429.*

SA Navy Photo Collection, *S.A. 470.*

SA Navy Photo Collection, *S.A. 659.*

SA Navy Photo Collection, *S.A. 987.*

SA Navy Photo Collection, *S.A. 1231.*

SA Navy Photo Collection, *S.A. 1628.*

SA Navy Photo Collection, *S.A. 1651.*

SA Navy Photo Collection, *S.A. 1657.*

SA Navy Photo Collection, *S.A. 5044.*

SA Navy Photo Collection, *S.A. 5219.*

6.3 North-West University, RAM Division (Potchefstroom)

6.3.1 Ossewabrandwag Archive (OB Archive)

6.3.1.1 Correspondence Archive

A.F. Schulz Versameling. *Nazisme in Andalusia Interneringskamp, 9 Okt 1940 – 22 Nov 1944.*

L. Sittig Collection. *Lyste met kodes, ongedateer.*

L. Sittig Collection. *Kontak tussen die Ossewabrandwag en die Duitse Regering, 1942-1944.*

L. Sittig Collection. 3(a) – *N.O. Pasche, 12 Aug 1986*

6.3.1.2 Audio Archive

Transkripsies/Bandopname. *H.J.R. Anderson.*

Transkripsies/Bandopname. *J.H. Barnard.*

Transkripsies/Bandopname. *H.T. Hickman.*

Transkripsies/Bandopname. *Dr Eric Holm.*

Transkripsies/Bandopname. *J.H. McDonald.*

Transkripsies/Bandopname. *H. Rooseboom.*

Transkripsie/Bandopname. *D.J.F. Scribante.*

Transkripsies/Bandopname. *L. Sittig.*

Transkripsies/Bandopname. *A.S. Spies.*

6.3.1.3 Photo Archive

F00005_3 – *H. Rooseboom.*

F00660_3 – *M. Radley.*

F00660_5 – *W. Radley.*

F01069_5 – *L. Sittig.*

M0011 – *Radiosender.*

6.4 The National Archives of the United Kingdom

6.4.1 Records of the Admiralty

ADM 1/10262. *Memorandum on the possible conversion of South Atlantic whalers for A/S duties, Mar 1939.*

ADM 1/10262. *Treasury Inter-Service Committee – Proposal to requisition Whalers, 18 Mar 1940.*

ADM 1/10262. *Remarks on the Underwater Defence of Cape Town, Simonstown, East London, Port Elizabeth, Durban and Saldanha Bay, 14 Feb 1942.*

ADM 1/10262. *Circular by Director of Local Defences re South African Boom Defences, 23 Mar 1942.*

ADM 1/10262. *Naval Cypher from F.O.i.c. Simonstown to C-in-C South Atlantic re Shipment of Boom Defences to Union, Mar 1942.*

ADM 1/10262. *Naval Cypher from Admiralty to F.O.i.c. Simonstown re Importance of the Development of Saldanha Bay, 16 Mar 1942.*

ADM 1/10262. *Naval Cypher from F.O.i.c. Simonstown to Admiralty re Union Government commitment to Boom Defences, 13 May 1942.*

ADM 1/12101, *Anti-U-boat warfare. Measures required to meet the U-boat threat in South Atlantic, 7 Dec 1942.*

ADM 1/12643. *Report by Captain C D Howard-Johnston on anti-submarine operations in the South Atlantic, 1943.*

ADM 1/26888. "Y" Organisation in South Africa. *Memo on Y and RSS in South Africa, 16 Mar 1942.*

ADM 1/26888. "Y" Organisation in South Africa. *Report by Staff Officer (Y) on "Y" Organisation, 24 Jun 1943.*

ADM 1/26888. "Y" Organisation in South Africa. *Report by Staff Officer (Y) on "Y" Organisation, 24 Jun 1943.*

ADM 1/27176. *Naval Intelligence Organisation South Africa. Cape Town Intelligence Centre – Report of Working, 1933.*

ADM 1/13288. *South Atlantic R.D.F. Instructions, 1 May 1943.*

ADM 1/15276. *Secret Correspondence between C-in-C South Atlantic and SANF re the manning of A/S Fixed Defences in South Africa, 22 Jun 1943.*

ADM 1/15276. *Naval Cypher from Admiralty to C-in-C South Atlantic re A/S Fixed Defences in South Africa, 8 Oct 1943.*

ADM 1/15276. *Memorandum on the Axis use of Midget Submarines, 19 Jan 1943.*

ADM 1/15276. *Circular from Director of Anti-Submarine Warfare re HDAs in South Africa, 5 May 1943.*

ADM 1/12643, *Anti-Submarine Operations – South Atlantic Station. Report of Captain Howard-Johnston's Visit to the Cape, Oct 1943.*

ADM 1/31006. *History and Organisation of the Naval Intelligence Centre Cape Town. General Organisation and Expansion from Peace to War Footing.*

1/31006. *History and Organisation of the Naval Intelligence Centre Cape Town. Tracking Section.*

ADM 1/31006. *History and Organisation of the Naval Intelligence Centre Cape Town. Operational Intelligence.*

ADM 1/31006. *History and Organisation of the Naval Intelligence Centre Cape Town. Security.*

ADM 1/31006. *History and Organisation of the Naval Intelligence Centre Cape Town. Naval Press Relations.*

ADM 1/31006. *History and Organisation of the Naval Intelligence Centre Cape Town. Naval Censorship.*

ADM 1/31006. History and Organisation of the Naval Intelligence Centre Cape Town. *Appendix I.*

