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CANADIAN FORCES COLLEGE - COLLÈGE DES FORCES CANADIENNES AMSC 8 - CSEM 8

'THE CAGED TIGER'

CUNNINGHAM - A STUDY OF DECISIVE OPERATIONAL LEADERSHIP

By

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Abstract

Admiral of the Fleet Viscount Cunningham of Hyndhope was one of the Royal Navy's finest leaders in the 20th Century. Not since Nelson has a maritime operational commander been so successful in the face of truly adverse conditions. From June 1939 until April 1942, Cunningham served as the Commander-in-Chief (C-in-C) of the Royal Navy's Mediterranean Fleet. In these attritional and taxing early years of the War, Britain stood alone in Europe against the Axis powers. Often starved of the assets he needed, Cunningham was unfettered in his delivery of violence upon the enemy where he considered it necessary and equally assured in regional diplomacy and negotiation. This essay is an examination of Cunningham's career focusing on the lessons of his leadership at the operational level. It will also measure Cunningham's leadership qualities against recently introduced Canadian Forces (CF) doctrine. This essay will demonstrate that Cunningham's strategic insight, humanity and decisiveness were key elements to his success and these qualities have enduring lessons for leaders at the operational level.

Introduction

Leadership in command is a popular topic. There are many volumes of advice and analysis available. But peel away the layers of guidance and at the core you will find some basic principles necessary for good leadership, particularly when things are going wrong. Cunningham was one of the finest maritime commanders of the 20th Century. His command of the Royal Navy's Mediterranean Fleet in the early years of the Second World War serves as a model for operational level leadership particularly in the face of truly adverse conditions. British Defence Doctrine defines the operational level as "the level of war at which campaigns and major operations are planned, conducted and sustained to accomplish strategic objectives within theatres or areas of operations." It further defines the operational art as "the skilful employment of military forces to attain strategic goals through the design, organisation, integration and conduct of campaigns or major operations – linking military strategic to tactics."² Pigeau and McCann contend that "only humans can command." These definitions demonstrate that current and future doctrine will continue to demand a human command interface between the strategic and the tactical where military effects are required. This interface is the operational commander exercising the operational art. In doing so, the operational commander must lead and must lead effectively.

Canadian Forces Leadership Doctrine

2005 saw the issuing of updated CF leadership doctrine.⁴ It defines 'effective leadership' as "directing, motivating and enabling others to accomplish the mission professionally and ethically, while developing or improving capabilities that contribute to mission success." There are shorter definitions such as Northouse who sees it as "a process whereby an individual influences a group of individuals to achieve a common goal." The CF leadership model is a

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¹ UK Ministry of Defence JDP 01, Joint Operations, (Shrivenham, JDCC, 2004) 2-1

² UK Ministry of Defence JWP 0-01, British Defence Doctrine, (Shrivenham: 2001) 1-2

³ Ross Pigeau and Carol McCann, *Re-conceptualizing Command and Control*, Canadian Military Journal, Vol 3, No 1 (Spring 2002) 54

⁴ CFP A-PA 005-000/AP-003, *Leadership in the Canadian Forces, Doctrine* (Defense Department of Canada, 2005)

⁵ CFP A-PA 005-000/AP-003, *Leadership in the Canadian Forces, Doctrine* (Defense Department of Canada, 2005)

⁶ Northhouse, Peter G, Leadership: Theory and Practice (Michigan, Western Michigan University, 2004) 3

values-based system⁷, which recognises the changing strategic background of rapid globalisation and the emerging security dynamic where the threat from nation states has receded and the threat from insurgent, non-aligned groups has increased. The doctrine also acknowledges the changing human resource environment, contemporary public awareness, the media, and, with modern communications, the ability to micro-manage strategically. Distilled from the doctrine are two overarching themes which will be used as a template to measure the lessons of Cunningham's leadership; functional responsibilities of leaders and leadership characteristics.

Functional responsibility is constructed from five 'dimensions' necessary for organisational effectiveness: mission success, internal integration, member well-being and commitment, external adaptability and military ethos. Described as the 'primary' outcome, mission success is supported by the other enabling dimensions. The theme of military ethos includes conduct, values, seeking and accepting responsibility and the ethical, moral and legal dimensions of a campaign which leaders should cultivate.

CF doctrine also recognises the wide and varied results of numerous studies over many years which have analysed leadership characteristics; there is no definitive list; there is no panacea for leaders to follow. Col Morneau, in his paper on the attributes of successful operational leadership, identified 74 characteristics of operational commanders which he still described as "not exhaustive." Nevertheless, the CF doctrine defines leadership characteristics in five contemporary human capability 'domains'; knowledge and skills, cognitive ability, social capacities, personality and professional motivation. The list is neither definitive nor exhaustive and lays no claim that possession of these characteristics will result in good leadership. But as a contemporary and relevant framework, it is presented here as a sound basis for analysis of Cunningham.

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⁷ 'Values' defined as 'beliefs concerning what is centrally important in life and what should, therefore, guide decisions and actions; properties or qualities that make something useful, desired or esteemed'. Canadian Defence Academy CFP A-PA-005-001/AP-004, Leadership in the Canadian Forces, 133

⁸ Morneau, Col, *What are the Key Attributes Required by an Operational Level Commander to be Successful?*, Canadian Forces College AMSC 1, Annex E

ABC - The Making of the Man

"Thank God for giving our people and nation such a man at such a time." 9



Andrew Browne Cunningham (ABC)¹⁰ was born in Dublin on 7th January 1883, the third son of Professor and Mrs Daniel Cunningham. His father was Professor of Anatomy at Trinity College, Dublin and both his grandfathers had been Scottish Presbyterian Ministers - none of his forebears had been in the Navy. Cunningham enjoyed a happy and prosperous early childhood in his close knit Christian family in Dublin. At the age of eight, he started at Morley's School. Evidently not happy there, Cunningham's parents made arrangements for him to attend Edinburgh Academy living

with his aunts in the city. Although a better arrangement, Cunningham was still not settled and when his father telegrammed him suggesting "Would you like to go into the Navy?", Cunningham replied "Yes, I should like to be an Admiral." So after three years 'cramming' in Stubbington, ABC joined HMS Brittania, in Dartmouth, on 15th January 1897 at the tender age of just fourteen years and eight days. After initial training in Dartmouth, ABC undertook a number of early appointments in sailing and steam ships. As a Midshipman he served ashore in the Naval Brigade in South Africa during the Boer War. This was a harsh but enriching experience of the brutality of land warfare in 1900. Cunningham described it as:

"A grand experience for a boy of seventeen to have to live in considerable discomfort and to have to fend for his men and himself in all sorts of unfamiliar conditions. It also brought one into close contact with the Army which was most useful in the years that were to come." 12

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⁹ Words spoken by the Bishop of Norwich during his address at Cunningham's funeral in St Paul's Cathedral on 12 July 1963.

