

**The RAF (39 Squadron) in Malta during WWII: a micro-history based on the logbook and
artefacts of flight navigator – Squadron Leader Terrence Arthur McGarry DFC**

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Abstract

This dissertation analyses the flight logbook and other artefacts of Squadron Leader Terrence McGarry DFC (Mac) during his tour of duty as flight navigator and later formation navigator with 86 and 39 Beaufort Squadrons in Malta for the period August 1942 to June 1943. It assesses the logbook's value as a primary source of evidence in comparison with the logbook of a 39 Squadron pilot, Flight Lieutenant (F/Lt) Don Tilley, and Squadron Operational Record Books (ORBs). Consideration is given to the impact of 39 Squadron on Axis provision of supplies to support Rommel's invasion of North Africa and the contribution of Malta and the Mediterranean conflict to World War Two Allied victory. Based on materials retained by Mac, the challenge of living in Malta, whilst also mounting perilous torpedo-bombing operations, is highlighted. Despite scant published accounts of the contributions of flight navigators compared to those of pilots the analyses presented indicates the navigator logbook to provide equally valuable insights and on some occasions more information. Interestingly, the analysis shows Mac to have almost always crewed the same aircraft as formation navigator with Wing Commander Gaine whilst Don Tilley flew twenty-six different aircraft, with many of the later recorded as lost in action. Turnover does not appear to have been due to differing standards of maintenance or risk taking. The flight logbooks confirm ORBs although with minor differences such as logbooks providing evidence of air testing of aircraft when such was prohibited due to fuel shortages. Records of strikes on enemy shipping are not always accurate in either logbooks or ORBs in comparison with later texts which have benefitted from access to Axis shipping records. Analyses show 39 Squadron to have had a significantly impact on Axis supplies reaching north Africa and, whilst there is some debate over the contribution of the Mediterranean War to overall Allied victory, Malta-based forces clearly disrupted Axis activities. The narrative constructed around the ephemeral mementos retained by Mac shows life on Malta to have been highly challenging during the period covered by this study.

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I would like to thank Mr Ray Polidano, Chairman of the Malta Aviation Museum Foundation, for helping me appreciate the challenges faced by Malta forces and the island's inhabitants. I am likewise grateful to Brigadier O' Callaghan CBE and Wing Commander Jefford for helping me orientate my thinking in the field of military history which was entirely new to me. My gratitude is also due to Ms Liz Deery, Air Historical Branch, RAF Northolt for information provided and for reviewing files which are not accessible to the public due to the operational nature of the base, and to Mr. Trevor Clark, archivist, Tangmere Military Aviation Museum, for retrieving deposited materials. I thank Mr Le Roux, owner of SAAFWW2Pilots website, for permitting me to use Don Tilley's logbook and reproduce 39 Squadron photographs. I particularly appreciate the encouragement my tutors, Dr. Alexander Scott and Dr. Lester Mason have provided and for always been approachable and helpful. Finally, I owe a depth of gratitude to my parents for their unfailing support.

List of Abbreviations

ALT	Air Launched Torpedo*
AONS	Air Observers Navigation School
ASP	Anti-submarine Patrol
ASV	Air to Surface Vessel (Radar)
CO	Commanding Officer
DAK	<i>Deutsches Afrikakorps</i>
DFC	Distinguished Flying Cross
F/Lt	Flight Lieutenant
FTR	Failed To Return
MOD	Ministry of Defence
ORB	Operational Report Book
POW	Prisoner of War
PRU	Photographic Reconnaissance Unit
RAF	Royal Air Force
RN	Royal Navy
S/L	Squadron Leader
SS	Shipping Search
TS	Torpedo Strike
USAF	United States Air Force
VHR	Very High Frequency Radar
W/C	Wing Commander
WOP/AG	Wireless Operator/Air Gunner
WWII	World War Two
W/T	Wireless Telegraphy

* According to W/C C.G. Jefford

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Introduction

War offers the historian a unique opportunity to measure the fleeting actions of private individuals against the international arena. The contribution of pilots to the Malta-based Mediterranean conflict of World War Two (WWII) is well documented (e.g. Wing Commander (W/C) Laddie Lucas¹, W/C Patrick Gibbs²) but little is recorded of the contribution of navigators as confirmed by Ray Polidano (Chairman of Malta Aviation Museum Foundation, Ta'Qali, Malta) during a discussion with him at the museum in 2016: 'Everyone records the pilot but nobody records the navigator who got them there in the first place'.³

Flight Lieutenant (F/Lt) (later Squadron Leader) Terrence Arthur McGarry DFC (usually referred to as Mac) arrived in Malta with 86 Squadron in August 1942, transferring to 39 Squadron in September 1942 for operations in the Mediterranean and North Africa. The squadron's mission was to disrupt Axis shipping conveying supplies for Rommel's *Deutsches Afrikakorps* (DAK) (Appendix 1). Between August 1942 and June 1943 Mac, in his flight logbook, records eleven strikes around Southern Italy, the Greek Islands and off the Libyan Coast (Tobruk, Tripoli) receiving commendations and awards in March 1943. His last mission as lead navigator with 39 Squadron in Malta was 18th April 1943, after which he was transferred to 76 Squadron for operations in the North Sea.

Mac's logbook shows that during his time with 39 Squadron in Malta, he served as the Formation Navigator with W/C Gaine, together recording seven strikes on merchant shipping. Mac's citation for award of the DFC confirms the 'crucial role of flight navigators in successful operations'.⁴ Delve, in his history of 39 Squadron notes: 'The part played by the anti-shipping squadrons and 39 in particular, has been too often ignored in histories of the North African campaign'.⁵ Mac is clearly a noteworthy subject for considering the

¹ L. Lucas, *Malta: the Thorn In Rommel's Side Six Months That Turned the War* (London: Penguin, 1993).

² P. Gibbs, *Torpedo Leader on Malta* (London: Grubb Street, 2008). Commanding Officer Gibbs was the instigator of torpedo-bombing tactics in Malta.

³ R. Polidano, Chairman of Malta Aviation Museum Foundation, Takali, Malta, during a discussion at the museum with myself in 2017.

⁴ Corroboration from Liz Deery, Air Historical Branch (RAF) Reference D/AHB(RAF)/8/38 dated 13 September 2017.

⁵ K. Delve, *The Winged Bomb: History of 39 Squadron RAF* (Leicester: Midland Counties Publications, 1985), p. 85.

contribution of flight navigators to the Mediterranean conflict and was an exemplar practitioner of navigational skills.

This dissertation analyses Mac's flight logbook, considers its value as a primary source, examines details behind the entries and relates them to the broader Mediterranean conflict from the perspectives of operations of 39 Squadron, the siege of Malta, and RAF actions to impede the flow of supplies to Rommel's invasion of North Africa. It relates micro-history and the contribution of one individual to the broader history of the WWII Mediterranean conflict. The first two chapters provide an analysis of Mac's logbook from August 1942 to April 1943 in relation to the Mediterranean Air War in WWII and the role of the RAF in disruption of supplies for DAK. The thesis proposes that the contribution of the navigator has been largely undervalued in historical narrative and shows that navigator and pilot logbooks have equal historical 'worth'. A second theme relates micro-history of logbooks to large-scale events and argues the importance of Malta-based operations in the Mediterranean in 1942 to 1943. The third chapter considers the living conditions military personnel, as well as civilians, had to contend with in Malta whilst mounting operations. Analyses of living conditions are partly driven by ephemeral personal belongings that Mac thought worthy of retention, held by myself or by Tangmere Aviation Museum, and partly by contemporary accounts. Mac retained little war-time memorabilia, what he did keep pertained mainly from his time in Malta, thus Chapter 3 is based on reconstruction from artefacts.

Methodology

This dissertation is based on the analysis of Mac's flight logbook as a primary source of evidence. For comparative purposes, use has also been made of the flight logbook of 39 Squadron pilot, F/Lt. Don Tilley, (later Major), with the permission of the website owner. Some photographs from the website have been reproduced, again with permission. In September 2016 I visited Malta and key operational locations, including the four RAF airfields in existence between 1942 and 1943, Luqa, Takali⁶, Hal Far and Qrendi.⁷ By 1992, when Mac returned to Malta as part of the George Cross Island Association Fifty Year

⁶ The 'RAF' spelling of Maltese place-names will be adhered to e.g. Takali in place of Ta'Qali.

⁷ J.F. Hamlin, *Military Aviation in Malta G.C. 1915 – 1993* (Peterborough: GMS, 1994).

Reunion, Luqa airport had changed beyond recognition from the craters and dispersal pens he remembered, though he recognised the building that once housed Luqa RAF Officers Mess (known as the 'poorhouse') amid the new traffic lay-out – this had disappeared by 2016.⁸ Redevelopment precluded historically relevant photography: Hal Far and Takali airfields are now light industrial sites and a sports stadium respectively, with the one extant RAF aircraft hangar constituting part of the Aviation Museum. Qrendi no longer exists and is only discernible as a section of very straight road (Google Earth). I visited the Aviation Museum at Takali for a pre-arranged meeting with Ray Polidano (Chairman, Malta Aviation Museum Foundation) to discuss 39 Squadron operations and the role of flight navigators. A visit to Tangmere Aviation Museum in February 2018 to meet with the archivist Trevor Clark provided an opportunity to examine archive material deposited by Mac and relatives.⁹

Letters were exchanged with Liz Deery (Air Historical Branch RAF Northolt) who reviewed files for information since there is only limited public access to the RAF archives because of the operational nature of the base. I accessed archive material for 39 Squadron remotely from The National Archives, having first ascertained that all extant Operational Report Books (ORBs) were available electronically; archive material from *The Times of Malta* for the period of Mac's service on Malta were accessed from their website. Exchanges of e-mails and telephone conversations with Brigadier Derek O'Callaghan¹⁰ and W/C 'Jeff' Jefford¹¹ provided very useful information which helped me navigate the world of military history which was entirely new to me.

⁸ Article written in a fund-raising pamphlet by T.A. McGarry, 'Malta – 50 Years On', RAF Association, Bognor Regis Branch, September 1992 (personal collection).

⁹ This was the earliest opportunity – the museum being closed for refurbishment and cataloguing since September 2017.

¹⁰ Brigadier D.M. O'Callaghan CBE, Senior Adjunct Fellow, Potomac Institute for Policy Studies.

¹¹ W/C C.G. Jefford, Editor of the Journal of the RAF Historical Society.

Chapter 1

Role of 39 RAF Squadron, analysis of flight logbooks and assessment of their value as primary sources of evidence

Role of 39 Squadron

39 Squadron was converted from bombing to torpedo attack in January 1942 using the Beaufort Mark I and later, the faster, Beaufort Mark II aircraft working alongside long range Beaufighters.¹² The squadron was developed as an effective strike force by W/C Gibbs who was described by Barker as 'ruthless in sending away crews who did not measure up to his exacting standards resulting in a squadron which was a corps d'élite'.¹³ Mac was originally posted to Malta in a detachment of 86 Squadron in July 1942, transferring to 39 Squadron in August. He served in 39 Squadron in Malta and Egypt as the Squadron Navigation Officer with W/C Gaine, who assumed full control of the Squadron in September 1942 (Figures 2 and 3). Barker¹⁴, reflecting on Gaine's leadership, confirms the value of Mac's contribution: 'His partnership with McGarry his navigator, was as successful as that between Gibbs and Creswell which had preceded it.' Together they recorded a total of seven strikes on merchant shipping. Mac was responsible for navigation on large-scale operations, with interception being dependent firstly on the accuracy of reconnaissance and secondly on the strike leader's navigator.¹⁵ The Air Historical Branch records on the occasion of Mac's DFC award: 'fine results have been obtained from the sorties which this officer has completed in the Mediterranean.'¹⁶

Torpedoes were originally designed for naval use but air-dropping was found to be highly effective against shipping, though operationally dangerous.¹⁷ By August 1942, the Squadron had relocated to Malta and was equipped with twin-engine Mark II Beauforts armed with torpedoes (occasionally bombs and later Air to Surface Vessel (ASV) Mk 2 radar) as well as defensive machine guns. In 1942 and early 1943 during the period of Mac's service, 39

¹² Delve, *The Winged Bomb*, pp. 67-90.

¹³ R. Barker, *The Ship Busters* (London: Chatto and Windus, 1957), p. 220.

¹⁴ *Ibid.*, pp. 231-232.

¹⁵ *Ibid.*, p. 205.

¹⁶ Verified by Liz Deery, Air Historical Branch (RAF) Reference D/AHB(RAF)/8/38 dated 13 September 2017.

¹⁷ K. Delve, *Malta Strikes Back: The Role of Malta in the Mediterranean Theatre 1940-42* (Barnsley: Pen and Sword Aviation, 2017), p. 70.

Squadron strength was nominally twenty-four to twenty-six aircraft, although it was unusual to have any more than twelve operational at any one time.¹⁸ Because of shortages of crews and aircraft, the Squadron made strenuous efforts to keep itself informed as to the whereabouts of any other Beauforts in transit or under repair in the Middle East for 'parts', and aircraft and crews were 'acquired at every opportunity'.¹⁹ Additional tasks for the Squadron were anti-submarine patrols (ASP, noted for their monotony²⁰) and mine-laying ('gardening' in RAF-parlance).

Table 1 Relative survival chances for RAF aircrews (Nesbit, 2012)

Duty	% Chance of survival	
	One Tour	Two Tours
Torpedo bomber	17.5	3
Light bomber	25.5	6.5
Fighter reconnaissance	31	9.5
Night fighter	39	15
Bomber reconnaissance	42	17.5
Day fighter	43	18.5
Heavy and medium bombers	44	19.5
Light general reconnaissance landplane	45	20
Medium general reconnaissance landplane	56	31.5
Long-range fighter	59.5	35.5
Sunderland flying boat	66	43.5
Heavy general reconnaissance landplane	71	50.5
Catalina flying boat	77	60

Compiled by Nesbit (2012) from war-time confidential data of Air Marshall Sutton, November 1942

Despite the effectiveness of 39 Squadron, torpedo-bombing crews had the worst survival rates in the RAF with a 17.5% chance of surviving one tour of duty (200 hours of operational flying; Table 1). The usual delivery height was 75 feet at 160 mph at a distance of 200-250

¹⁸ Delve, *The Winged Bomb*, p. 75.