ADM 1/31006. History and Organisation of the Naval Intelligence Centre Cape Town. *Appendix II.*

ADM 1/31006. History and Organisation of the Naval Intelligence Centre Cape Town. *Appendix III.*

ADM 1/17587, A/S Organisation in South Africa. *Report on the A/S Organisation in South Africa by Lt Cdr R.N. Hankey, 16 Apr 1945.*

ADM 116/4344. *SNO to Admiralty, 3 Sept 1939.*

ADM 116/4344. *SNO to Admiralty, 6-7 Sept 1939.*

ADM 116/4344. *SNO to Admiralty, 9 Sept 1939.*

ADM 116/4344. *SNO to Admiralty, 13 Sept 1939.*

ADM 116/4344. *SNO to Admiralty, 21 Sept 1939.*

ADM 116/4499. *Defence Plan for Ports in the Union of South Africa, 23 Feb 1942.*

ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, Jan 1943.*

ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, Feb 1943.*

ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, Mar 1943.*

ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, Apr 1943.*

ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, May 1943.*

ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, Jun 1943.*

ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, Jul 1943.*

ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, Aug 1943.*

ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, Sept 1943.*

ADM 199/2334. South Atlantic War Diary, January to October 1943. *South Atlantic War Diary, Oct 1943.*

ADM 223/530. *Naval Cypher from S.O.I. Simonstown to C-in-C South Atlantic re Bellringer, 13 Nov 1941.*

6.4.2 Record of the Air Ministry, the Royal Air Force, and related bodies

AIR 9/190, Anti U-boat Warfare – African Shipping. *Memorandum by the Secretary of State for Air re Anti-submarine air protection of convoys on the west coast of Africa and the Indian Ocean, 25 Jan 1943.*

AIR 9/190, Anti U-boat Warfare – African Shipping. *Anti-U-boat protection in the Cape Area, 9 Jun 1943.*

6.4.3 Records of the Cabinet Office

CAB 84/46, Air Defence on South Africa and Madagascar. *Personal Telegram from Smuts to Churchill, 5 Jun 1942.*

CAB 84/46, Air Defence on South Africa and Madagascar. *Report by the Joint Planning Staff on the Air Defence of South Africa and Madagascar, 7 Jun 1942.*

CAB 84/46, Air Defence on South Africa and Madagascar. *Note by the Secretary of the Joint Planning Staff on the South African Air Force, 12 Jun 1942.*

CAB 120/474, South Africa: correspondence with Field-Marshal Smuts. *Note to Prime Minister on Air Defence of South Africa, 16 Jun 1942.*

6.4.4 Records of the War Office

WO 106/4934. *South African Coastal Defence, 24 Nov 1940.*

WO 208/5111. South Africa General. *Telegram from C-in-Ci Middle East to War Office, 7 Mar 1942.*

WO 208/5111. South Africa General. *South Atlantic 'Y' Organisation, 12 Dec 1942.*

WO 208/5156. "Y" Committee South Africa. *Letter from ME to MI8, 13 May 1942.*

WO 208/5156. "Y" Committee South Africa. *Minute from Y Board with enclosed paper on formation of Y Committee in South Africa, 13 Aug 1942.*

WO 208/5156. "Y" Committee South Africa. *Minute to DMI, 19 Aug 1942.*

WO 208/5156. "Y" Committee South Africa. *Memo from Chairman 'Y' Board on 'Y' Services in South Africa, 3 Oct 1942.*

WO 208/5156. "Y" Committee South Africa. *Draft telegram to Chairman 'YI' Board from Chairman 'Y' Board, 3 Oct 1942.*

6.4.5 Records of the Security Service

KV 2/202, Elferink, Lambertus. *152a – Interim Report on WERZ, Luitpold, 31 Oct 1945.*

KV 2/925, Leibbrandt, Robey. 67a – *From Col. Webster attaching replies to questionnaire, copies of photograph, memorandum re LEIBRANDT's activities, 1 Jun 1942.*

KV 2/939, Lothar SITTIG/ Nils PAASCHE. 79a – *Copy of First Report on German Espionage in the Union of South Africa, 25 Sept 1943.*

KV 2/939, Lothar SITTIG/ Nils PAASCHE. 121b – *Copy of Second Report on German Espionage in the Union of South Africa, 27 Nov 1943.*

KV 2/939, Lothar SITTIG/ Nils PAASCHE. 194a – *Extracts from Third Report German Espionage in the Union of South Africa, 25 May 1944.*

KV 2/940 – Kolb, Hubert. 55a – *Interim Report on Walter Paul Kraizizek.*

KV 2/941, Rooseboom, Hans. 37a – *Copy of information from BJ 135893.*

KV 2/941, Rooseboom, Hans. 11a – *Copy of cable received from Pretoria re ROOSEBOOM, SITTIG and MASSER, 27 Jul 1943;*

KV 2/941, Rooseboom, Hans. 13a – *Extract from BIB report on German Espionage in the Union of South Africa re ROOSEBOOM, 25 Sept 1943.*

KV 2/941, Rooseboom, Hans. 43a – *Copy of Interim Report on MASSER, mentioning ROOSEBOOM, 26 Oct 1945.*

KV 2/941, Rooseboom, Hans. 44a – *Copy of Interim Report on Walter Paul Kraizizek, 31 Oct 1945.*

KV 2/941, Rooseboom, Hans. 46a – *Extract from CSDIC/WEA Final Report on AHLRICHS re ROOSEBOOM, 4 Feb 1946.*

KV3/10. German Espionage in South Africa, 1939-1945. *German intelligence activities in South Africa during the Second World War.*