¹⁰Cunningham was universally and affectionately known throughout the Navy by his initials, ABC - an appropriate abbreviation to use from time to time in this paper.

¹¹Cunningham, Viscount of Hyndhope, *A Sailor's Odyssey* (London: Hutchinson, 1951), 11 ¹² Ibid. 31

ABC's career started to make real headway on 13th May 1908 when he joined Torpedo Boat 14 in command. Little did he know that day that he would remain continuously in command of torpedo craft until 1919 – eleven years at sea in command, a remarkable chain of appointments for any age of the Royal Navy particularly as it included the entire First World War. ABC later transferred to the coal-burning destroyer HMS Vulture which he described as "distinctly inferior" 13 to TB 14. Not long after, he moved to command his "beautiful little ship" 14 HMS Roebuck but this was a short lived love affair as Roebuck soon paid off with boiler trouble. Expecting a return to larger ships, ABC learned with "delighted amazement" of his appointment to command HMS Scorpion.

HMS Scorpion was one of the latest ocean-going destroyers, 900 tons, well armed and capable of 27 knots. Cunningham was unusually junior to command such a ship and the whole period was one packed with adventure, misadventure, war and the loneliness of command. The early years were spent in home waters under the watchful eye of the Commodore (Destroyers), the ruthless disciplinarian, Rear Admiral Sir Robert Arbuthnot. Under Arbuthnot's stern leadership, ABC drove a hard but happy and efficient ship and not without incident. On a dark November night in 1911 in the Dover Straits, Scorpion collided with a sailing ship, the Fynn. Fynn subsequently sank and only five of her six crew were recovered. The Court of Enquiry found Scorpion responsible for the collision and the Admiralty duly paid up although Cunningham's career was unaffected.

In November 1913, in company with fifteen other destroyers, Scorpion arrived in the Mediterranean. Cunningham was to remain in the Mediterranean in command of Scorpion until December 1917. One could fill pages with an account of this period of ABC's life, suffice to say that there was rarely a dull moment for him. Scorpion was involved in such actions as the infamous chase of the German ships Goeben and Breslau, the Allied landings in Gallipoli, battleship and convoy escorts. This was an arduous and demanding time but it was also a period which both formed ABC as a leader and gave him his intuitive know-how in the Mediterranean

¹³ Ibid, 46 ¹⁴ Ibid, 46 ¹⁵ Ibid, 47

region; its people, politics and geography. One young officer, Sub Lieutenant Francis Flynn, who served for Cunningham in Scorpion, later wrote:

"I believe the foundations of ABC's subsequent fame were laid in those seven years in Scorpion. Sir Robert Arbuthnot was probably the great influence which fanned the sparks of South Africa and first commands into a glowing fire in Scorpion. By 1918 he had a big reputation both as a destroyer commander and a man of action in the Mediterranean and he was determined to strive for excellence."16

So now we have a very successful, tough and decisive destroyer captain who, at the age of just 34, has accumulated many years of command experience and is an emerging leadership talent. After promotion to Captain as the most junior officer on his list, Cunningham took command of the cruiser HMS Calcutta, flagship of the North American and West Indies station. He was also the Flag Captain to Admiral Sir Walter Cowan, the station C-in-C. For over two years, ABC plyed the waters of Canada, North America and the Caribbean showing the flag and "being initiated into the mysteries of staff work." This was all rather different territory to ABC's war experience but he learned the value of diplomacy. The other key element of this period was his pupilage to Sir Walter Cowan. Cowan, who had commanded HMS Princess Royal at the Battle of Jutland, was a feisty, rugged, determined, sometimes abrupt sailor with an extraordinary reputation. They developed a highly professional relationship where ABC honed his leadership and command powers.

Command of the battleship HMS Rodney, a sure precursor to flag rank, followed and a week after joining the ship he married Miss Nona Byatt; ABC was 47 and Nona 40. From then on, Nona accompanied ABC wherever possible and theirs was very happy marriage. After a spell ashore as the Commodore of the Naval Barracks in Chatham, ABC, on 1st January 1934, was appointed Rear Admiral (Destroyers) Mediterranean – the appointment he "would have chosen above all others." After a number of other flag appointment including a spell in London as the

¹⁶ Pack, S.W.C., Cunningham, the Commander, (London: Batsford, 1974) 29-30

¹⁷ Cunningham, Viscount of Hyndhope, *A Sailor's Odyssey* (London: Hutchinson, 1951), 121

¹⁸ Ibid, 156

Assistant Chief of Naval Staff, ABC was appointed, on 6th June 1939, as C-in-C Mediterranean with the acting rank of Admiral.

Context - The Mediterranean - 1939 - 1942

Before even reading one word of Cunningham's autobiography, the reader will be struck by his dedication of the book. Not to his wife, family or friends, but to "my Staff in the Mediterranean to whom I owe so much for their never failing support, loyalty and undefeated spirit in those difficult and memorable days of the Second World War." 19 Difficult and memorable days is typical of Cunningham's laconic wit and occasional understatement. Mainland Europe was over-run by Nazi Germany, Italy had aligned itself with the Axis powers and the French Armistice with Nazi Germany signed on 22 June 1940 effectively left Britain isolated and alone but fighting on in Europe. Cunningham had drawn up plans for the complete evacuation of the eastern Mediterranean, a worst case scenario which he envisaged as possible if the Italians went on the offensive and French warships fell into enemy hands. Add the national strategic maritime priority of the Atlantic trade routes over Mediterranean plans and the reality was that ABC's situation could simply not have been more difficult and anything positive in this scenario was definitely going to be *memorable*. This dedication of the book is also an insight into where Cunningham personally placed his Mediterranean command; a singularly most challenging and rewarding period. When he left the Mediterranean in April 1942, his haul-down message to his Fleet started with the words "this achievement of the officers and men of the Mediterranean Fleet in some two years of the most strenuous naval fighting on record is one which I greatly treasure."20

Three episodes during this time illustrate Cunningham's leadership in operational command; the neutralization of the French naval vessels in Alexandria, the Battle of Matapan and the evacuation of Crete. The political leadership and the Admiralty in London, specifically Admiral of the Fleet Sir Dudley Pound, the First Sea Lord, were Cunningham's strategic commanders. The plethora of lower ranking flag officers, commodores and captains formed Cunningham's

¹⁹ Ibid, 1

²⁰ Ibid, 459

tactical task groups undertaking the wide and varied task in the theatre. In modern parlance, ABC was the operational level theatre Maritime Component Commander (MCC).