¹⁹ Delve, *Malta Strikes Back*, p. 78.

²⁰ Until a successful submarine-strike in January 1943, the standing-joke was that no Beaufort had ever hit a submarine, though a submarine had sunk Beauforts, crated on-board a merchant vessel.

feet from target²¹ which explains the high mortality rate. In typically understated fashion, Mac wrote that 'Torpedo bombing was always regarded as a bit 'dodgy', but in Malta - with 10/10 sunshine - unhealthy'.²² Mac would not have known that, during the period of his service, the senior RAF officer for personnel, Air Marshall Sir Bertine Sutton, had compiled grim statistics of survival for the various RAF aircrews showing that torpedo-bomber crews had the worst survival rates (Table 1). By September 1945, Mac had completed over 320 operational hours, excluding initial training.

Any torpedo-bomber aircrew left alive by 1945 considered themselves' fortunate – Mac intimates as much: '[in] June 1943 only my WOP/AG and myself were left of the original 86 Squadron.....most had been posted missing'.²³ This chapter details minutiae of Mac's flight logbook and compares it with that of a 39 Squadron pilot. Chapter 2 shows why Allied Command judged the high attrition rate worth it.

Analysis of the flight logbooks of two 39 Squadron aircrew

There are many biographical and autobiographical accounts published on the contributions of pilots to the Mediterranean arena (Shores and Massimello, 2012, 2016²⁴, cite thirty-two pilot auto/biographies), but little is recorded of the contributions of flight navigators²⁵ (or rear-gunners and wireless-operators). As Polidano affirmed, few navigator autobiographies appear in publication lists.²⁶ The vital role of the flight navigator (getting the aircraft to the target and getting them back) was as under-played in contemporary accounts as it is currently in print. Navigator Ken Dodwell recounted an operation over Mannheim: the CO 'turned to our pilot Brian Slade and said, "Well done, Slade!" There was a voice from the

²¹ R. C. Nesbit, *The Armed Rovers: Beaufores and Beaufighters over the Mediterranean* (Barnsley: Pen and Sword Aviation, 2012), p. 13.

²² T.A. McGarry 'Malta – 50 Years On', RAF Association, Bognor Regis Branch, September 1992.

²³ *ibid.*

²⁴ C. Shores and G. Massimello, *A History of the Mediterranean Air War 1940-1945. Vol. II: North African Desert February 1942-March 1943, (Vol. III: Tunisia and the End in Africa November 1942-May 1943* London: Grubb Street, 2012).

²⁵ Ken Delve has published histories of the squadron and Maltese operations; his role as a navigator with 39 Squadron is not evident, other than on the fly-leaf, in his publications.

²⁶ R. Polidano, Chairman of Malta Aviation Museum Foundation, Takali, Malta, during a discussion at the museum with myself in 2017.

back of the briefing room: “What about the Navigator?”²⁷ This prompts the question: why are there fewer testaments of aircrew other than the pilot? Is it because pilots’ records are more detailed or accessible or is it, in Dodwell’s opinion: ‘still a pilot’s air force, dating back to WWI’? The first point of reference is the flight logbook of pilot and navigator – what can be deduced from them, what are their respective merits and can comparative analysis allow historical interpretation? Comparisons of flight logbooks provide an insight into both the contributions of individuals to the conflict and into operations of 39 Squadron thus enabling consideration of the question posed above as well as an assessment of the value of flight logbooks as sources of evidence.

Appendix 2 sets out a comparison of data extracted from Mac’s flight logbook with that of a pilot - Don Tilley.²⁸ Both men served in 39 Squadron at the same time thus had shared war experiences, knew each other and very occasionally flew together. The analysis of their respective logbooks illustrates the following points. Firstly, it is apparent that 39 Squadron operated as separate teams although this arrangement might be restricted because of limited aircraft availability. With the exception of a single operation mounted on 17th March 1943 against a merchant convoy off Cape Stilo and between-base flights (December 1942), Mac and Don did not share the same operations. The data corroborate, as Delve suggests, shortage of aircraft permitting only limited numbers of aircraft on many sorties. Evidentially, in large formations (as lead navigator, Mac’s logbook details formation numbers, Don’s does not), as on 24th August, 23rd September, 8th December, 9th March, Don is either air-testing other aircraft or ‘resting’. The second point is the stark difference in the relative turnover of aircraft the men flew – from August 1942 through to March 1943, Mac navigated seven different aircraft, but mainly serial number DD927, whereas Don piloted twenty-six, though there is some uncertainty because Mac identified aircraft flown by their respective serial numbers but Don used code letters only. In the absence of documentary proof, one can ascribe various reasons for differences in numbers of aircraft flown. From 8th November onwards, Mac was invariably teamed up with W/C Gaine on offensive operations, who, as CO, would be in the position to select the first aircraft – probably one that was familiar. On

²⁷ Forces War Records, The Navigator Ken Dodwell remembers his life as a RAF navigator from 1940 to 1946, [online]. Available: <https://www.forces-war-records.co.uk/documents/2465/the-navigator-ken-dodwell-remembers-his-life-as-a-raf-navigator-from-1940-to-1946>

²⁸ T. le Roux, [online]. Available: www.saafww2pilots.yolasite.com/don-tilley.php

the assumption that most crews preferred to stick to the machine they knew, Mac consistently navigated DD927 throughout the period swapping only for air-testing and transferring other aircraft for maintenance between Shallufa and Malta. Ground crews overhauled aircraft to the same standards, and aircrews were unanimous in their gratitude and admiration of maintenance staff, making different levels of serviceability unlikely.²⁹ The greater turnover of aircraft flown by Don could be due to inherent reliability problems in some engines. It is noticeable that some of the planes flown by Don are recorded in latter missions as Failed To Return (FTR; Appendix 3). Investigations were never carried out following FTRs (or not formally documented) therefore it is not possible to attribute causality to enemy action, engine failure, pilot/navigator error or fuel shortage.

Was the difference in turnover of aircraft due to age and experience and/or differing approaches to risk-taking i.e. different flying styles might require differing degrees of maintenance? There is little age difference, both Don and Mac were in their late-twenties and their CO was thirty-three. By December 1942, Don had 413 hours flying experience whereas Gaine began flying in 1931 and, as a former bomber instructor, was the more experienced. As regards risk-taking, although Barker described Gaine as quiet and unassuming, he took no evasive action in combat, 'ignoring the flak, to which he seemed oblivious'³⁰, thus Gaine was not risk-averse. It is not possible to draw general conclusions based on comparisons of only two log books (even large data-sets would only establish correlation, not causation), but it seems likely that the disparate numbers of aircraft flown was down to DD927 being the 'CO's plane', different flying styles, familiarity and possibly temperament. Finally, what is obvious from the comparison is that the logbooks effectively convey the same information, with Mac's giving slightly more information on the size of the individual sorties. Returning to the earlier question posed regarding fewer navigator memoirs, this may be due to relative 'publish-ability', with a larger prospective audience for a narrative history of a pilot than any other participant. Taking the longer view, the primary sources of a 'published' biography are more likely to be retained and consequently used by subsequent generations of researchers, which may then introduce unintentional bias in interpretations.

²⁹ Shores and Massimello, *A History of the Mediterranean Air War 1940-1945. Vol. III*, pp. 598-628

³⁰ Barker, *The Ship Busters*, p. 77, p. 231.

Table 2 Differences in details recorded between ORBs and Flight Logbooks

Date	Flight logbooks	39 Squadron ORB
31.8.42	Air and fuel test (DT)	Non-operational therefore not listed (and not officially sanctioned during this period)
1.9.42	Air and VHF test (M)	
5.9.42	Air, radio and turret test (M)	
6.9.42	Air tests (DT)	
8.9.42	Air test (M)	
9.9.42	Air test (M)	
13.9.42	Air test (M)	
25.9.42	Air test (DT)	No hits Non-operational
27.9.42	Hit confirmed (DT) Air tests (DT)	
7.12.42	TS off Kerkennah (DT)	Listed as ASP
8.12.42	TS – Convoy off Kuriat (M)	Listed as SS – tanker not found
19.12.42	Force-landing in Libya (DT) (4 day walk-back)	Not listed
15.1.43	SS – not found (M) Attempt to salvage plane (DT)	
31.1.43	Mining off Trapani (DT)	
10.2.43	Convoy escort duties (M)	
14.2.43	Convoy escort duties (M)	
9.3.43	TS – Convoy (M) (turned back due to engine trouble)	Listed as SS (recalled)

M – Mac DT – Don Tilley Other abbreviations are listed above, p. iii

Flight logbooks are a vital source of primary evidence because they were completed within hours of actual events and countersigned at the end of each month by the senior officer. Though there are slight differences in the layout of pilots and navigators logbooks, they are standard records and register similar data for each operation. By contrast, ORBs were compiled weeks, sometimes months later, or not at all, by the CO at times when record-

keeping was not their highest priority.³¹ 39 Squadron ORBs (Appendix 4) and the two logbooks agree on most salient features although there are slight operational anomalies (Table 2). In these circumstances it is fair to consider that the logbook is the better contemporary record of events though they may not always be accurate as explored further below.

Because of acute fuel shortages in Malta between August and September 1942, air-testing in advance of operational flights was not officially permitted and aircraft were man-handled into position pre and post-flight to avoid fuel consumption during taxiing.³² However, both logbooks record short air-tests in September 1942 when the Squadron was based in Malta which runs counter to protocol although they would have given considerable peace of mind to flight crews. Logbooks were signed off by Gaine so he would have been aware that air-testing was performed if only under particular circumstances. From December onwards, when fuel restrictions were lifted, Mac and Don record frequent ALT testing. This acronym does not appear on the Ministry of Defence (MOD) Standard Abbreviation List but W/C Jefford advised that it stands for 'Air Launched Torpedo'. For training purposes, it was common practice for Beauforts to 'attack' Royal Navy (RN) ships, strictly on a pre-arranged basis, to provide target practice for aircrews using dummy torpedoes and for RN ships to practice evasive tactics.³³ Although activities are identified in Table 2 that do not appear in the Operational Report Books (ORBs), all flying carried an element of risk, particularly in the training of new pilots, given the height and speed of torpedo delivery.

Particularly noteworthy is the rarity of reference to 'duff gen', meaning 'inaccurate intelligence', in logbooks. Both logbooks have only one 'duff gen' entry each (Appendix 2), suggesting that the squadron was working with highly reliable intelligence. Enemy convoys were located by the Photographic Reconnaissance Unit (PRU). Gibbs acknowledged the role of Malta's PRU which ascertained course, speed, composition and disposition of convoys. Follow-up reconnaissance might be necessary with the pilot returning to base in person to report rather than break Wireless Telegraphy (W/T) silence. A Baltimore would then set off in advance of a strike force and, if prior intelligence was correct, maintain silence and stay

³¹ Shores and Massimello, *A History of the Mediterranean Air War*. Vol. II, p. 22.

³² Delve, *The Winged Bomb*, pp. 67-90.

³³ W/C C.G. Jefford, Editor of the Journal of the RAF Historical Society, personal communication.

afterwards to photograph the strike if possible.³⁴ Following the breaking of the Enigma-encoded cipher at Bletchley Park in June 1941, highly confidential intelligence was provided although bomber crews would not have been aware of this at the time. From mid-September, intelligence regarding Rommel's supply problems and information on convoy movements from overt and covert surveillance was robust and informed operations well.³⁵

Accuracy and inaccuracy of contemporaneous records

The analyses presented in Appendices 2 and 4 reveal differences in claims of strikes or damage inflicted by protagonists when these are compared with other published sources of information, for example offensive operations and comparable shipping losses in official records of 12th and 17th March 1943. Wherever possible, aircraft photographed strikes for records (Figure 4) but frequently logbooks recorded 'no result observed'. There were good reasons for attacking-bombers to leave the field of battle as quickly as possible to avoid flak from escorting vessels, enemy escort fighters and risk of damage from explosions on target vessels, particularly considering the close-range of torpedo delivery. This inevitably resulted in an element of guess-work as regards effectiveness of 'strikes'. Also, the relative effectiveness of operations carried out at night or in poor weather conditions could lead to inaccurate reporting. False reporting could have arisen from other causes as suggested by the torpedo-strikes recorded on 17th March (Appendix 2) which claim unequivocal strikes on merchant vessels *Marco Foscarini* and *Nicolò Tommaseo* although neither of these were corroborated in corresponding Italian shipping records.³⁶ According to Nesbit, 39 Squadron claims were usually accurate. The reason for this discrepancy may have resulted from the mode of delivery. Because coastal Italian convoys were typically protected by naval destroyers on the seaward-side where aggression was anticipated, Allied air-attacks were mounted from inland.³⁷ The trajectory of launched torpedoes were no doubt accurate but wreckage, rocks or sand-banks could have resulted in deflection and premature detonation with the three definite and four probable strikes recorded by 39 Squadron which failed to connect with their targets.

³⁴ Delve, *Malta Strikes Back*, p. 213.

³⁵ Operational forces would not have been aware of Ultra. D. Austin, *Malta and British Strategic Policy 1925-1943* (London and New York: Routledge 2012), pp. 131-2; Holland, *Fortress Malta*, p. 343.

³⁶ Shores and Massimello, *A History of the Mediterranean Air War. Vol. III*, pp. 389-391.

³⁷ Nesbit, *The Armed Rovers*, p. 137.