'Do Not, Repeat, Not Fail' - The French in Alexandria

Among the strategic issues for Britain resulting from the French Armistice with Nazi Germany was what to do with the French Navy. A powerful maritime force, the French Navy's ships were dispersed in European, North and West African ports and would pose a very serious threat to the balance of naval power should they fall into Axis hands. Despite assurances from the French that their ships would be scuttled rather than fight the British, Churchill was determined to act "solely in accordance with the dictates of our own safety"²¹ using force if necessary to neutralise French warships.

At Mers-el-Kebir in Algeria lay three French battleships, a seaplane carrier and six destroyers. In Alexandria, already under the guns of ABC's Fleet, lay one French battleship, three gun cruisers and one light cruiser. The French Admiral in Alexandria, Admiral Godfroy was a friend of ABC's and a "man of honour."22

Force H, led by Vice Admiral James Sommerville, flying his flag in HMS Hood, had been dispatched to deal with the French in Mers-el-Kebir. Meanwhile, in Alexandria, ABC opened his dialogue with Godfroy. The initial instruction from London to Cunningham was that the French ships in Alexandria should be "seized." ABC found this "utterly repugnant" and applied his mind to finding a negotiated solution. He voiced his strong concerns back to London at the potential effects the use of force against the French might have, specifically the alienation of the goodwill of the French populations in the Middle East, particularly around the Suez Canal with potentially far reaching strategic consequences.

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 ²¹ Barnett, Corelli, *Engage the Enemy More Closely* (London: Norton, 1991) 173
 ²² Cunningham, Viscount of Hyndhope, *A Sailor's Odyssey* (London: Hutchinson, 1951) 244
 ²³ Ibid, 244

²⁴ Ibid, 244

London had set a deadline of 3rd July 1940 for settlement of this matter - the date was based on the earliest opportunity that Force H could mount an attack in Mers-el-Kebir. Cunningham described the 2nd of July as a "day of tense anxiety."²⁵ He met with Godfroy in person at 7am to discuss options; continue the struggle alongside the Royal Navy, de-fuel and de-arm his ships, or take them to sea and sink them. With the threat of force ever present, Cunningham, whilst diplomatic with the French Admiral, was able to impress upon him the need for an early decision. ABC's impression after the meeting was that Godfroy would accept the second option, that of disarming his ships, and ABC signalled as much back to London, but was then "bitterly disappointed"²⁶ to receive Godfroy's letter at noon saying that he had chosen the third alternative, that of sinking his ships. ABC was convinced that when the war eventually turned in the allies favour, these powerful French warships would once again be able to fight on the allied side – deliberate sinking was not the right answer. He wrote a personal note to Godfroy who subsequently agreed to commence discharging fuel whilst negotiations continued. It seemed like a solution was emerging although Cunningham was under immense pressure on two fronts. First, London wanted the matter resolved quickly - at 8.15pm Cunningham received a telegram demanding early resolution and imploring him to ensure that French ratings were removed from the ships "before dark tonight. Do not, repeat, not, fail." Second, Sommerville's negotiations with the French in Mers-el-Kebir were failing and, later that evening, Somerville was forced to open fire on the French with great loss of life; over 1,200 French sailors were killed in this regrettable but necessary action.

With the hope of a bloodless solution still uppermost in his mind, ABC chose to ignore the order from London. Its tone led him to suspect that the signal "had not emanated from the Admiralty"²⁸ – his subtle way of suggesting it was direct from the pen of Churchill. But events took a bitter twist when ABC received a hand-written note from Godfroy explaining that he had ceased the fuel discharge and was in receipt of orders to sail. Cunningham sent his Chief of Staff, Rear Admiral Willis, to the French Flagship to reason with Godfroy. Having heard news of the attack in Mers-el-Kebir, Godfroy was unmoved by persuasion. As Cunningham described

²⁵ Ibid, 246 ²⁶ Ibid, 249 ²⁷ Ibid, 250

²⁸ Ibid, 250

the situation, three courses of action were now open: "to seize the French ships by boarding, to sink them at their moorings by gun and torpedo fire or to demand Godfroy surrender which would probably lead to him sinking his ships."²⁹

Unresolved and with time running out, in almost Nelsonian fashion, ABC "retired to bed, much fatigued and worried."³⁰ Events moved swiftly and at 7am the following morning, Cunningham received a handwritten letter from Godfroy "repudiating each and every undertaking he had given and reserving to himself complete liberty of action"³¹ thus leaving Cunningham in no doubt that Godfroy was going to try and break out of the harbour, fighting out if necessary.

This must have been a moment of nerve-wracking anxiety for Cunningham. He had taken an immense personal risk in trying to resolve this issue without loss of life and for the greater strategic benefit of the theatre. He had built up trust in Godfroy based on a mutual understanding and an attempt to create a set of circumstances where, without loss of face, he could release most of his sailors to return to France - something they were desperate to do to protect their families from the occupying Nazis. Now it would appear that there was no choice but to open fire and neutralize the French ships by force; Cunningham would not have been criticised for attacking the French at this point. In ABC's Fleet the decks were cleared for action.

One chance remained. Cunningham decided to appeal directly to the officers and men of the French Fleet over the head of their Admiral. Messages were flashed by light, in French, to each ship and boats were driven round the harbour with the same message written on blackboards for the French seamen to read. The message stated the British desire not to destroy them or their ships and also set out the British Government's policy of either repatriating them to France or offering them Royal Navy terms and conditions if they fought on. Each British captain was sent by Cunningham to visit a French ship to influence the French captains to try and change Godfroy's mind and avoid the battle.

²⁹ Ibid, 252 ³⁰ Ibid, 252

³¹ Ibid. 252

The British subsequently witnessed mass meetings of French sailors on deck and then after lunch all the French captains were seen visiting Godfroy's flagship. An hour later, Godfroy asked to call on ABC and, yielding to the overwhelming force and the state of mind of his officers and men, agreed to continue de-fuelling and disarming his ships, reducing to skeleton crews such that they could not put to sea.

It was a remarkable outcome to which Cunningham remarked:

"Never in my life have I experienced such a whole-hearted feeling of thankful relief as on the conclusion of this agreement and the same was felt by every officer and man in our Fleet."³²

Godfroy had acquiesced to *force majeure* but Cunningham had brought off a dramatic and strategically vital outcome. Commander Royer Dick, a member of Cunningham's staff and a linguist who had acted as ABC's interpreter, commented:

"ABC's moral courage and width of view of this period is the moment when one first realized his qualities of greatness. Of course we knew him as a fine, dashing leader, but his handling of the French problem was masterly and one wonders how many others would have had the breadth of mind let alone the moral 'guts' to disregard his instructions. That was truly Nelsonic."³³

Alexandria - Operational Level Leadership Lessons

This high drama was a time for cool heads and diplomatic mastery. The outcome was the result of extraordinary patience and personal risk. The lessons:

• The Strategic Context. ABC had a detailed knowledge of the region and had analyzed the potential strategic effect of the use of force. He understood that alienating French

³² Ibid, 254

³³ Winton, John, *Cunningham* (London, John Murray, 1998), 89

nationals or French sympathizers in the Middle East could eat into Britain's regional goodwill. He was also confident that, when the war turned in the allies' favour, the French could well be in a position to join the fight again so there was a longer term objective to ABC's actions.

- Personal Risk. Knowing well the characters involved, Cunningham took an immense personal risk by ignoring the telegram from London and allowing the French Admiral more time for negotiation. Had events not gone as planned or the French escaped, it could easily have ended Cunningham's era in the Mediterranean. But, as with the strategic context issue, ABC could see the wider picture and was prepared to take the risk, recognizing the benefit it could and did deliver.
- **Humanity**. Simply in sparing French lives but also in making the point directly to the French sailors that they could end the matter "without loss of dignity or honour."³⁴ Given the context of the desperately difficult strategic situation and the British Government's determination to fight on, ABC's action was significant in its humanity.
- **Decisiveness**. Cunningham still required preparation for battle and would have been quite ready in his own mind to open fire if necessary. He held a decisive edge over his French counterpart; significantly higher morale in his ships and a decision cycle well inside his potential opponent. Indeed, Cunningham held most of the cards in this episode so it is should not be a surprise that he was able to deliver the outcome of his own choosing, but the resistance of pressure from his own strategic commander became the decisive turning point in the sequence of events.
- Operational to Strategic Information Flow. In many ways Cunningham benefited from having a very high degree of control over the information which flowed back to London. He was able to choose his moment to update the Admiralty but also to choose his words with care, delivering a consistent message up the command chain. He did not suffer press intrusions or other methods of information flow back to his strategic

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³⁴ Cunningham, Viscount of Hyndhope, A Sailor's Odyssey (London: Hutchinson, 1951) 253

commander. But there remains a lesson - that of managing the picture and making sure your strategic commander gets the right message, sequenced at the right time for the coordinated battle rhythm. Strategic and operational commanders need to be synchronized and understand each other's personal information management styles.

'Yellow-Livered Skunks' - The Battle of Matapan

After Italy's entry into the War and the French capitulation, the situation for Cunningham was very bleak. The priority of the Atlantic over the Mediterranean left him short of assets - he made his materiel shortcomings clear to his strategic commander but also planned as best he could based on what he had. As a result of the threat to Malta, ABC relocated his HQ to Alexandria in Egypt where his vision was to "gain control of the sea and keep it." Doing so meant getting to grips with the Italian Navy - larger, faster and better armed than the Royal Navy Fleet in the Mediterranean, ABC was, nonetheless "keen to attack the Italian Fleet as soon as possible." 36

The prelude to a disaster for the Italians was misleading German intelligence which suggested to them that "there is only one British battleship, Valiant, in the eastern Mediterranean fully ready for action."³⁷ The Italian main Fleet, under the command of Admiral Iachino, could not resist this juicy bait and put to sea. On 25th March 1941, Cunningham was informed by the Admiralty of Ultra decrypts "pointing towards a possible large enemy operation soon in the Agean or eastern Mediterranean."38 Notwithstanding the uncertainty of the reports, ABC was swift to act, modifying his convoy plans and getting to sea himself with his battle fleet. It must have been a formidable sight, the British battleships HMS Warspite, HMS Valiant and HMS Barham escorted by nine destroyers departing Alexandria in formation. The armoured aircraft carrier HMS Formidable had sailed earlier in the day to embark her aircraft. There was also a certain irony associated with the fact that the three British battleships, older and slower than their Italian foes, had all been present at the last major sea battle fought by the Royal Navy at Jutland in

³⁵ Ibid, 28 ³⁶ Ibid, 27

³⁷ Pack S.W.C., Cunningham, the Commander (London: Batsford, 1974), 131

³⁸ Barnett, Corelli, Engage the Enemy More Closely, (London: Norton, 1991) 333

1916. However, Cunningham knew he had two critical technology advantages which could give him a decisive edge; carrier-borne air power and radar.

The Italian Fleet now at sea consisted of the battleship Vittorio Veneto, eight cruisers and thirteen escorting destroyers. Cunningham took the main battle fleet north west at speed as the picture built up using sea and land based reconnaissance aircraft. Word had spread around the British fleet that the Italians were at sea and there was a real prospect of an engagement. His determination to engage the enemy is set out by his Gunnery Officer, Commander Barnard:

"Whenever enemy forces were reported at sea in a position which gave us a possible chance of interception, ABC's burning desire to get at them and utterly destroy them would at once become evident. He would pace one side of the Admiral's bridge, always the side nearest the enemy. This mood was known colloquially among the staff as the 'caged tiger act.'"³⁹

During the morning of 28th May, Cunningham's light forces ahead of the battle fleet had made contact with the enemy and a skirmish ensued with shots fired but no hits. After an initial chase and British air attacks, the Italians had retreated west "such was now the Italian fear of British carrier aircraft." ABC's dilemma was one of how to catch the faster, retreating Italian ships. His picture was unclear but he was determined to deliver a decisive attack. As the day drew on, it became clear that a daylight engagement would not materialize.