In their day-by-day accounts of the conflict which detail claims of all combatants, Shores and Massimello³⁸ refer to a degree of over-claiming on both sides. This is not surprising given the reasons stated above, in addition to the often chaotic conditions of war-time data gathering. Although this analysis has identified only very minor recording differences within the primary sources reviewed (logbooks and ORBs), the analysis does however demonstrate differences between the primary sources and later published accounts as indicated in Table 2 and, for example, unofficial flouting of the embargo on air-testing, no doubt with good reasons.³⁹ Although these are interesting differences to note, they do not alter the greater historical context. Though inconsequential in the greater context of the war, these differences are based on *different* sources of inaccuracies which the historian must consider when assessing historical evidence. The first is simply record-keeping (Gaine appears to be meticulous in this respect) which can only be deduced by comparison of primary sources. This analysis has shown that certain details in the logbooks were not replicated in the ORBs. Since ORBs are most likely to be the records that later researchers access, this introduces another layer of inaccuracy, which is then replicated in any further publications that cite the research work. A third type of inaccuracy arises from selectivity of source material, *i.e.* pilots appear to be over-represented in narrative histories which may produce unintentional bias in publications. Historical perspective, in which the micro-history of a single person or unit is considered within the greater conflict, can correct, when more accurate data are available, and introduce other inaccuracies or bias. Thus, in relation to this study, the logbooks and ORBs inaccurately recorded strikes which could be corrected after the war as corroborative data from Axis sources became available.⁴⁰ Conversely, inaccuracies may arise from the source and availability of the data selected, for example, the part played by Bletchley Park-based Intelligence was not fully published or appreciated until 1991 thus earlier researchers may not have considered this aspect. Finally, in the longer-term, secondary and official records are most likely to survive compared with ephemeral, less 'worthy' sources.

This chapter has dealt with the often highly dangerous nature of torpedo-bombing and the relative accuracies of source material. Analysis of Mac's logbook and comparison with the

³⁸ Shores and Massimello, *A History of the Mediterranean Air War*. Vol. III, p. 598.

³⁹ Delve, *The Winged Bomb*, pp. 67-90.

⁴⁰ For example, publications of Delve, Nesbit, Shores and Massimello, all referenced in this text.

logbook of a 39 Squadron pilot from the same period has detected similarities as well as differences. Reasons for the differences have been discussed but whether the pattern of 'ownership' of the CO's aircraft is typical falls outside the remit of this dissertation. It is difficult to speculate whether there could be links between aircrew losses and numbers of different aircraft flown, given that both Mac and Don survived their service. Nevertheless, it remains an unexpected, albeit minor, finding. Chapter 2 now places the operations of 39 Squadron within the wider context of the Mediterranean campaign.

Chapter 2

The role of 39 Squadron in the greater conflict

Strategic significance of Malta

In order to evaluate the contribution of 39 Squadron to the Mediterranean conflict it is necessary to consider the strategic significance of Malta including its role prior to 1942. Malta's strategic significance in the War lay in its deep harbours, its central position in the Mediterranean and accessibility to the Atlantic and the Middle East. Securing Malta for the Allies would permit air and sea operations against Axis' ambitions in Africa and the Middle East.⁴¹ Its disadvantages lay in its proximity to Mussolini's Italy and, in 1940, its poor state of preparedness for conflict.

In 1940 Malta was vulnerable and its defences were inadequate.⁴² The Mediterranean Fleet had relocated to Alexandria in 1939⁴³ and Britain's commitment to her defence was highly questionable.⁴⁴ Additionally, Britain was forced to prioritise home security over Malta-based defensive capacity following the defeat of France.⁴⁵ The armed forces were not unanimous in their opinions. The Navy supported improvement of anti-aircraft capacity of the island whereas the RAF and army considered defence of Malta of little strategic value due to its proximity to Sicily and their belief that bombers would dominate future conflicts.⁴⁶ Policy changed with the appointment of Churchill as prime minister in May 1940 who considered defence of Malta fundamental to the success of Mediterranean operations. In June 1940, Mussolini's declaration of war on Britain and France brought Malta into the conflict. Air raids followed the next day⁴⁷ with Malta poorly equipped to repel attack (Appendix 4). However, Italy failed to capitalise on its aerial superiority,⁴⁸ targeting French-held Tunisia in the belief that Britain would negotiate for peace. Mussolini's tactical error

⁴¹ J. Holland, *Fortress Malta: An Island Under Siege 1940-1943* (London: Orion, 2003), p.21.

⁴² Austin, *Malta and British Strategic Policy*, p.1.

⁴³ Holland, *Fortress Malta*, pp.26-27.

⁴⁴ A. Levine, *The War Against Rommel's Supply Lines 1942-1943* (Westport: Praeger, 1999), p. 6; C. Jellison, *Besieged: The World War II Ordeal of Malta 1940-1942* (Hanover: University Press of New England, 1984), p.22.

⁴⁵ Austin, *Malta and British Strategic Policy*, pp.64-65.

⁴⁶ Holland, *Fortress Malta*, pp.26-27, pp. 92-101.

⁴⁷ D. Austin, *Churchill and Malta: a Special Relationship* (Stroud: Spellmount, 2014), p. 84.

⁴⁸ Holland, *Fortress Malta*, p.51.

created the opportunity for Britain to strengthen Malta's defensive and offensive capabilities.

Despite renewed emphasis on the strategic importance of Malta, improvements to Malta's defensive and offensive capacity was slow. Hal Far, Luqa and Takali airfields were under-developed though 261 Squadron, comprised of Hurricanes and Fairey Swordfish torpedo-bombers, was formed in July 1940 and constituted Malta's principal offensive capability⁴⁹ (Appendix 4). Malta's vulnerability increased in October 1940 with Germany joining the arena following Mussolini's invasion of hitherto neutral Greece which had shielded Hitler's access to Romanian oil supplies.⁵⁰ *Luftwaffe* attacks in January 1940 marked the beginning of the siege of Malta,⁵¹ inflicting severe damage to HMS *Illustrious*,⁵² Grand Harbour, Takali and Luqa.⁵³

Although disruption of Axis convoys was paramount for Malta forces, Allied actions were hampered until February 1941 by Government restrictions preventing submarines targeting merchant vessels thirty miles beyond enemy coastline. When it was lifted in February 1941, 94% of German troops bound for North Africa had already reached Tripoli and within eighteen months the British were driven back to within sixty miles of Alexandria.⁵⁴ Additionally, aerial resources were re-directed to the western Mediterranean to counter German invasion of Crete⁵⁵ and the RAF's Malta-based Hurricanes were no match for Messerschmitt 109 fighters.⁵⁶ However German tactical error advantaged besieged Malta. Transfer of German air power to support invasion of Crete and offensives in the Western Desert meant that the responsibility for the Malta air offensive was transferred to Italy who had inferior aircraft and offensive capabilities.⁵⁷ Reduction in aerial attrition allowed Operation Winch to increase island offensive capabilities between April and June 1941. Though aircraft losses remained high, the island possessed air superiority for the first time.⁵⁸

⁴⁹ Delve, *Malta Strikes Back*, p. 19, p.25.

⁵⁰ Holland, *Fortress Malta*, p.66.

⁵¹ *Ibid.*, pp.90-92.

⁵² Austin, *Malta and British Strategic Policy*, p.108.

⁵³ Delve, *Malta Strikes Back*, p. 47.

⁵⁴ Delve, *Malta Strikes Back*, p. 54; Holland, *Fortress Malta*, p.108; Austin, *Malta and British Strategic Policy*, p.116.

⁵⁵ Holland, *Fortress Malta*, p.117.

⁵⁶ Delve, *Malta Strikes Back*, p. 70; Holland, *Fortress Malta*, p. 118.

⁵⁷ Holland, *Fortress Malta*, p.142-149.

⁵⁸ Austin, *Malta and British Strategic Policy*, p.120.

Allied air and submarine successes against Axis shipping supplies to North Africa led to intensification of Italian attacks on airfields and harbour installations in autumn 1941.⁵⁹ Despite operational hindrances which included better-performing Axis aircraft, bureaucratic failure to address Malta-specific provisioning and operational losses incurred in the Battle of the Atlantic, Malta-based offensive actions proved effective, forcing Axis retrenchment in North Africa.⁶⁰

Because of Malta's impact on Rommel's campaign, Field-Marshal Kesselring, who favoured occupation of Malta to secure North Africa, took command of Germany's Mediterranean forces, and relocated *Luftflotte* II to Sicily and half the Atlantic U-boat fleet to the Mediterranean.⁶¹ German air attack recommenced in January 1942,⁶² which limited effective Allied reconnaissance from Malta. Axis powers resumed supply of North Africa and Rommel pushed British forces back across Cyrenaica.⁶³

By February 1942, conditions in Malta were precarious: 'It is a question of survival'.⁶⁴ The loss of Libyan airfields reduced air cover for Malta convoys resulting in successful March convoys being destroyed before they could unload. The island experienced massive aerial bombardment but could raise little offensive capacity as only five fighter aircraft remained serviceable against Axis forces of over two hundred.⁶⁵ However, Rommel's renewed successes prompted Hitler to prioritise the taking of Egypt over conquest of Malta, postponing invasion (Operation Herkules) until July/August 1942, only to abandon it altogether after capturing Tobruk.⁶⁶ This hiatus gave a window of opportunity for the Allies to strengthen Malta. Air capability and forces, including 39 Squadron, were deployed to the island in July/August 1942. Allied air superiority was established resulting in cessation of

⁵⁹ Holland, *Fortress Malta*, p.179.

⁶⁰ J. Green and A. Massignani, *Rommel's North Africa Campaign: September 1940-November 1942* (Conshohocken: Combined Publishing, 1999), pp. 127-129

⁶¹ Austin, *Churchill and Malta's War: 1939-1943* (Stroud: Amberley Publishing, 2010), pp. 146-147; Holland, *Fortress Malta*, p.186.

⁶² Delve, *Malta Strikes Back*, p. 132.

⁶³ Austin, *Churchill and Malta's War*, p. 149.

⁶⁴ London, National Archives, PRO WO106/2113, 1870-1962.

⁶⁵ Holland, *Fortress Malta*, p.202.

⁶⁶ Austin, *Malta and British Strategic Policy*, pp. 153-154.

Axis bombing operations by the end of July 1942 and offensive engagement recommenced on 17th August on Axis shipping.⁶⁷

With the North African front-line moving eastwards to El Alamein in July 1942 following Allied retreat, Rommel's forces remained vulnerable to Allied attack through his main supply port, Tripoli. Malta-based air and submarine strikes on Axis convoys became critical to changing the direction of the war in North Africa.⁶⁸ However, the situation in Malta remained dire as severe food shortages and limited fuel supplies made the likelihood of Malta holding out beyond September 1942 remote. A minimally-successful convoy in August allowed resumption of Allied Malta-based offensive once more.⁶⁹ The hiatus in Axis offensive operations allowed S/L Patrick Gibbs to develop the use of Beaufort-bombers as an effective strike force operating from Malta.⁷⁰ Allied bombing of supply lines impeded Axis advance on Cairo⁷¹ and Rommel gambled on the success of the *Sant' Andrea* convoy to land sufficient supplies and launched the Alam Halfa Ridge offensive on 30th August.⁷² Failure of this and further convoys in September 1942 led Kesselring, in a bid to neutralise Malta, to reinforce Sicily's aerial capabilities, though this was unsuccessful because of improved Maltese offensive and defensive capabilities (Appendix 4).

Crisis-conditions in Malta continued unabated which partly informed the decision to relocate 39 Squadron back to Egypt to support the 8th Army's offensive and reduce impact on meagre Maltese supplies. By the end of November, supplies (Operation Stoneage) reached Malta unopposed due to Allied sea and air superiority, conditions very slowly improved and the island became a centre for operations for the Tunisian campaign as the desert conflict moved back from East to West.⁷³

⁶⁷ Delve, *Malta Strikes Back*, p. 203; Holland, *Fortress Malta*, pp. 278-283, p. 308.

⁶⁸ Austin, *Malta and British Strategic Policy*, p. 167; Holland, *Fortress Malta*, p. 313.

⁶⁹ Holland, *Fortress Malta*, pp. 334-335.

⁷⁰ Delve, *Malta Strikes Back*, pp. 169-197; Delve, *The Winged Bomb*, p. 79.

⁷¹ Delve, *The Winged Bomb*, p. 85.

⁷² Austin, *Malta and British Strategic Policy*, pp. 166-167.

⁷³ Holland, *Fortress Malta*, pp. 370-371, pp. 378-379.

Activities of 39 Squadron from August 1942 to May 1943

Most published narratives of 39 Squadron are personal and dwell on day-to-day operations.⁷⁴ Instead, Appendix 4 places 39 Squadron's operations in the context of the greater Mediterranean conflict, and is sourced primarily from official records and academic reviews. It includes key events running up to August 1942 (when Mac started his tour of duty with 39 Squadron) because understanding of Malta's position prior to August 1942 is critical to the understanding of the strategic operations of the period for the squadron (Table 3). As part of the recognition (and Churchill's insistence) that Malta had to be defended in order to mount offensive operations against DAK, 39 Squadron which had been based in Egypt from December 1940 moved to Malta. Initially a small detachment moved in June 1942 whilst the rest remained in Egypt, the whole squadron transferring to Luqa in August 1942.⁷⁵ The standard *modus operandi* for 39 Squadron during the Mediterranean theatre was to split the squadron into three shifts: 'A', 'B' and 'C', working eight-hour shifts; occasionally flying in formation (Appendix 2) but more frequently, during the Tunisian campaign, taking off individually rather than flying in groups.⁷⁶

39 Squadron's operations can be split into five stages (Table 3).⁷⁷ From August to October 1942 the squadron was tasked with targeting Axis shipping in the vicinity of Italy and Greece and anti-submarine patrolling (ASP). Locations of operations and placement of 39 Squadron are detailed in Table 3 which also includes Axis shipping lost to Malta-based forces. The squadron moved to Malta at a particularly precarious phase of the conflict. The island was under siege and food and operational supplies were very short such that aviation fuel was officially restricted to operational activities only (though logbooks indicate differently), with attack restricted to larger (>5,000 tons) cargo vessels. At this phase of the war, Malta's strategic position was judged more important, placed as she was within Beauforts' operational ranges from North African to Greek coastal regions (Map 1, below), than any physical privations and operational limitations consequent on local shortages. Mac was

⁷⁴ Barker, Delves, Gibbs, Nesbit, all listed in the bibliography

⁷⁵ Delve, *The Winged Bomb*, p. 170.

⁷⁶ Holland, *Fortress Malta*, p. 366.

⁷⁷ Table adapted from Delve, *The Winged Bomb*, pp. 80-82.

engaged in day-time actions off the Corfu coast and likewise Don – both recorded separate torpedo strikes (Appendix 2). Axis merchant shipping lost during this period that can be directly attributable to 39 Squadron operations for August and September (usually in joint actions with other squadrons, submarine and occasionally naval support) include the *Rosolino Pilo*, *Dora*, *Poza Rica*, *Sant’ Andrea* and *Barbara*, with damage to *Luciano Manara* (later beached), the tanker *Unione*, *Dielpi* and possibly *Georgia*. Mac’s logbook records torpedo strikes on the tanker *Georgia*, and *Rosolino Pilo*, *Dora* and *Poza Rica*, though only results for the first were observed.⁷⁸



Map 1: Map of the central Mediterranean with range of the Mark II Beaufort Bomber⁷⁹

The entire squadron moved from Malta back to Egypt at the beginning of October. The reasons for this are two-fold. Firstly, food and fuel shortages and German aerial aggression (the ‘mini-blitz’ targeting in particular Maltese airfields) over Malta made it imperative for any non-defensive Allied forces to relocate elsewhere. Secondly, as a bomber squadron, 39 was moved to Shallufa (for training and maintenance purposes), with a detachment at Gianacelis (30 miles south of Alexandria) to prepare for the 8th Army offensive in late October and to continue attack on shipping lanes supplying DAK via Libyan ports. Both Mac and Don record operations against shipping off Tobruk and Tripoli (Appendix 2). 39 Squadron was heavily involved in attacks on convoys heading into and out of Tobruk and Benghazi, sinking of the freighter *Tergeste*, merchant vessels *Zara* and *Brioni* and tankers *Proserpina*, *Portofino* and *Luciano*. Mac was involved in the day-time operation on 2nd November against the *Zara* and *Brioni* (results confirmed – *Brioni* reached Tobruk harbour but was sunk before

⁷⁸ Shipping records taken from Shores and Massimello, Vols II and III.

⁷⁹ G. Smith, [online]. Available: www.naval-history.net

she could be unloaded). W/C Jefford confirmed that *Brioni* was bombed and *Zara* was hit by a torpedo delivered by Gaine with Mac as his navigator.⁸⁰

Table 3 Operational spheres of action for 39 Squadron

	Targets for 39 Squadron operation*	No. of Axis ships lost to Malta-based forces \$	39 Squadron locations
August – October 1942	Axis shipping along shipping lanes off Greek coast and Brindisi to Benghazi/Tobruk passage with emphasis on tankers and merchant vessels > 5,000 tons	21	Malta, within range of Greek and Italian coasts
October – November 1942	North African campaign to support the Allied El Alamein offensive Axis shipping lanes Crete to Tobruk	53	Based in Gianacis (Alexandria), within range of west Mediterranean shipping lanes and Shallufa - for training
November 1942 – January 1943	North African campaign to support continuing desert offensive Axis shipping lanes Sicily – Tunis – Tripoli route	42	Malta, within range of Tunisian coast
December 1942 – January 1943	Tripolitania offensive – ASP, torpedo and mining operations off Tunisian coast. Own convoy escort duty and training	33	Libya, Egypt and Malta – offensive operations in Libya and Malta, training in Egypt
January 1943 – June 1943	Axis shipping in Sicilian narrows and Sicily to Naples shipping route (subsequent Allied invasion of Sicily in July)	57	Malta, within close range of southern Italy
Total number of Axis ships lost to Malta-based activities (individual numbers are for overlapping periods)		107	

* Mainly joint operations with other squadrons and often supporting naval and submarine forces

\$ Data taken from Austin, *Malta and British Strategic Policy 1925-1943* – overlapping periods

⁸⁰ Personal Correspondence with C.G. Jefford 8/12/17.

During the third stage of operations the squadron was transferred back to Malta for logistical reasons, with both Mac and Don returning on 6th November. Ground conditions were much improved on the island. The 'mini-blitz' had ceased because of heavy *Luftwaffe* losses in Sicily due to Britain increasing and improving Malta-based fighter capabilities in summer/autumn 1942 (Appendix 5). Allied convoys to Malta were successful, such that aviation fuel was no longer a limiting factor in operations. But more importantly, DAK was retreating back across Libya towards Italian-occupied Tunisia with the supply route shifting from Tobruk to Tripoli and Tunis, both well within the Beauforts operational range from Malta (Map 1).

39 Squadron activities for this period included continued attacks on enemy convoys. Damage inflicted through sorties involving 39 Squadron include the sinking of *Saturno* and damage to *Pistoia*, and possibly *Verona*. Other duties include strategic mining operations off the Tunisian coast and convoy escort. Both logbooks detail operations off the Libyan coast, including torpedo and bombing operations and stand-by duty in Gambut (a military airfield 30 miles south-east of Tobruk, Appendix 2). Mac's logbook records a strike on 20th November on a 2,500-ton merchant vessel, whereas Italian records report loss of the 785-ton *Lago Tana*, thus the identity of the vessel targeted by Mac, and recorded as sunk, cannot be established. One point of particular interest is Mac's record for the 23rd November, when a merchant vessel, later identified from Italian records as SS *Numidia*, was spotted northbound but not torpedoed because of suspicion it might be carrying Allied prisoners of war (POWs). Attacks on northbound enemy were particularly sensitive at this time because SS *Scillin* had been sunk off the Tunisian coast by HMS submarine *Sahib* on 14th November 1942 with the loss of over 800 Allied POWs.⁸¹

The fourth operational phase, the Tripolitania offensive, was a continuation of operations along the Tunisian coast for 39 Squadron, interspersed with periods in Egypt for training which included, for both Mac and Don, exercises with flame floats and flares for night attack. Don's logbook already shows considerable night-time experience in the Mediterranean by this time whereas all of Mac's 39 Squadron recorded missions, with the

⁸¹ Shores and Massimello, *A History of the Mediterranean Air War 1940-1945. Vol. II*, p. 67.

exception of 15th January and 19th February 1943, appear to be day-time operations which were considered riskier.

The last stage of the Mediterranean Air War was concentrated, for 39 Squadron, out of Malta for offensive operations along Italian shipping lanes around Sicily and southern mainland Italy. Acting usually in tandem with other squadrons, for example 221 Squadron on 15/16th February, 89 Squadron on 24/25th February, 39 Squadron recorded successful attacks on the following shipping: sunk – *Capo Orso*, *Alcano*, *Thorsheimer*, damaged – *Sterope*. The *Esterel* was targeted, and later sunk by submarine-delivered torpedo on 12th March. An attack on 22nd March reported possible damage/sinking of some of the eight vessels in the convoy (no result observed). Successful torpedo strikes caused damage to four merchant ships, recorded in 39 Squadron ORBs and logbooks for 12th and 17th March, but subsequently reported as undamaged by the Italians, due, as discussed in Chapter 1, to deflection of accurately-aimed strikes. However, the squadron could derive some satisfaction from the fact that the 12th March 1943 convoy was heading from Naples to Tunis but the 10,000 ton tanker *Sterope* turned into Palermo harbour without delivering her load.⁸² The convoy on the 17th March paused in the Straits of Messina before continuing onto Bizerta (west of Tunis) but whether this was due to minor damage sustained in the torpedo attack or planned is not recorded. Given that Axis operations in the Western Desert were critically limited by fuel shortages by this time (Appendix 4), as Austin contends delays had the same operational impact as a successful strike.⁸³ Mac's logbook for the period details ASP, shipping search and attacks and escort duties for Malta-bound convoys. From February 1943 onwards, he records increased air- and VHF-testing, which suggests greater availability of resources for training on Malta. Both Mac and Don had finished their tours of duty by April 1943. The final recorded torpedo strike by 39 Squadron was recorded on 23rd/24th April 1943 on the merchant vessel *Aquino* sailing from Leghorn to Tunis – she was hit by 39 Squadron, but later sunk by Liberators of the 12th United States Air Force.⁸⁴

The above discussion has concentrated on 39 Squadron activities, although offensive operations were almost invariably mounted with other squadrons in action at the same time

⁸² Nesbit, *The Armed Rovers*, p. 135.

⁸³ Austin, *Churchill and Malta's War*, p. 137.

⁸⁴ Nesbit, *The Armed Rovers*, pp. 138-9.

and/or operating in waves of attack. Mac's entry for 23rd September 1942 may indicate a fifteen-aircraft formation from more than one squadron, given that 39 Squadron might not have had that number operational (Appendix 2, page 4-5 above). A typical longer-range mission of one thousand miles or more usually consisted of one, but more often several, squadrons of heavy bombers (Beauforts, Beaufighters, Wellingtons).⁸⁵ Joint operations with Hurricanes and Albacores were more restricted due to their shorter ranges (930 and 600 miles respectively). Most engagements examined indicate that many sorties consisted only of bombers, for example, those of 7th September, 1st November, 17th/18th December. Appendix 5 contains a list of squadrons based in Malta in 1942 to 1943, adapted from Hamlin.⁸⁶ This source may be restricted to those *only* based long-term in Malta since records elsewhere (e.g. the comprehensive lists of engagements given in Shores and Massimello, volumes II and III) record participation of squadrons not given in Hamlin's list. The alternative explanation is that these were combined operations with squadrons from other locations. This would present logistical challenges, particularly in night-time operations given that there was no Allied flight control tower capability anywhere in the Mediterranean until the later stages of WWII and the requirement to keep radio transmission to an absolute minimum. What Appendix 5 shows clearly is the move in relative capabilities from bomber/torpedo to fighter squadrons as the war continued. In June 1942, two-thirds were bomber squadrons, falling to just over half in November 1942 and by June 1943 two-thirds of the Malta-based air force comprised fighters reflecting the changing requirements of the conflict after Axis defeat in Africa from land/sea operations to the subsequent invasion of Italy.

'See-Saw' conflict and the impact of Allied strategic bombing on the Mediterranean War

Though not continuously Malta-based, the effectiveness of 39 Squadron can best be evaluated through the role played by Malta in the Mediterranean conflict. Malta was strategically important for maintenance of the offensive in North Africa. From June 1942 to June 1943, regardless of whether the squadron was based in Luqa, Libya or Egypt, the objective for the squadron remained unchanged: attack on supply routes to North Africa. Appendix 4 plots the time-line of major events during the Mediterranean conflict. What the

⁸⁵ As listed by Shores and Massimello, *A History of the Mediterranean Air War* Vols. II and III.

⁸⁶ J.F. Hamlin, *Military Aviation in Malta*, pp. 41-42.

appendix shows are changing levels of Allied and Axis offensive capabilities over Malta which are closely mirrored in cycles of pursuit, entrenchment, defeat, retreat, re-equipping and offensive action in the Western Desert. Austin has called this a 'see-saw' conflict.⁸⁷ Thus by February 1941 following incessant German bombardment from December 1940 onwards, Malta was unable to launch any offensive operations against enemy shipping and airfields and the Axis powers were able to garrison and provision forces in Cyrenaica⁸⁸ as a prelude to driving the British out of Egypt and Suez which was an important strategic target because of the canal's role in bringing supplies from Britain and America and access to India and Burma. However, Britain successfully improved Malta's capabilities in Operation Winch (April to June) and attacks on shipping resumed leading to supply problems for German and Italian African forces. After June 1941 hardly an Axis convoy went unchallenged and the supply situation in North Africa steadily worsened. By November 1941 Axis forces were retrenched in Libya and having to rely on the much longer supply route from Tripoli but British forces had made little progress either, leading to a stalemate in North Africa. The Axis' siege of Malta continued in early 1942 with intensive Sicily-based *Luftwaffe* activities with all offensive Allied operations ceasing by April 1942. By summer 1942, Malta was perilously close to starvation, the German high command considered that the island was effectively 'neutralised'⁸⁹ thus *Regia Aeronautica* took over from the *Luftwaffe* that had redeployed to the Russian front. A combination of minimal supplies getting through to Malta and less effective Italian operations allowed the Allies to resume offensive operations once more. By the later part of 1942, the attrition rate on Axis supplies increased and successes against convoys caused Germany and Italy to provision using smaller vessels and transport airplanes. Axis surrender in May 1943 became inevitable.

This struggle for resources is summarised in Table 4 and uses Allied reconnaissance and Intelligence data for ships that had been sunk by Allied forces, supplemented with information about tonnage and supplies lost from Axis records.

⁸⁷ Austin, *Malta and British Strategic Policy 1925-1943*, p. 189.

⁸⁸ An Italian colony since 1911.

⁸⁹ A. Kesselring, *The Memoires of Field-Marshal Kesselring* (Stroud: The History Press, 2015), p. 122. According to Kesselring, in May 1942: 'the task was accomplished'.

Table 4 Comparison of Axis shipping sunk by Malta-based forces, percentage loss of Axis supplies due to loss at sea and average supply quota for Axis forces (data taken / reformulated from Austin, 2012)

Allies		Axis			
	Proportion of Axis shipping sunk by Malta-based forces		% loss of supplies landed in North Africa	Total tonnage landed (in 1000 tons)*	Average supplies per month (in 1000 tons)
Jan – May 1941	61%	Jan – May 1941	7%	421	84.3
Jul – Dec 1941	86%	Jun – Oct 1941	17%	412	82.4
		Nov – Dec 1941	40%	70	35
Jan – May 1942	54%	Jan – May 1942	5%	409	81.8
Jun – Oct 1942	55%	Jun – Oct 1942	55%	300	60**
Nov – May 1943	50%	Nov – May 1943	45%	376	53.7

* Does not represent the amount reaching the Front (1400 miles between Tripoli and El Alamein)

** Not inclusive of gains for Axis forces from Allied supplies from fall of Tobruk

Average figures are given which mask particularly effective months, for example, losses in Axis supplies landed in October 1942 and May 1943 were 44% and 77% respectively. The increased success of Malta-based offensives in 1941 compared with 1942 is partly due to improving air capacity, and, in the second half of 1941 to improved Intelligence produced by Ultra in Bletchley Park, although unknown to front-line forces.⁹⁰ The January-May 1942 data emphasises the urgency of anti-shipping air-deployment which subsequently included 39 Squadron (Appendix 5). In 1942, the battle-front moved from west to east increasing the activities of eastern Mediterranean-based Allied forces, thus proportionate reductions in numbers of enemy shipping sunk was due to changing scenarios rather than reduced effectiveness of Malta-based forces. The end column of Table 4 represents the maximum

⁹⁰ R. Bennett, *Ultra and Mediterranean Strategy 1940 – 1943* in Austin, *Malta and British Strategic Policy 1925 – 1943*, p. 141.

supplies landed per month. Van Creveld calculated that the seven Axis divisions (two German, five Italian) stationed in North Africa would require about 70,000 tons of supplies per month to maintain operations⁹¹ thus the performance figures are a stark representation of the predominant reason for Axis failure: insufficient supplies. This analysis of data from various sources provides strong evidence for successful Allied operations against Axis supply chains to North Africa.⁹² Malta remained important throughout the North African campaign, though this is not necessarily the opinion of all historians, as discussed below.