Now came, in Cunningham's words, the "difficult moment of deciding what to do." He met with his staff. He was convinced that "having got this far, it would be foolish not to make every effort not to complete the Vittorio Veneto's destruction." He went on,

"Some of my staff argued that it would be unwise to charge blindly after the retreating enemy with our three heavy ships, and the Formidable also on our hands, to run the risk

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³⁹ Pack S.W.C, *The Battle of Matapan* (London: Batsford, 1961) 39

⁴⁰ Barnett, Corelli, Engage the Enemy More Closely (London: Norton, 1991) 337

⁴¹ Cunningham, Viscount of Hyndhope, A Sailor's Odyssey (London: Hutchinson, 1951) 330

⁴² Ibid, 330

of ships being crippled, and to find ourselves within easy reach of enemy dive bombers at daylight. I paid respectful attention to this opinion and as the discussion happened to coincide with my time for my dinner I told them I would have my evening meal and see how I felt afterwards."⁴³

"Respectful attention" is not how the meeting was recalled by Barnard:

"The well known steely blue look was in ABC's eye and the staff had no doubt there was going to be a party. Nevertheless on paper the compact mass of the enemy fleet looked to the staff a pretty formidable opposition for any form of night attack. I think ABC had made up his mind about 8pm to send in the light forces and follow up with the battle fleet, but he nevertheless on this occasion, went through the formality of asking the opinion of certain staff officers. Neither Power nor Brownrigg liked the idea much and said so in their different ways. I said I was keen to let the guns off but the battleships had not had a night practice for months and there might well be a pot mess. ABC took one look at his supposed helpers and said 'You are pack of yellow-livered skunks, I'll go and have my supper now and see after supper if my morale is not higher than yours."

There is a Nelson touch in ABC's response – to take his supper in the Admiral's cabin, to consider events, the loneliness of command. The staff's collective anxiety was well founded – the main battle fleet was heading into what they perceived as a highly confused night action with great risk to almost the entire British Fleet in the eastern Mediterranean. If damaged, they would not be able to escape the faster Italian battleship and cruisers or enemy dive-bombers in daylight. They were right to voice their concerns. ABC, meanwhile, recognized the strategic significance of a decisive victory at such a difficult time. He also knew it was unlikely that the Italians would expect a night action or that they were aware of the British presence and its full magnitude. Ichaneo was later to "complain sourly about the lack of aerial reconnaissance and fighter cover afforded to him from the Regia Aeronautica and the Luftwaffe." 45

⁴⁴ Winton, John, Cunningham (London, John Murray, 1998), 156

⁴³ Ibid, 330

⁴⁵ Barnett, Corelli, Engage the Enemy More Closely (London: Norton, 1991) 342

So as darkness fell Cunningham was now set up with his cruiser and destroyer forces searching ahead of the main force all proceeding at maximum speed. On receiving reports of "an unknown ship, stopped five miles ahead of him located by radar"⁴⁶, Cunningham noted "our hopes ran high. This could be the Vittorio Veneto."⁴⁷ In fact the stopped vessel was the Italian cruiser Pola which had been crippled in an earlier attack by British aircraft. Pola was, by this time, in company with the cruisers Zara, Fiume and four escorting destroyers who had been turned back by Iachino to protect the striken cruiser.

ABC now maneuvered his battle fleet like a squadron of destroyers, altering the heavy ships towards the radar contact in direct contravention of the tactical doctrine of the day⁴⁸. So came the moment which ABC had waited for, trained for and worked towards since joining the Navy. The Italian ships were now in visual range as well as being tracked by radar. Without radar of their own, they had no knowledge of the presence of the British battle fleet, their unmanned guns lay passively fore-and-aft. They were about to pay a massive price for their Admiral's decision to turn them back earlier in the day. The order was given to open fire. The main action actually lasted less than five minutes when ABC was forced to turn the heavy ships away due to the presence of enemy destroyers who had been "seen to fire torpedoes." But the battleships' work was done and they retreated eastward into the night leaving the remaining British and Italian destroyers to battle out a night of confusion and chaos. So ended the action which became known as The Battle of Matapan. The Italians had lost three heavy cruisers, two destroyers and over 2,400 officers and men. Vittorio Veneto had escaped.

Matapan – Operational Level Leadership Lessons

Matapan was a gruelling encounter between the heavyweight battleships and sea and land based British air forces and a substantial Italian maritime force. Despite a crippling air attack, Vittorio

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⁴⁶ Cunningham, Viscount of Hyndhope, A Sailor's Odyssey, (Hutchinson: London 1951), 331

⁴⁷ Ibid, 331

⁴⁸ The Admiralty Fighting Instructions of the day stated that if enemy destroyers were encountered by night, a battle fleet should be turned away to avoid risk of torpedo attack. Bearing in mind this tactical advice and the extremely high likelihood of the presence of enemy destroyers in company with a large radar contact, ABC was advised by his staff to make the signal 'Four Blue' – i.e. a turn away. Cunningham's response, "If that's the enemy, we will turn towards and find out what sort they are and how soon we sink them, Blue Four" – i.e. turn towards.

⁴⁹ Barnett, Corelli, Engage the Enemy More Closely (London: Norton, 1991) 344

Veneto escaped Cunningham's guns. The action had a damaging effect on the morale of the Italian Navy and severely curtailed their operations thereafter. The lessons from Cunningham's actions can be summarised as:

- Tactical Victory and Strategic Effect. ABC understood the significance a victory would have on the morale of the Italian Navy. Cunningham also recognised the value of a victory of this order in the grand strategic picture of Britain's isolation in Europe.
- **Doctrine's Value**. At the moment critique, ABC chose to ignore the tactical doctrine which should have meant turning his battleships away from the enemy at night: he ordered the opposite, a turn towards. Whilst largely tactical, he was directing the entire Fleet's movements as the operational commander and he understood the limitations of the tactical doctrine as guidance rather than rules. In today's parlance, it is the operational commander's ability to exercise art rather than science, which will deliver strategic effects.
- **Decisiveness.** The 'loneliness of sea command' had taught Cunningham about the requirement for leaders to make tough decisions in the face of adversity and accept personal risk in doing so. Cunningham's staff were right to point out the risks associated with a night action against faster and potentially better armed ships but Cunningham, having weighed up all the factors at his disposal, had made up his mind. His referring to the staff as 'yellow-livered skunks' would probably be considered unethical today but he made his point in the language and atmosphere of the day.
- **Understanding Technology**. ABC understood the advantage he enjoyed through the reconnaissance and offensive capability delivered by his carrier-borne aircraft and the availability of radar in his force.