There is little disagreement among historians that success of DAK depended on the free-flow of reinforcements and supplies from Italy to Libya, but where there is contention is the relative importance of Malta in the conflict. Some historians consider that the Mediterranean War has received undue prominence, arguing that the main theatres of World War Two were the North Atlantic and the Far East. Barnett called the Mediterranean conflict a 'cul-de-sac' and both he and van Creveld consider that Malta played a lesser role in the Desert War.⁹³ Keegan likens the conflict to the Peninsular War, 'a strategic diversion on the maritime flank of a continental enemy'.⁹⁴ Giorgerini judged that Malta did not play a prominent role because the greatest period of success against Italian shipping coincided with the greatest success in supplying DAK (Table 4 above) though Austin counter-argues that the *indirect* role Malta played was not fully considered.⁹⁵ Some participants, such as Hitler and Göring, thought that Malta could be by-passed, and Hitler considered the Mediterranean an ancillary theatre anyway. In their estimation was that the Cretan-Benghazi/Derna route was more sensible for provisioning DAK than Tripoli although this ignored the limited capacities of Cyrenaican ports.⁹⁶ Others thought differently. Churchill was a staunch believer in the importance of Malta,⁹⁷ as were Admiral Raeder, Rommel and

⁹¹ M. van Creveld, *Supplying War: Logistics from Wallenstein to Patton* in Austin, *Malta and British Strategic Policy 1925 – 1943*, p. 138.

⁹² Including Austin, Shores and Massimello who use data from RAF and *Luftwaffe* ORBs, *Diari Storici* of *Regia Aeronautica*, US National and Forces Archives.

⁹³ C. Barnett *Engage the Enemy More Closely: The Royal Navy in the Second World War* and M. Van Creveld, *Supplying War: Logistics from Wallenstein to Patton* in Austin, *Churchill and Malta's War*, p. 189.

⁹⁴ J. Keegan, *The Second World War* (London: Penguin, 1990), p. 306.

⁹⁵ G. Giorgerini, *La battaglia dei convogli in Mediterraneo* in Austin, *Malta and British Strategic Policy 1925 – 1943*, pp. 159-180.

⁹⁶ R.F. Le Blanc, *A Study of German strategy in the Mediterranean, June 1940 to August 1942*, Unpublished MA thesis, University of Montana, 1969.

⁹⁷ Austin, *Churchill and Malta's War 1939-1943*

Kesselring: in Kesselring's words, 'without occupation of Malta, the north African theatre [is] in no way secured'.⁹⁸ Those historians who give Malta and the Mediterranean a more prominent role include Austin, Macintyre and Bragadin who consider actions mounted from Malta to have been critical to the outcome,⁹⁹ and Porch, who concluded that it was 'impossible to launch Operation Overlord in 1944 without first having mastered the Mediterranean'.¹⁰⁰ Austin is measured in his estimation – Malta was very important and a major contributor to the arena, but he assigned her importance to less measurable indirect effects including the island's draining effects on Axis resources and through convoy diversion to longer passages around Greece, as much as her direct impact on shipping, bombardment and mining of Axis harbours.

Regardless of the relative importance of the Desert War and Malta's contribution in particular, there is little disagreement over the role logistics played in operations. The disagreement lies in the relative importance given to the reasons for supplies failures. Knox points to the weaknesses in Italy's economic base, her failure to 'make good' the damage that the Allies exerted on her infrastructure and manufacturing bases and her lack of domestic mineral and oil resources.¹⁰¹ Also, at the onset of war, approximately one-third of Italian mercantile strength, including most of her most modern ships was in waters outside Axis control¹⁰² where presumably they remained. Giorgerini notes that most ships sailed under-laden, at only 50% capacity, possibly linked to up-stream supply problems.¹⁰³ Both Le Blanc and van Creveld consider the war from a logistical angle, but whereas Le Blanc affirms the strategic value of the island, van Creveld assigns it a subsidiary role. The latter argues that the logistical bottle-necks of port capacities, inadequate land-based transport and the single road connecting Libya and Egypt were instrumental in Rommel's failure, rather than the damage inflicted from Allied air/naval operations.¹⁰⁴ In contrast, Austin states: 'It is no

⁹⁸ Kesselring, *The Memoires of Field-Marshal Kesselring*, pp. 119-136.

⁹⁹ D. Macintyre, *The Battle for the Mediterranean* (London: Batsford, 1964), p.16; M.A. Bragadin, *The Italian Navy in World War II* (Annapolis: United States Naval Institute, 1977), p. 20.

¹⁰⁰ D. Porch, *The Path to Victory: The Mediterranean Theater in World War Two* (London: Cassell, 2004), p. 676.

¹⁰¹ M. Knox, *Hitler's Italian Allies: Royal Armed Forces, Fascist Regime, and the War of 1940–1943*. (Cambridge University Press, 2000), pp. 23-50.

¹⁰² R. de Belot, *The Struggle for the Mediterranean* in Le Blanc, MA thesis, University of Montana, 1969.

¹⁰³ Giorgerini, *La battaglia dei convogli in Mediterraneo* in Austin, *Malta and British Strategic Policy 1925 – 1943*, pp.130-1.

¹⁰⁴ Van Creveld, *Supplying War: Logistics from Wallenstein to Patton* in Austin, *Malta and British Strategic Policy 1925 – 1943*, pp. 159-180.

coincidence that Rommel's two successful campaigns were carried out when Malta was neutralised'.¹⁰⁵ The 'bottle-neck' arguments cannot explain why, if Malta was unimportant, Italy resorted to longer shipping routes, why the Allies built up and retained their air and sea offensive capacities in Malta, why they concentrated on supply ships and why they redistributed bomber squadrons once Axis shipping lanes were eliminated, as evidenced in Appendices 2, 4 and 5. Finally, Le Blanc's thesis and the first edition of van Creveld's book pre-date disclosure of Enigma intercepts when the full extent of how catastrophic the loss of supplies was to DAK, in the form of messages to and from Berlin, was made public.¹⁰⁶ I concur with Austin and conclude, therefore, that detractors of Malta's importance have been based on considerations of land-based operations only, or without benefit of the extent of intelligence-based records. Data presented here and in appendices supports the importance of Malta and anti-shipping offensives to the failure of DAK in North Africa.

In Austin's opinion, Malta must be considered a major contributor to the defeat of the Axis powers in the Mediterranean. When Malta was restricted to defence, DAK was adequately supplied, when Malta was operational, Axis supplies suffered. Ten out of the thirteen ships sunk in October 1942 were sunk by Malta-based forces and most of the ships off Tobruk were sunk by aircraft operating out of Egyptian airfields,¹⁰⁷ with 39 Squadron playing a part in both. Allied Intelligence was well aware of the acute Axis fuel situation thus tankers were especially targeted, as Appendix 2 indicates.

The Mediterranean War epitomises the twentieth-century version of the axiom (attributed both to Frederick the Great and Napoleon): 'an army marches on its stomach' – it also goes nowhere without oil. Mac retained a copy of *The Sunday Times of Malta*, dated April 25, 1943 which carried an article by W/C L.V. Fraser describing Mac's torpedo strike of the previous week. It states 'the motto of the torpedo pilot is never mind destroyers – get supply ships'. Delve considered that the part played by torpedo-bombers was pivotal and 'was often ignored' in the Mediterranean War and 'possibly the war'.¹⁰⁸ Without them, the Desert War would have been more protracted and a well-provisioned DAK could have

¹⁰⁵ Austin, *Churchill and Malta's War 1939-1943*, p. 189.

¹⁰⁶ These were published in *British Intelligence in the Second World War: Its Influence on Strategy and Operations*, in five volumes between 1979 and 1991 by F.H. Hinsley *et al.*

¹⁰⁷ Austin, *Churchill and Malta's War 1939-1943*, p. 168.

¹⁰⁸ Delve, *The Winged Bomb*, p. 85.

gained the advantage. However, it is possibly over-ambitious of Delve to consider that the torpedo-bombers, despite their significant achievements in the Mediterranean, were crucial to the final outcome of WWII.

Chapter 3

Life in Malta for the RAF and Maltese

As discussed in the two preceding chapters 39 Squadron was involved in highly precarious operations. These were rendered even more challenging by the difficult living conditions on Malta. Mac's memorabilia included some editions of *The Times of Malta*, paper currency and pamphlets (The *Shaky-Do*¹⁰⁹) of the Veterans Association he belonged to. The newspapers were retained in connection with operations that he was engaged in, though particular squadrons are not specifically identified in the articles.¹¹⁰ The currency consists of George V notes dated 20th November 1918, overprinted '1 shilling' in Malta, declared legal tender on 17th November 1942 and immediately put into circulation, and uniface emergency-issue one shilling George VI notes (Figure 5), but the only reference in contemporary records and museum displays I found to overprinted emergency currency was a brief note in Galea's diary.¹¹¹ An article appearing in *The Times of Malta* in June advocated the use of small denomination bank notes to alleviate war-time shortages¹¹² - which was subsequently implemented. These notes imply acute shortages in Malta and Mac's retention probably indicates that there was little to spend money on.¹¹³ The pamphlets are particularly useful because of an article he wrote in one of them. Mac was laconic regarding

¹⁰⁹ A 'dangerous operation or event' RAF Slang and Abbreviations. [online]. Available: http://www.lancaster-archive.com/bc_slang.htm [Accessed 15 April 2018].

¹¹⁰ For example: 'Air War in the Mediterranean: Malta helps Montgomery' by W/C Fraser, *Sunday Times of Malta* 25 April 1943. Retained newspapers are 24 August 1942, 10 and 18 March and 25 April 1943.

¹¹¹ J.E. Sandrock, Bank Notes of the Government of Malta. [online]. Available: www.thecurrencycollector.com/pdfs/Bank_Notes_of_the_Government_of_Malta.pdf [Accessed on 5 April 2018]. M. Galea, *Malta Diary of a War 1940 – 1945*, (San Gwann: Publishers Enterprise Group, 1994), p. 183 Michael Galea refers to issue of overprinted 1s notes in his diary entry of 19th November. Emergency currency is not displayed in the Malta at War Museum, Vittoriosa (personal visit).

¹¹² Anonymous, 'Small Change', *The Times of Malta* June 20 1942: p. 2.

¹¹³ Black Market eggs were 16d each by September 1942, J. Micallef, *When Malta stood alone (1940-1943)* (Malta: Interpret, 1981), p. 184. A single egg sandwich cost the equivalent of a week's wages, Holland, *Fortress Malta* p. 291.

his war-time experiences therefore these, together with the books he contributed to, remain his extant personal narratives.¹¹⁴

Malta experienced the heaviest, most sustained aerial bombardment anywhere in Europe in the first half of 1942. According to British estimates 11,079 tons of bombs were dropped between January and May, with the *Luftwaffe* concentrating on airfields.¹¹⁵ Between 20th and 22nd April 1942, 499 tons of bombs were dropped on Luqa and Takali airfields alone: 'both places a complete shambles, in spite soldiers working day and night'.¹¹⁶ The standard practice, during air-raids, was to get all serviceable Spitfires into the air to engage the enemy. By August 1942, when Malta was better equipped with Spitfires, Air Vice-Marshal Park was tactically unequivocal, and conveyed the delicate balance between fighter and bomber capabilities: 'Any sign of defensive tactics by our fighters will encourage the enemy to...reintroduce bombers therefore the more aggressively our fighters are...the better will Malta be defended'.¹¹⁷ During daylight, bombers had to be housed in dispersal pens for protection such as Mac remembered (Figure 6); at night-time they were kept parked on the edge of the runway ready for an early take-off if convoy reports came in. Non-operational aircraft were moved back to the pens before daylight so Beaufort crews on standby had to be on the airfield one hour before dawn with standby every other day.¹¹⁸ These pens were an effective way of camouflaging aircraft, being constructed of local stone or 'bits and pieces', making their location difficult to distinguish from the air.¹¹⁹ 39 Squadron arrived in Luqa in June 1942 after the heaviest period of bombardment (Appendix 4), and they also avoided the 'mini-blitz' of October, when the *Luftwaffe* mounted 1,400 sorties.¹²⁰ Although the frequency and destructiveness of aerial attack had diminished substantially by the time that 39 Squadron fully regrouped in Malta in November 1942, camouflage of grounded aircraft was still essential with an increasing number of pens required for the growing

¹¹⁴ McGarry, 'Malta – 50 Years On'

¹¹⁵ Austin, *Malta and British Strategic Policy*, p. 152.

¹¹⁶ Delve, *Malta Strikes Back*, p. 164.

¹¹⁷ Ibid., pp. 210-211.

¹¹⁸ Barker, *The Ship Busters*, p. 227.

¹¹⁹ Delve, *Malta Strikes Back*, p. 166. Blast-pens were crucial in the periods when the RAF did not have aerial supremacy and was restricted to night-time bombing sorties.

¹²⁰ Micallef, *When Malta stood alone*, p. 187.

numbers of aircraft, as the numbers of Luqa-based squadrons substantially increased from 1942 to 1943 (Appendix 5).

There is a wealth of sources documenting hunger during the siege of Malta – published diaries and recollections,¹²¹ websites,¹²² reminiscence platforms hosted by the University of Malta¹²³ and the daily newspaper, *The Times of Malta*. Shortage of animal fodder and channelling of foodstuffs to official outlets led to government purchase ‘at enhanced prices’ of pigs, sheep and goats and by the end of the siege, about half the island’s sheep and goats had been slaughtered.¹²⁴ Mac’s first stint in Malta must have been a hungry one since Malta-based forces’ rations were as meagre as the local populations – Governor Gort was living off the same rations as everybody else.¹²⁵ Victory Kitchens, introduced in January 1942, were set up to consolidate food and cooking facilities offering one basic meal per day for 6d in return for relinquishing half of daily rations.¹²⁶ Their take-up success was due solely to there being little else available, including Black Market food. By mid-1942, the stringent rationing system could not maintain health: in September 1942, Mr. Rowntree, Deputy Director of Communal Feeding, reported that ‘an increase of about one-third calorific value was required to prevent serious medical problems’.¹²⁷ With only a few weeks of food left, it is obvious from the press that the government was ‘micro-managing’ food supplies. *The Times of Malta*¹²⁸ published a ‘Questions and Answers’ article: in answer Governor Jackson responded to the need for opening a Victory Kitchen in the dockyard and no bread delivered to a bakery – these appear trivial, but reflect that Malta was starving. Improved food supplies by the beginning of January 1943, by which time Mac was back in Malta, led to increased food rations and the rapid closure of the Victory Kitchens.

¹²¹ For example, Joseph Micallef, Michael Galea and Shirley Thomas are among the many autobiographies of the period who attest to starvation conditions on Malta.

¹²² Malta: War Diary, [online]. Available: <https://maltagc70.wordpress.com>

¹²³ Surviving War: health, shelter and the Victory Kitchens, [online]. Available: https://www.um.edu.mt/data/assets/pdf_file/0019/112843/survivingwar.pdf

¹²⁴ Micallef, *When Malta Stood Alone (1940-1943)* p. 170. One benefit is that cases of human brucellosis (animal reservoir is the goat) decreased. A consignment of R.S.P.C.A.-funded dog biscuits was eaten by the human population instead.

¹²⁵ Lance-bombardier Ken Griffiths recalls daily rations, at their worst, consisting of two hard tack biscuits, a small piece of bacon, a slice of corned beef and ‘a bit of jam’ – and three cups of tea. Holland, *Fortress Malta*, p. 292, p. 311.

¹²⁶ Micallef, *When Malta Stood Alone (1940 – 1943)*, pp. 172-176.

¹²⁷ Austin, *Churchill and Malta’s War*, p. 161.

¹²⁸ Anonymous, ‘Questions and Answers’ session of 4th August, *Times of Malta* 14 August 1942, p. 3.

What is interesting is that throughout the starvation of summer 1942, the paper continued to carry advertisements for restaurants: 'The First & Last Bar ... announce the opening of [the] Bar and Chicken Shack'.¹²⁹ However, what they were serving was outside the purchasing power of most civilians and forces alike.

In 1940, Malta was already one of the most densely populated areas of Europe with problems of overcrowding in many urban locations. Difficulties faced by both local inhabitants and the forces were greatly exacerbated by the destruction of 15,000 buildings in April 1942 alone and the loss of over 37,000 homes by the end of the war.¹³⁰ To place the scale of attrition into the wider context, the tonnage of bombs dropped on Malta in April was thirteen times that which fell on Coventry during the saturation bombing of November 1940.¹³¹ Because of the size of the island, military and civilian populations were constantly in close proximity to the focus of Axis attrition. Although construction of deep rock shelters started in 1940, with blast and shrapnel shelters located across the island, many of the shelters were basically cave dwellings for forces and civilians alike.¹³² The perilous nature of existence on the island was intensified further by location of work: the majority of Maltese worked in Valetta and the surrounding towns, the dockyards being the main employers and the majority of income coming from Grand Harbour.

The main targets for the *Luftwaffe* in 1942 were Grand Harbour and the airfields at Luqa, Takali and Hal Far which, with the exception of Hal Far, were located in populated areas - the villages of Luqa, where Mac was based, and Mosta near Takali were totally destroyed during Axis bombardment.¹³³ Fighting forces and local people were closely integrated particularly from April 1942 onwards when non-conscripted men were called up for national war work (Mac mentions the son of a Maltese attached to 39 Squadron who was keen to make Mac's acquaintance during commemoration events in 1992).¹³⁴ Petrol shortages made it difficult to reach work-places critical to the success of aircrews. Evacuation to surrounding rural areas together with military and RAF personnel increased 'rural' population and

¹²⁹ *The Times of Malta* 20 June 1942, p. 3.

¹³⁰ S. Thomas, *Greetings From Malta: World War II* (Launceston: Regal Press, 1996), p. 112.

¹³¹ Thomas, *ibid.*, p. 67.

¹³² *Ibid.*, p. 23.

¹³³ Micallef, *When Malta Stood Alone*, pp. 124-137.

¹³⁴ *Ibid.*, pp. 141-142.

created additional challenges by placing heavy demands on drainage and sanitary systems.¹³⁵ Most people, civilian and forces, walked or 'biked', and it is no coincidence that *The Times* carried practically daily advertisements for bicycle theft insurance. Though Mac does not comment, for RAF personnel, operational life was difficult, hampered by hunger, very early starts and often long treks to base.

Chronic under-nourishment of the Maltese population and Malta-based forces, coupled with scarcity of water and soap¹³⁶ and cramped living conditions in bomb shelters and emergency housing, led to increases in infectious disease, which was extensively chronicled in health messages in *The Times of Malta* and personal diaries.¹³⁷ Disease-carrying fleas and lice were constant problems, the former rampant after the slaughter of much of Malta's livestock, the latter untreatable for lack of soap. The use of human faecal waste as crop fertiliser (animal manure being scarce) led to a large-scale typhoid fever outbreak in the summer and autumn of 1942 in which 99 people died.¹³⁸ Scabies was epidemic in 1942 and 1943, with up to 40% of the Maltese population affected, leading to temporary closure of public entertainment venues that had remained open throughout the blitz.¹³⁹ By November 1942, the Medical and Health Department were reporting rises in respiratory diseases and diseases associated with vitamin deficiencies. In late 1942, a polio epidemic struck Malta and Gozo, probably introduced by armed forces with 436 confirmed cases.¹⁴⁰ As intimated, the forces were not immune: sandfly fever, boils, jaundice, scabies and an enteric disease termed (by British servicemen) 'Malta Dog' were all endemic – and easily transmitted by poor hygiene and lack of human resources: one RAF officer recounts that he 'found the cook sitting on the toilet with his trousers down and the primus stove in front of him doing the cooking'.¹⁴¹ However, the physical effects of privation for Allied forces stationed on Malta were short-term, remediated by transfer to other operations.¹⁴² For the indigenous

¹³⁵ Ibid., pp. 12-20.

¹³⁶ Galea, *Malta: Diary of a War* p. 165. Soap was unavailable as a ration item by September 1942.

¹³⁷ *The Sunday Times of Malta* 22 November 1942, p. 7 warned of the risks of water contaminated with water-borne diseases typhoid and dysentery. J. Attard, *The Battle of Malta: an epic true story of suffering and bravery* (Valletta: Hamlyn, 1982), p.229. Attard also discusses the ubiquity of scabies.

¹³⁸ Holland, *Fortress Malta*, p. 312.

¹³⁹ Personal memory of Maltese resident J.A. Zahra, 2011, [online]. Available : <https://maltagc70.wordpress.com/tag/p35/>

¹⁴⁰ M. Saliba, 'The Polio Epidemic in Gozo', *The Gozo Observer*, No. 28, June 2013. pp. 3-6.

¹⁴¹ Holland, *Fortress Malta*, p. 208.

¹⁴² A web search revealed no public health data for British WWII veterans other than for psychological trauma.

population, starvation had short- and long-term consequences as evidenced by rises in infant mortality in 1941-2, mainly from a greater incidence of diarrhoeal disease and Maltese women born during the War producing off-spring more prone to adult-onset metabolic diseases.¹⁴³

Mac retained few war-time mementos. Except for his logbook, some hand-drawn cartoons, photographs and press cuttings relating to the first RAF polar flight he navigated in 1947, those items he kept pertained solely to his time in Malta.¹⁴⁴ The Maltese bank-notes, pamphlets and logbook were kept together with his medals and RAF insignia at home.¹⁴⁵ These must have been important to him, providing an insight into his war-time experience.

¹⁴³ C. Savona-Ventura, 'World War II and population change in the Maltese context', *Malta Medical Journal*, Volume 21 (issue 4): (2009), 42-46. The effects of war-time polio still affect a dwindling population - there is a still on-going collaboration between the Orthopaedic Centre in Nuffield, UK and the Maltese Ministry for Health.

¹⁴⁴ Mac was the navigator on the first polar RAF exercises. There is a newspaper cutting (unidentified) in his logbook entitled 'RAF plan training near the North Pole', dated Friday, December 12, 1947.

¹⁴⁵ Other items such as press cuttings, dress uniform and his war-time 'Goldfish Club' tie were donated to Tangmere Museum; Goldfish Club membership is restricted to survivors 'coming down in the drink'. Richard Branson is a relatively recent member.

Concluding remarks

This work is based on the contribution of one person and his squadron to the Mediterranean conflict in WWII. Its originality lies in its construction of events initially from a navigator's perspective but also draws on records from a pilot within the same squadron. Comparative analysis has identified subtle differences between the two servicemen in terms of numbers of aircraft flown, but has also indicated there to be no appreciable difference in 'historic worth' between the primary records of the navigator and pilot despite the disproportionate pilot-based narrative material available. Comparison of logbooks with squadron ORBs identified further differences between individual operations and official records. However these are minor details, and what effect they had on operations could not be determined. Primary and narrative sources comprised the greater part of the bibliography of the first chapter.

Chapter 2 places 39 squadron operations within the greater conflict through the use of interpretive publications and experiential sources. I was conscious, when constructing the time-line in Appendix 4, of the sequential evolution of events – it is difficult *not* to construct cause-and-effect sequences when the outcome is known. Logbooks, memories and newspapers¹⁴⁶ are experiential and immediate whereas post-war analyses are structured evaluations using official source materials, written when time had developed meaning and long-term perspective. Both macro and micro-analyses emphasise the important role of torpedo-bombers in the Mediterranean conflict.

Chapter 3 used bank-notes, Mac's article and published testimonies to illustrate aspects of life on Malta in 1942 to 1943 - what could be gleaned from Mac's narrative and experiences were tangential since he rarely alluded to his war-time memories within the family. Thus they construct a narrative which is largely missing from his personal effects. There is an oblique reference to past and present difficulties: '[being] Malta, one expected problems', and 'organisation was S.N.A.F.U and after that gentle chaos!'¹⁴⁷ A 2010 study examined the war-time memories of ten WWII veterans, categorised them into coherent and traumatic narratives, and examined the extent of disclosure within family and peer groups. The

¹⁴⁶ Newspapers, particularly during war-time, are not wholly reliable records of what has happened because of journalistic interpretation and the requirements of war-time censorship and propaganda.

¹⁴⁷ McGarry, 'Malta – 50 Years On'; S.N.A.F.U. – 'Situation Normal: All Fucked Up' (RAF slang).

interviews reinforced an earlier study of the importance of veterans associations, shared experiences within the peer group and use of the family as an 'avoidance haven' for traumatic experiences.¹⁴⁸ It is impossible to analyse Mac's experience using this study template since he rarely spoke of his war-time experiences outside his peer group. However, given that he was used as a 'reliable witness' by various authors, I conclude that he produced a 'coherent' narrative. In the article he wrote on the George Cross Island Association after his commemoration visit:

"It was a good exercise, I'm glad I went and was able to meet up with old friends and learn about others, particularly POWs, and to be on the same wave-length...."¹⁴⁹

The observation that he did not share his war-time experiences with family was, I conclude, because he did not need to – and a historical record has therefore been lost. A large part of his social life in later years revolved around the various veterans associations he belonged to and he retained war-time friendships into old age. I also consider it likely that he scrupulously observed the confidentiality agreements he signed as a post-war volunteer officer (Appendix 1).¹⁵⁰

This dissertation indicates further areas of research. Firstly, there are marked differences in the number of aircraft two servicemen flew: was this typical and did this have an impact on survival rates? Only examination of more logbooks could answer this. Secondly, how currency 'worked' in the war-time Maltese economy could be a fascinating study – and one that seems hitherto under-evaluated.

Finally, this has been partly a study in giving 'non-judgemental' archive material (a logbook, bank-notes, newspaper cuttings) a historical narrative and perspective. What has been obvious is what has been selected for retention and documentation, and what is absent, 'now lost forever'.¹⁵¹

¹⁴⁸ K.J. Burnell, P.G. Coleman and N. Hunt, 'Coping with traumatic memories: Second World War veterans' experiences of social support in relation to the narrative coherence of war memories', *Ageing & Society*, 30, (2010), 57-78, and references therein.

¹⁴⁹ T.A. McGarry, 'Malta – 50 Years On'

¹⁵⁰ His Tangmere archive contains two signed MOD 'Official Secrets' agreement forms that extend to 1961.

¹⁵¹ M. Bywater, *Lost Worlds: What Have We Lost and Where Did It Go?* (London: Granta, 2004).

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Figures



Figure 1: Squadron Leader Terrence McGarry (third from the left), dated 26th May 1945



Figure 2: 39 Squadron Air Crew Shallufa 1942. Mac is standing third row third from the right, W/C Gaine is seated, central (Don Tilley)



Figure 3: The "39" Boys – Malta. W/C Gaine is seated centre, Mac is standing fourth from right



Figure 4: Water plume from a torpedo hit on a merchant vessel (Don Tilley)

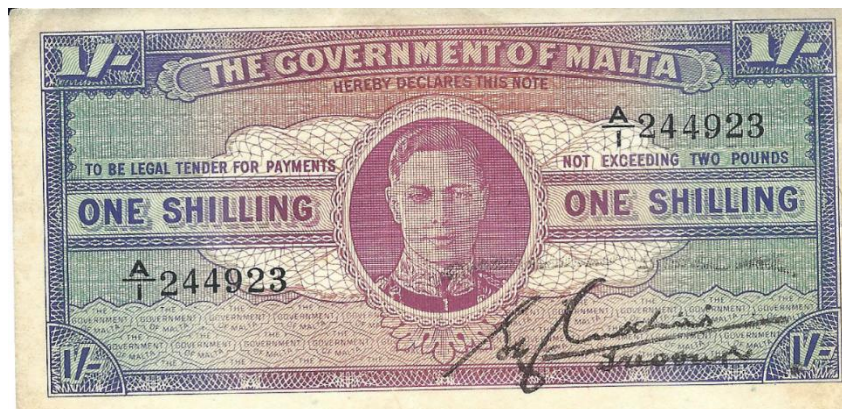


Figure 5: Overprinted George V and emergency issue George VI one shilling notes, issued by Edgar Cuschieri, Malta Treasurer, dated November 1942 (personal collection). Note the poorer print quality of the emergency issue note.