A Three Hundred Year Tradition - The Battle for Crete

The German invasion of Greece in April 1941 by an overwhelmingly superior force led the British and Greek armies into what was effectively a headlong retreat. The inevitable evacuation followed in tortuous conditions for the retreating soldiers, Cunningham's Fleet and the supporting allied auxiliary shipping. Valiant efforts on the Navy's part retrieved over 50,000 of the 58,000 allied troops, many taken straight off Greek beaches by night in small vessels. This failure in Greece, however heroic, left the Axis Powers in control of the Balkans, the Corinth Canal and airbases in Greece - well placed to operate over the central and eastern Mediterranean. It also left Cunningham with a "very tired fleet" which had been running hard for months and was in need of repair, recuperation and maintenance.

This evacuation of Greece also raised the strategic question of defending Crete where a German invasion had now become a question of *when*, and not *if*. ABC turned his attention to plans for the prevention of a seaborne German assault on Crete, the disruption of any airborne assault and the possibility of a further allied evacuation. Of the many complications in ABC's planning, his greatest anxiety was his almost complete lack of air cover. The few remaining allied aircraft in Crete were now massively outnumbered and in any case were largely destroyed by German bombing.

Through the first half of May 1941, Cunningham maintained light forces in the seas between Crete and mainland Greece. He laid mines and maintained surveillance whilst other elements of his forces made repairs in Alexandria. Three separate groups of ships sailed from Alexandria on the nights of 14th, 16th and 17th May and the anticipated German invasion started on the night of 20th May. The German attack commenced with heavy bombing followed by parachute, glider and transport aircraft landing troops. ABC now had at sea four widely dispersed groups of ships including the battle squadron tasked to the west of Crete to provide defense against the possibility of Italian interference. Notwithstanding the success of Matapan, the threat was still present. As a result of the dispersed nature of his forces and "to keep in close touch with his

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⁵⁰ Simpson, Michael, A Life of Admiral of the Fleet Andrew Cunningham, (London, Cass: 2004) 88

fellow C-in-C's"⁵¹, Cunningham made, for the first time, the decision to command his main Fleet from ashore.

German air and land superiority in Crete soon followed although the Navy's presence thwarted German ambitions for a seaborne re-enforcement of air assaults. But, like Greece before, matters quickly transitioned to planning an allied evacuation. On the morning of 26th of May, General Wavell, GoC Middle East and Air Chief Marshall Tedder, Air C-in-C, flew to Cunningham's HQ to discuss matters. As a result of the large contingents of Australian and New Zealand troops in Crete, General Blamey, the Commander of Australian Forces in the Middle East and Hon. Peter Fraser, the Prime Minister of New Zealand, were also present at the meeting. The staff presented a paper to the Joint C-in-C's which summarized that the troops in Crete were overwhelmed, the Navy had lost many ships sunk or damaged and the allied air forces simply could not operate over the island. The paper recommended "that C-in-C's order the armies in Crete to surrender." After considering the paper, Wavell suggested that any evacuation risked losing the rest of the Navy and that it could take three years to build a new Fleet. Blamey, Fraser and Tedder agreed and recommended accepting the advice of the Staff to surrender. We now witness ABC's overwhelming conviction that it was the Navy's job to go and get those soldiers. He recalled:

"My view was perfectly clear. I needed no persuasion. It was impossible to abandon the troops in Crete. Our Naval tradition would never survive such an action. Whatever the risks, whatever the losses, the remaining ships of the Fleet would make an all out effort to bring away the Army." ⁵³

Commander Brownrigg, Master of the Fleet and a staff officer in ABC's inner circle, present at the meeting, later recalled Cunningham's words:

"It has always been the duty of the Navy to take the Army overseas to battle and, if the Army fail, to bring them back again. If we now break with that tradition, ever afterwards

⁵³ Cunningham, Viscount of Hyndhope, *A Sailor's Odyssey*, (Hutchinson: London 1951), 378

⁵¹ Barnett, Corelli, Engage the Enemy More Closely, (London: Norton, 1991) 353

⁵² Winton, John, *Cunningham* (London, John Murray, 1998), 210

when soldiers go overseas, they will tend to look over their shoulders instead of relying on the Navy. You have said, General, that it will take three years to build a new Fleet. I will tell you that it will take three hundred years to build a new tradition. If, gentlemen, you now order the Army in Crete to surrender, the Fleet will still go there to bring off the Marines."⁵⁴

So the Navy was duly ordered to execute the evacuation. Unprotected from the Luftwaffe, the Fleet suffered disastrously but over 18,600 of the 32,000 garrison were evacuated and most reached Egypt safely. The Navy's losses were severe; two battleships and an aircraft carrier damaged, three cruisers and six destroyers sunk, six cruisers and seven destroyers damaged. Between the evacuations of Greece and Crete, the Allies had also lost 32 transport, supply and troop ships totaling 128,418 tons. But the efforts of Cunningham's already exhausted Fleet were inspirational, determined and magnificent under almost continuous attack by German aircraft.