Figure 6: 39 Squadron Beaufort bomber in a blast-pen, Luqa, dated 1943 (Don Tilley)

Appendix 1 Resume of Squadron Leader Terrence Arthur McGarry

Squadron Leader Terrence Arthur McGarry DFC (usually referred to as Mac) qualified as an Air Navigator in June 1941 and received further navigation, gunnery and bombing training at A.O.N.S. RAF Penrhos¹⁵². His flight logbook shows he joined 86 Squadron in November 1941 flying from Kemble and Portreath airfields before flying to Gibraltar on 20th December 1941 or, more correctly, *almost*: as his log book records 'crashed into the sea five miles South Europe, picked up by HMS *Hermoine (sic)*'.¹⁵³ Following a gap of five months, entries resume in May 1942 for 86 Squadron North Sea operational flights from airfields in the North of Scotland (Skitten, Sumburgh, Haston and Leuchars). Mac recorded strikes off Aalesund and Statlandet.

In July 1942, 86 Squadron transferred to Malta for anti-shipping operations in the Mediterranean. In September 1942 some of the squadron, including Mac, were posted to 39 Squadron for continuing operations in the Mediterranean and North Africa. Between August 1942 and June 1943 Mac recorded eleven strikes around Southern Italy, the Greek Islands and off the Libyan Coast (Tobruk, Tripoli) receiving commendations and awards in March 1943. Mac's citation for award of the DFC (provided by RAF Air Historical Branch) confirms his 'contribution as navigator to the fine results obtained from sorties in the Mediterranean and the crucial role of flight navigators in successful operations.' In July 1943, Mac was back in Britain, flying from Long Kesh in Northern Ireland and the Hebrides, moving to RAF Cranage in December 1943. He joined 612 Squadron in March 1944, recording attacks on e-boats off the Dutch coast in December 1944. After the war Mac remained in the RAF and was involved in radar air testing until 1948.¹⁵⁴ In December 1947 he navigated the first Lancaster Aries flight to the North Pole to gather data. His last logbook flight entry was 8th March 1951. He remained an RAF volunteer officer until 1961; Tangmere archives retain signed 'Official Secrets' forms and a letter from NATO Allied Command Atlantic dated 8th September 1956 thanking him for his participation in Exercise 'Gulf Stream'.

¹⁵² Nesbit, *The Armed Rovers*, p. 82.

¹⁵³ Nesbit, *The Armed Rovers*, pp. 82-83.

¹⁵⁴ Mac's radar testing operations appear to be linked with changing defence needs consequent on the developing Cold War. J. Gough, *Watching the Skies: the History of Ground Radar in the Air Defence of the United Kingdom* (London: HMSO, 1993), pp. 48-99.

Appendix 2 Comparison of flight logbooks of Mac and Don Tilley

DR – Destroyer

MV – Merchant vessel

TS – Torpedo strike

ALT – Air launched torpedo

B – Bombing

nro – no result observed

Balbo – Large air formation

* According to W/C C.G. Jefford

Aircraft are Beauforts unless stated otherwise (W/ton = Wellington, Mosq. = Mosquito, T/Moth = Tiger Moth, L/heed = Lockheed, brackets denote further identification based on Delve, 1985)

PRU – Photographic reconnaissance unit

ASP – Anti-submarine patrol

OS – Offensive sweep

DFM – Distinguished Flying Medal

Gardening – Mine laying

Duff Gen – Inaccurate intelligence

Rover – Patrol for opportune attack on enemy shipping

Day of operation	a/craft engine No.	Mac – 39 Squadron Beaufort Navigator (86 Squadron – August 1942)	a/craft engine No.	Don Tilley – 39 Squadron Beaufort Pilot
7.8.42			DD950 DD950	Base – LG226 LG226 – Malta (Recce)
9.8.42			DD992	Formation form up [Balbo]
17.8.42	AW305	TS – Convoy One 9000t-MV sunk, 2 DRs Hit		
20.8.42	AW305	TS – Convoy off Southern Italy 10500t-tanker, 4 DRs, Flak, fighter opposition, nro		
21.8.42			DD930	TS – Strike 10500t MV, 5DRs off Corfu, dropped. Hits observed (beached)
24.8.42	AW341	Formation navigator (18 a/c) TS – Convoy Ionian Sea off Corfu One 7000t-tanker, 2DRs, air escort, Flak, nro PRU – ship hit on starboard side	W/ton HZ481	Local flying & air test Cor!!
27.8.42			'K'	TS – Strike 6000t MV, one DR SW of Crete. Hit , burning stern to stern and half-submerged on leaving
31.8.42			AW219	Air test and consumption test
1.9.42	AW305	Air & VHF test		
4.9.42			'M' (AW348)	TS – Strike MV not sighted. Last light 'Duff Gen'
5.9.42	AW305	Air, radio & turret test		
6.9.42	DD910 (G)	TS – Convoy, turned back owing to high petrol consumption	Illegible 'F' (DD927)	Local – air test Local – air test
8.9.42	DD910 (G)	Air test		
9.9.42	AW350	Air test		
13.9.42	AW284 (Y)	Air test		
22.9.42			AW349	TS – Strike One 6-7000t-MV (since beached), 3DR, 2 Ju-88 near Anti-Paxos. Hits observed. Izzard (?) crashed in our section
23.9.42	DD927 (F)	Formation navigator (15 a/c) TS – Convoy 10 miles West of Paxos One 6000t-tanker beached, 3 DRs, air escort. Hit obtained with torpedo, 1 Ju 88 damaged, Flak		
25.9.42			AW349	Local – air test
27.9.42			L 9802 Baltimore	Local – consumption test Local – air test [Jeeze!]

			'G' (DD910)	TS – Strike by moon. One 6-7000t-MV, 4 DRs. Hit confirmed. Single a/c 'Steve' gets DFM
1.10.42	DD927 (F)	Formation navigator (3a/c) Malta – Shallufa		
2.10.42			'I' (DD898)	Malta - Shallufa
8.10.42			'B' (AW300)	Mariut - Shallufa
9.10.42			'L'	Camera runs
10.10.42			'Q' (DD899)	Air test
19.10.42			'Q' (DD899)	Base – LG226
27.10.42			'Q' (DD899)	TS – Strike Tobruk Dropped at ocean barges (fuel cargo). nro 3 DRs + coastal battery. Hit by flak
28.10.42	DD927 (F)	Shallufa - Gianaclis	'Q' (DD899)	LG226 - Base
29.10.42			'U'	Base – 226 - Base
2.11.42	DD927 (F)	Formation navigator (12 a/c) TS – Convoy North of Tobruk Two MVs, one DS, escort of Ju-88 & Cant Z-1007 Hit obtained on 5000t-MV (sunk), 2 Ju-88 & Cant Z damaged, smaller MV also hit, one Ju-88 confirmed		
3.11.42	DD927 (F)	Gianaclis - Shallufa	'S' (DD875) DD885	Base – Gianaclis TS – Strike in Tobruk Bay Dawn No see! RED + ships
4.11.42			'U'	LG226 - Shallufa
6.11.42	DD927 (F)	Formation navigator (3 a/c) Shallufa – Gianaclis - Malta	'E' 'E' (AW362)	Shallufa – LG226 LG226 - Malta
20.11.42	DD927 (F)	Formation navigator (9 a/c) OS – Malta – Tripoli, coastwise to Kuriat. 2500t-MV attacked with torpedo (sunk)		
22.11.42			'K'	B sortie – Stick parallel to road 15' miss
23.11.42	DD927 (F)	Formation navigator (7 a/c) TS – Convoy 20East Cape Mahedia, One MV, one DR no joy, convoy northbound – not attacked as suspected loaded with Allied POWs. Flak from DR		
28.11.42			'N' (DD934)	TS – Strike by night off Maritimo Vis. Nil in rainstorm. No see!
7.12.42			'M' (AW348)	TS – Strike off Kerkennah. 'Duff gen'
8.12.42	DD927 (F)	Formation navigator (14 a/c) TS – Convoy off Kuriat One 4000t-tanker – No joy, 'Duff Gen' – ship proved already 'pranged'	'E' (AW362)	Malta – M.E.
9.12.42	DD927 (F)	Formation navigator (3 a/c) Malta - Shallufa		
12.12.42			Marauder 'Y'	ALT
15.12.42	Marauder FK 118	ALT Suez Bay (Passenger)	Marauder 'M' (AW348)	ALT
16.12.42	DD943 DD943 (A)	Shallufa – Heliopolis Heliopolis - Shallufa	'A' (DD943)	Shallufa – Heliopolis (with F/Lt McGarry) Heliopolis - Shallufa

18.12.42			W/ton 'W'	ALT
19.12.42			'E'	Force-landed near Martuba 4 days with 4 S.A.A.F.
23.12.42	DD943 (A)	Shallufa - Martuba		
24.12.42	DD943 (A)	Martuba - Shallufa	'A' (DD493)	Martuba - Base
31.12.42	DD927 (F)	Shallufa – Gambut 'Standby'	'T' (DD935)	To Gambut on standby
3.1.43	DD927 (F)	Gambut - Shallufa		
13.1.43			'L'	Sidi Bee Os - Base
14.1.43			'F(i)' 'F(i)'	Search for F/S Boon Low flying Suez Bay (night)
15.1.43	DD927 (F)	SS - Suez Bay – Low flying – No joy - Cloud	'K(i)' 'E' (AW362)	Base – Martuba Attempt to collect 'E' (write off)
16.1.43			'K(i)' 'K(i)' 'K(i)'	Martuba – Gambut ASP – Creek Gambut – B. el Arab – Base Practice torpedo attack with flares
19.1.43	DD927 (F)	Suez Bay – ALT, Homing, sightings, flame floats and flares		
21.1.43	DD927 (F)	Formation navigator (3 a/c) Shallufa - Gambut	'K(i)' 'K(i)'	Shallufa – Berca Berca – Malta [Recce] formation with 'Moose'
23.1.43	DD927 (F)	Formation navigator (2 a/c) Gambut - Malta	'N' (DD934)	Air test TS Convoy – Strike by night North of Ustica Isle. Hit confirmed Also hit 5000t- MV
25.1.43			'F' (DD927) 'W' (DD878)	Air test (with F/Lt McGarry) TS – by night off Sicily. No contact - rain
28.1.43	DD927 (F)	ASP 180 n.m. South of Malta and convoy escort		
31.1.43			'R' 'R' (AW349)	Air test Gardening – Trapani with bombing diversion. One enemy a/c evaded near Pants
2.2.43			'C' 'C' (DD928)	Air test Night Rover with torpedo North of Bizerta. No sighting
4.4.43				Air test OK
5.2.43	DW872	Air and VHF test 5 mile radius Malta		
6.2.43				Air test OK
9.2.43	DD927 (F)	Air and VHF test	'W' (DD878)	Air test OK Gardening – Trapani with W/ton bomber diversion which worked very well. Inaccurate Flak
10.2.43	DD927 (F)	ASP and escort 80 South Malta for incoming convoy (4 MVs,8DRs,1CRs), weather bad, rain and low cloud		
14.2.43	DD927 (F)	ASP and escort, 130 m. South of Malta for outgoing convoy (2TKs,1MV,4DRs) weather bad, rain and low cloud		

15.2.43			'C' (DD928)	TS – Strike by night S/SW off Maritimo. 8-10/10 ruined 4 runs, nro Moonpath. Accurate Flak
17.2.43			'C' (DD928)	Air test Torpedo Rover by night. Weather Duff. Diverted to Castel Benito in Tripoli
19.2.43	DD927 (F)	Torp. Rover Pants – Keliba – Cap Bon. No joy		
20.2.43			'C' (DD928)	Return to Malta
21.2.43			'C' 'C' (DD928)	Air test OK TS – Strike 10000t-tanker. Our Hit observed and confirmed starting a fire. On 3 rd hit (F/S Deacon) the works blew up. Flame and smoke rising high
22.2.43	DD927 DD927 (F)	Malta – Castel Benito (Tripoli) Castel Benito - Malta		
26.2.43			'C' 'C' (DD928)	Air test Night torpedo Rover. Weather Duff. No see
9.3.43	DD934 (N)	Formation navigator (20 a/c) TS – Engine cut out soon after being airborne. Torpedo jettisoned. Single engine landing 'Shaky do'		
12.3.43	DD927 (F)	Formation navigator (20 a/c) ALT on 'K' Force with Beaufighters and Spitfires SW Malta	'I' DD898)	Air test
17.3.43	DD927 (F)	Formation navigator (18 a/c) TS –convoy off Cape Stilo – 5 miles. One 10000t-tanker, 2DRs, 1 Flakship, 12 110's and Ju-88s, one Cant Z-1007. Hit obtained with torpedo, attacked by ME110's, one shot down by rear gunner, tanker sunk, 2 probables, 5 damaged, all 110's	'J' (DD911)	TS – Strike by daylight 10000t-tanker, 3DRs, one DO 17, 7 ME110, one Cant near Cape Stilo. SUNK – starboard motor hit – S/E landing
7.4.43			'J' (DD911)	Malta – El Adem - Fayed
8.4.43			T/Moth Marauder	Shallufa – Heliopolis ALT – Runner Heliopolis - Shallufa
10.4.43	Mosq. DZ231	NFT Local Malta + Gozo (passenger)		
11.4.43			L/heed	Al Maza - Luxor
12.4.43	DD927 (F)	ALT Sunrise, on Orion		Returned home to Durban, South Africa, via Khartoum, Nairobi, Lusaka, Bulawayo, reaching Durban 2.5.43
18.4.43	DD927 (F)	Formation navigator (24 a/c) ALT on K force, SW of Malta with Beaufighters and Spitfires		
4.6.43	Dakota	Passenger Luqa – Algiers - Gibraltar		
5.6.43		Gibraltar – Hendon, UK		

Additional information on aircraft identification sourced from Delve, *The Winged Bomb: History of 39 Squadron*, 1985