During the evacuation, ABC came to "dread every ring on the telephone, every knock on the door and the arrival of every fresh signal." He sent to his Fleet, in the thick of the fighting and evacuation, his now famous signal demonstrating his conviction: "Stick it out, Navy must not let Army down." Cunningham visited ships departing and arriving back in Alexandria to boost morale. Some in the Fleet questioned ABC's plan – one cruiser captain called on the Admiral saying his ship's company were at breaking point and could not face a return to Crete. ABC addressed the ship's company but he took a hard line when there was a whiff of mutiny, saying to the ship's captain that he would be "no more backward than Lord St Vincent in making you hang your own ring leaders from your own yard arm." Vincent in making you

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⁵⁴ Winton, John, *Cunningham* (London, John Murray, 1998), 211

⁵⁵ Roskill, S. W., The War at Sea, (London: HMSO, 1954) 446

⁵⁶ Ibid, 446

⁵⁷ Ibid, 446

⁵⁸ Cunningham, Viscount of Hyndhope, A Sailor's Odyssey, (Hutchinson: London 1951), 372

⁵⁹ Ibid 373

⁶⁰ Winton, John, Cunningham (London, John Murray, 1998), 215

⁶¹ A reference to Admiral Lord St Vincent ordering the Marlborough mutineers in 1797 to be hung by men only from their own ship's company.

In the aftermath, perhaps driven by the scale of the losses, ABC questioned his own position. In a letter to the First Sea Lord on 30^{th} May, he remarked:

"It may be that the Admiralty would like a change of command out here. If this is so, I shall not feel in any way annoyed, more especially that it may be that the happenings of the last few days may have shaken the faith of the personnel of the Fleet in my handling of affairs."

The reality was very different and any suggestion of relieving Cunningham was out of the question. Wavell, in a personal note to ABC, commented:

"I send to you and all under your command the deepest admiration and gratitude of the Army in the Middle East for the magnificent work of the Royal Navy in bringing back the troops from Crete. The skill and self-sacrifice with which this difficult and dangerous operation was carried out will never be forgotten and will form another strong link between our two services. Our thanks to all and our sympathy for your losses." 63

The Battle for Crete – Operational Level Leadership Lessons

The leadership lessons from this episode are very personal. This was a devastating few days with almost unimaginable loss of life and equipment on today's scale.

• Moral Courage. Put simply, to do what he believed was the right thing to do. To say so at the meeting on 26th May and to follow his words with determined and convincing actions. Sometimes leadership is not about plans, processes, briefs, people, outcomes - it is purely about seeing a situation developing in front of you and doing the right thing, however hard. But also to have the courage to question your own judgement and to learn from your own reasoning. Had there been an ounce of doubt in London about

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⁶² Winton, John, Cunningham (London, John Murray, 1998), 222

⁶³ Ibid, 222

Cunningham, his comments to the First Sea Lord would have been more than enough ammunition to have him relieved immediately.

- **Personal Touch**. It also demonstrates his personal touch with the men of his Fleet talking to them, walking amongst them, boosting morale by his personal presence but also showing a ruthless flash of steel when potential discipline issues rose to the surface.
- **Joint Leadership**. ABC's decision not to be at sea was frustrating for him but he trusted his subordinate Admirals at sea and recognised the critical importance of being accessible to the other environmental C-in-C's and to London. This is an illustration of the balancing act between institutional and tactical leadership.

Operational Level Leadership Analysis

The following tabular analysis measures Cunningham's leadership in the framework of the CF doctrine in terms of organisational effectiveness and leadership characteristics.

Organizational Effectiveness

Function	Cunningham	Analysis
Mission	Always at the front of Cunningham's mind	Ultimately mission success is going to be the
Success	and clearly defined in his vision; a bloodless	benchmark of military achievement. It is,
	outcome with the French, shattering the will	therefore, essential for operational level
	of the Italians and not letting the Army down	leaders to define mission success and
	in Crete.	promulgate a vision of success beforehand.
	Cunningham understood his strategic commander's intent and what actions were necessary to achieve success.	
Internal	ABC's many years in command of destroyers	We live in a world today where we are
Integration	and destroyer squadrons taught him the value	immersed in policy, process, organization,
	of organization, cohesion, keeping superiors	procedures, doctrine and advice on

	and subordinates informed. Equally, he was	management. Cutting through this to get to
	comfortable operating beyond doctrine where	the nub of problems is a key skill for
	is suited the aim and was based on clearly	operational level leaders.
	thought out, well considered plans where he	operational level leaders.
	understood the risks, often personal.	
	understood the risks, often personar.	
Member	Consistently deployed by Cunningham to	Critical to mission success and a function
Well-being	engender a team spirit and maintain morale of	which can be learnt and enhanced through
l ven zenig	his Fleet. Also deployed over head of	education and subordinate development.
	Godfroy to appeal directly to French sailors.	education and subordinate development.
	Godffoy to appear directly to French sanois.	
	Whilst not someone who enjoyed staff-work	
	in his early days, ABC always took a close	
	personal interest in his officers' appointment	
	and their career development.	
External	ABC understood the relative priorities	Understanding the wider context of your
Adaptability	between the Atlantic and Mediterranean Fleets	activities is critical for operational leaders.
	and was able to subtly argue his point for a	The more 'global' your view, the more sense
	better balance of resources.	you will be able to make of the mission you
		have.
	Key is developing external relations – in	
	ABC's case his relations with the C-in-C's	Developing relations with host nations and
	land and air over Crete and his diplomacy	fellow operational commanders with deliver
	with hosts in Malta, Egypt and so on.	insight into both the strategic purpose and the
		part you play in it.
	His knowledge of the wider context of the	
	second and third order effects should he defeat	Use of intelligence, situational awareness,
	the French with force in Alexandria was a	anticipate the future, be joint, inter-agency.
	driving force to developing a bloodless	
	solution. His understanding of this was better	
	than his strategic commander's.	
Military	Cunningham was a 'career' naval officer and	Ethos, ethics, accepting responsibility are not
Ethos	a man of immense stature, bearing and moral	new concepts – they have underpinned
	courage. But he was also a man of his time in	military leadership for generations.
	that his style suited the environment of the	3 1 2
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day. He studied naval history, understood its	Perhaps the difference today is the
significance and was strongly influenced by	transparency of our actions – we can all see
Arbuthnot and Cowan.	what we all do.
His style could be interpreted as overly	
authoritative in today's currency. However,	
he was very adaptable and it could be argued	
that, if he was a military leader today, he	
would simply adapt to today's environment	
and achieve such leadership greatness with	
different methods.	
Seeking and accepting responsibility falls into	
this category - this is an outstanding area of	
ABC's personal courage and motivation and	
desire to take responsibility for his actions.	

Leadership Characteristics

Cunningham	Analysis
It is difficult to argue how ABC's grooming	Expertise relating to the system you command
for his operational command in the	is critical particularly where you have a
Mediterranean could possibly have been	technology advantage.
better. His experience in command and time	
spent in the theatre were strong elements of	Understanding and managing your potential
his knowledge and skill set.	weaknesses is also critical.
ABC understood his critical technology	
advantage at Matapan with ship borne radar	
and sea-based air support. He also found	
ways to overcome weaknesses such as his	
speed disadvantage.	
There is a thread running through ABC's	Intelligent problem solving is fundamental to
career of practical problem solving and novel	the delivery of the operational art.
solutions to issues.	
	It is difficult to argue how ABC's grooming for his operational command in the Mediterranean could possibly have been better. His experience in command and time spent in the theatre were strong elements of his knowledge and skill set. ABC understood his critical technology advantage at Matapan with ship borne radar and sea-based air support. He also found ways to overcome weaknesses such as his speed disadvantage. There is a thread running through ABC's career of practical problem solving and novel

Listening, negotiation and persuasion. ABC	Operational Commanders need to find time to
listened with 'respectful attention' to his staff	network, to listen to subordinates, to
- dutiful and kind of him to spend the time	understand and hear the views of others even
listening but he had probably made up his	where this may not appear significant in the
mind then about the plan for the night action.	mind of the commander.
In Malta specifically in pre-War years and as	Developing relations with external authorities,
C-in-C, ABC entertained, socialized and, in	military and civil, will always pay some sort
modern parlance, networked to a high degree	of dividend as events unfold regionally.
and with great subsequent value. This was a	
skill set he had learned during his time in	
North America and the Caribbean.	
ABC was a man of his time – he suited the	This is 'trait based leadership' in that it is
age; chivalrous, composed, direct and	espousing a series of characteristics which
authoritative. Also a leader of immense	will act as a catalyst to good leadership.
personal integrity. He had the courage to tell	Honesty in your personal dealings with
superiors and subordinates alike where he	superiors and subordinates is key.
stood and how he proposed to move issues	
forward.	Operating outside the doctrine of the day
	involves personal risk for leaders but has to be
	considered if it will deliver the strategic
	outcome and involves carefully considered
	plans.
ABC treasured the opportunity to command	Professionalism, desire to succeed,
the Mediterranean Fleet – he relished the	willingness to seek and accept responsibility,
responsibility and felt almost a sense of	willingness to take personal risk.
destiny about the task. Add his	
professionalism and this led to an immense	
capacity to motivate others.	
	- dutiful and kind of him to spend the time listening but he had probably made up his mind then about the plan for the night action. In Malta specifically in pre-War years and as C-in-C, ABC entertained, socialized and, in modern parlance, networked to a high degree and with great subsequent value. This was a skill set he had learned during his time in North America and the Caribbean. ABC was a man of his time – he suited the age; chivalrous, composed, direct and authoritative. Also a leader of immense personal integrity. He had the courage to tell superiors and subordinates alike where he stood and how he proposed to move issues forward. ABC treasured the opportunity to command the Mediterranean Fleet – he relished the responsibility and felt almost a sense of destiny about the task. Add his professionalism and this led to an immense

Conclusion

Cunningham was a leader of extraordinary talent who, with limited resources in the Mediterranean, maintained a Royal Navy presence through the punishing early years of the war. This effort facilitated convoy re-supply in support of the Army and also thwarted many Axis regional ambitions. Efficient, sometimes ruthless, but always approachable and concerned for his people, Cunningham mastered the region and focused his efforts appropriately to achieve the strategic goals which were sometimes not well articulated from London. But three key points, with enduring lessons for the future, emerge from the analysis. First, Cunningham's strategic insight – he intuitively knew what was in the minds of Churchill and Pound and could read every nuance and implied task from the short, sometimes curt instructions he received. This allowed him to take risk, personal in nature, for mission success. Second, his humanity - always present was his desire to achieve goals without loss of life but this did not prevent him making the tough decisions to use firepower where he considered it necessary. Finally, his decisive edge – seeking and accepting responsibility, making morally courageous decisions and seeing events through to a conclusion. Listening to the staff, weighing up the odds but when the moment came, Cunningham knew what he wanted to achieve and how to lead his force to the end-state. Ultimately, Cunningham was a man whose character, experience, traits, style and foibles came together in a personality uniquely suited to the arduous period of the Mediterranean in World War II.

Bibliography

Barnett, Corelli, Engage the Enemy More Closely, London: Norton, 1991

Canada, Department of National Defence. A-PA-005-000/AP-004. *Leadership in the Canadian Forces, Conceptual Foundations*. Canadian Defence Academy, 2005

Canada, Department of National Defence. A-PA-005-000/AP-003. *Leadership in the Canadian Forces, Doctrine*. Canadian Defence Academy, 2005

Cunningham, Viscount of Hyndhope, A Sailor's Odyssey, London: Hutchinson, 1951

Morneau, J, What Are The Attributes Required of an Operational Level Commander to be Successful, AMSC Paper

Northouse, Peter G, Leadership, Theory and Practice, Thousand Oaks: Sage, 2004

Ollard, Richard, Fisher and Cunningham, London, Constable, 1991

Pack, S.W.C, Cunningham, The Commander, London: Batsford, 1974

Pack S.W.C, The Battle of Matapan, London: Batsford, 1961

Pigeau, R and McCann, C, *Re-conceptualising Command and Control*, Canadian Military Journal, Spring 2002

Roskill, Stephen W, The War at Sea 1939 – 1945, Volume 1. London: HMSO, 1954

Roskill, Stephen W, The Navy at War, London: Collins: 1960

Roskill, Stephen W, Churchill and the Admirals, London: Collins, 1977

Simpson, Michael, A Life of Admiral of The Fleet Andrew Cunningham, A 20th Century Naval Leader, London: Cass, 2004

UK Ministry of Defence, JDP 01, Joint Operations, Shrivenham: JDCC, 2004

UK Ministry of Defence, JWP 0-01, British Defence Doctrine, Shrivenham: 2001

Warner, Oliver, Cunningham of Hyndhope, London: Murray, 1967

Whitehall Naval Staff War Histories, The Royal Navy in the Mediterranean, London: Cass, 2002

Winton, John, Cunningham, London: Murray, 1998