**Appendix 3 Attrition rate of Beaufort aircraft listed in the logbooks of McGarry and Tilley
(records are not entire)**

FTR – Failed to return

Aircraft Serial/Code*	Delivery date to Squadron	Last sortie	Piloted/navigated by
DD875/S	31.8.42	Missing 30.11.42	DT
DD878/W	17.8.42		DT
DD882/W	27.2.43		DT
DD887/R	10.2.43		DT
DD892/N	6.3.42	FTR 11.4.43	DT
DD896/G	6.3.42		DT
DD898/I	1.9.42		DT
DD899/Q	10.9.42	FTR 3.3.43	DT
DD910/G	1.2.43	Hit sea 25.2.43	M
DD911/J	18.8.42		DT
DD927/F	1.9.42		M, DT
DD928/C	1.12.42	FTR 12.3.43	DT
DD934/N	31.12.42	FTR 12.3.43	M, DT
DD940/H	27.2.42		DT
DD943/A	1.2.43	Departed for Middle East 1.7.43	M, DT
DD950	25.4.42	India 30.9.42	DT
DD935/T	23.8.42		DT
DD992	2.7.42		DT
AW219	4.5.42	India 1.12.42	DT
AW284/Y	27.7.42	FTR 30.11.42	M
AW300/B	1.5.42		DT
AW305	27.7.42	FTR 6.9.42	M
AW348/M	6.4.42	FTR 27.3.43	DT
AW350	27.7.42	FTR 22.9.42	M
AW349/R	18.8.42	FTR 24.2.43	DT
AW362/E	29.7.42	Force-landed 19.12.42	DT
DD930, AW341, K, AW349, DD885, DW872, L, U, DD493		No reference to either Serial number or Code reference	M, DT

* Mac identifies by Serial numbers, Don by Code

Source: K. Delve, *The Winged Bomb: History of 39 Squadron*, 1985

Appendix 4 Activities of Allied and Axis forces in relation to 39 Squadron operations

ASP – Anti-submarine patrol SR – Sea reconnaissance FTR – failed to return TS – Torpedo strike nro – no result observed a/c – Aircraft
 ASR – Air Sea Rescue MV – Merchant vessel SS – Shipping search cr – crash nf – Not found SD – Shot down
 OS – Offensive sweep B – Bombing (E) – Egypt detachment (39 Squadron) MTB – Motor transport boat DR – Destroyer
 Di – Ditched MiA – Missing in action KiA - Killed in action AA – Anti-aircraft ORB – Operational report book

	Allied activities	Axis activities	39 Squadron ORB
January 1940	Increased armaments and garrisoning for 'Fortress Malta',	Siege of Malta begins	
June 1940	coastal artillery improved Arrival of Hurricanes on 21/22 June for operations at Hal Far	Italian declaration of war on Britain and France, France falls	Based in Lahore, India
11 June 1940	First Maltese casualties	First air raids on Malta Italian high altitude bombing – reduced accuracy	Yemen
July 1940	12 Hurricanes arrived. 261 fighter Squadron was established		
December 1940/January 1941	<i>Sunday Times</i> of London: 'Malta appears likely to face the fiercest attacks....within the next few weeks'	German air raids on Malta begin Italian attack on British warships in Alexandria impairs Allied naval capabilities. Sicily heavily occupied by German forces	Based in Egypt (Helwan, Heliopolis, Gianacelis, Wadi Natrum, Burg el Arab, Shandur)
February to June 1941	Maltese capabilities inadequate to launch offensive operations 22 February - British restrictions lifted on attacking enemy MVs beyond 30 miles from coastal regions	February - Rommel's Afrika Korps arrive in Tripoli, having faced little concerted Allied opposition to troop and supply movements	
	Malta-based forces account for 61% losses of all Mediterranean Axis shipping Jan – June 1941 Operation Winch (April – June) to increase Malta's offensive capacity, including AA guns	March - Axis Mediterranean airpower spread over 3 commands: Sicily to support Malta assault, Libya to support Rommel and the Balkans to support German invasion of Greece and Greek islands (latter withdrawn eastwards to support invasion of Russia in June 1941)	
26 July	September 1941 Governor William Dobbie calls for strict water consumption measures in Malta	Massive Italian attack on Grand Harbour	
November 1941	Allies destroy 77% of Rommel's supply vessels but Operation Crusader (November – December) to relieve Tobruk fails. 13 November – a/c carrier HMS <i>Ark Royal</i> sunk just off Gibraltar Malta-based forces account for 86% losses of all Mediterranean Axis shipping Jul – Dec 1941	Axis retreat & entrenchment due to supply problems Axis forces (2 German, 5 Italian divisions) require supplies of about 70,000 tons per month to maintain N African offensive. Provisioning mainly across the Mediterranean from Naples, Brindisi, Taranto and Bari to Tripoli (Benghazi is within Allied flying range, Tobruk currently in Allied hands)	
Early 1942	Stalemate between Allies and Axis in Western Desert Intensification of air attacks on Malta, main targets are Luqa, Hal Far and Takali airfields	Between December 1941 – January 1942 almost 50,000 tons of provisions reach Axis N African forces – but Axis shipping avoiding Malta, instead taking longer routes around Greece	
February – June 1942	Precarious conditions in Malta Island ceases offensive operations by April 1942		21 June 1942 detachment to Malta

	17 April - George Cross bestowed on the entire island	April – Kesselring plans for neutralisation of Malta (Operation Herkules)	22 June First detachment of 39 Squadron arrives in Luqa, becoming a full Squadron 22 August 1942
June 1942	Food supplies very low in Malta – almost all stock animals slaughtered as little fodder available. Milk unavailable for adult population. Malta-based forces account for 54% losses of all Mediterranean Axis shipping Jan – June 1942 Relief convoys from both ends of the Mediterranean to Malta (Operations Harpoon and Vigorous) 21 June Tobruk falls – 35,000 Allies surrender with loss of 1.5 million gallons fuel and 3 million field rations. US Colonel Fellers: ‘Middle East less secure than at any time since German invasion of Russia’	May – June – Axis victory at Gazala and Tobruk June 1942 onwards - large Italian warships immobilised due to increasing fuel shortages Axis powers agree to pause N African campaign to allow for the capture of Malta (Operation Herkules) Mid-June offensive planned but Herkules shelved Second offensive (overturning agreed policy) – Rommel occupies Western Cyrenaica, defeat of 8 th Army at Gazala but with heavy losses	June to August – Convoy attack, ASP, SR, SS ORB details (if available) for period July 1942 to April 1943 listed below
1 July	Allies fall back to El Alamein	Rommel’s assault on new Allied line, attacking El Alamein and Deir el Shein	
3 July	1 – 27 July First Battle of El Alamein (66 miles from Alexandria)		Beaufort 39 Squadron & 217 Squadron strikes off Zante (2 FTR)
17 July	Malta experiences very heavy bombing 5 July Official RAF losses for June 1942 reported as 422 a/c, against Axis total of 318	<i>Regia Aeronautica</i> take over bombing of Malta (Luftwaffe redeployed to Russian front) Italian e-boat attack on Grand Harbour; mining of Maltese port entrances	TS – Convoy (6 sorties) 39 Squadron strike by 5 Beauforts on merchant convoy N of Mersa Matruh; 4 Beauforts slight damage by Italian 92 & 93 Squadriglia, all crews safe
July – Nov 1942	Air battles over the Alamein line in N Africa		
31 July	Auchinleck calls off offensive to allow 8 th Army to regroup and resupply		
August	Increasing Allies successes against Axis supply shipping On Malta August – September air testing in advance of operational flights not permitted due to fuel shortages; increased FTR and engine problems	Rommel’s advance on Alexandria impeded by fuel shortages due to Allied bombing	Phase 1 Operations off the Greek coast against Axis shipping supplying N Africa (August – October 1942) 39 Squadron based in Luqa
3 August	Operation Pedestal – 50 convoy ships to supply Malta	<i>Regia Aeronautica</i> activity increases	
6 August	Malta on the brink of starvation		ASP – Base – Malta (6 sorties) TS - Convoy
7 August	Malta has notional force of 163 Spitfires (120 operational)		ASP – Base – Malta (1 sortie)
10 August			ASP – Base – Malta (3 sorties)
11 August 1942	Loss of HMS <i>Eagle</i> aircraft carrier in Operation Pedestal		ASP – Base – Malta (1sortie)
14-18 August	Santa Marija Convoy including the oil tanker <i>Ohio</i> arrives sufficient to feed Malta for 3 months but with heavy attrition rate (5 out of 13 MVs reach Malta, only 2 undamaged with the loss of ~60% of total supplies sent)	17 August TS on MV <i>Rosolino Pilo</i> * 9,000t sunk by combined aerial/submarine offensive, damage to both escort DRs <i>Gioberti</i> and <i>Maestrale</i>	TS – Convoy of one MV and 2 DRs, light and heavy flak
19 August			ASP – Malta – Shandur (3 sorties)

	17 August – Malta resumes anti-shipping strikes		
20 August	First offensive sweep over Southern Italy (229 and 249 Squadrons) Allies bombing continues to impact on Axis shipping provision of N Africa causing them to divert to a more easterly route	Convoy: <i>Dora</i> and <i>Poza Rica</i> 161 ^o Gruppo (convoy escort Ionian Sea) intercepted formation of about 12 British torpedo-bombers (39 Squadron), 4 claimed shot down	TS – Convoy Toe of Italy (12 sorties) 39 Squadron: Beaufort II AW245 ‘T’ shot down (PO Condon) 86 Squadron: 1 Beaufort AW341 ‘F’ shot down WC Gibbs: no hits
21 August		<i>Poza Rica</i> 7,800-t sunk by 39 Squadron	ASP – Malta – Shandur (1 sortie) TS – Tanker near Corfu (9 sorties) – 3 hits on tanker Casualty: Beaufort AW353 shot down near Corfu FTR
24 August		Tanker <i>Georgia</i> sustained light damage and reached Tobruk, 1 Ju-88 hit Kesselring allows diversion of 1500 tons of fuel from Luftwaffe to Rommel’s tanks	TS – Tanker near Corfu (9 sorties) – explosion seen but no hits claimed Casualty: Beaufort AW290 shot down by flak during shipping strike off Corfu
27 August	Over 30 aircraft sent to carry out raids on Sicily - 29 Axis aircraft destroyed on the ground, 10 more in air combat, for the loss of two Spitfires	39 Squadron target Italian tanker <i>Dielpi</i> 1,500-t heading for Benghazi torpedoes, bombed & sunk between Suda and Benghazi	TS – Convoy Benghazi (9 sorties) MV sunk
30 August	Allied position and supplies improving; Axis diminishing	39 Squadron target <i>Sant’ Andrea</i> (5,077 tons) hit & sunk Italian claims: 3 Beauforts (39 Squadron) + a fighter Rommel launches an attack at 22:00h gambling on petrol from <i>Sant’ Andrea</i>	TS – Convoy South of Taranto (9 sorties) – tanker sunk, 1 Ju 88 probable, 1 MC.200 shot down Attacking formation of 39 Squadron: Beaufort AW295 shot down by flak off Punta Stilo
31 August		Rommel launches unsuccessful Battle of Alam el Halfa	
1 September		11 Axis supply ships sunk in September – Rommel’s desert campaign failing	
3 September			SR (1 sortie) – attacked nro SS (3 sorties) L9875 cr in sea. Attacked nro
4 September			SS – Off Cotroneo (7 sorties) nf
5 September			
6 September		39 Squadron target - Large Italian convoy N from Taranto: <i>Luciano Manara</i> (reported damaged) and <i>Ravello</i> Convoy P from Brindisi: <i>Sestriere</i> and 4,700 ton <i>Ankara</i> (German) linking off Cap Santa Maria di Leuca to form convoy Lambda, heading for Benghazi	TS – South of Taranto (13 sorties) Probable hits on MV, 1 Ju88 damaged, 1 MC.200 SD, 2 damaged 13 Beauforts + Beaufighter escort set off (4 Beauforts & 3 Beaufighters forced to turn back early) 2 Beauforts shot down by flak, 4 Beauforts damaged – 1 casualty (39 Squadron) off Corfu

7 September		39 Squadron target 3 MVs + 9 DRs	Axis convoy sighted 120 miles W of Crete; attacked by 38 Squadron; 33 Squadron also involved 39 Squadron: Maryland BS764 lost
8 September			(38 Squadron attacking convoy N of Derna)
9 September		Italian cover for 8 F-boats sailing to Mersa Matruh	
13 September	Operation Agreement mounted – amphibious attack on Tobruk but disastrous without air cover Subsequent large-scale air raid against Tobruk. Presentation of George Cross to Malta		From mid-September onwards, 39 Squadron instructed to concentrate on MV >5000 ton unless known to be carrying vital cargo
22 September			TS – Convoy (9 sorties) ‘M’ FTR. One hit on MV
23 September	Mid-September – British, Colonial and US forces	Tanker <i>Proserpina</i> reported hit	TS – Convoy 10 miles West Paxos, 1 (beached) tanker, 6,000 tons, 3 DRs and Air escort. Hit obtained with torpedo, 1 JU.88. Damaged light and heavy flak Mid-air collision between Beaufort and Beaufighter.
24 September			TS – Convoy (3 sorties) no hits
27 September		39 target – MV <i>Barbaro</i> 6343t (reported sunk), tanker <i>Unione</i> (did not sink)	TS – Convoy (3 sorties) TS on <i>Unione</i> Don Tilley awarded DFC
1 October	October 1942 – Malta experiencing renewed attack in ‘mini-blitz’ Typhoid epidemic breaks out in Malta 18-19 October Malta-based Wellingtons sink tanker <i>Panuco</i> Final blitz against Malta mounted 13 October	Hitler’s order to Kesselring to neutralise Malta in October Kesselring withdraws a/c from N Africa to deploy in final offensive on Malta – called off after a week due to unsustainable losses Luftwaffe regrouping in Sicily	Squadron based at Shallufa Detachment at Gianacalis to assist attack on Axis shipping outside Tobruk
23 October	2 nd Battle of El Alamein – Allies open up heavy barrage Allies acting on good intelligence from Bletchley Park ‘Mini-blitz’ ceases	At the outset of the Allies offensive, Rommel recuperating in the Austrian Alps, returning to the frontline on 25 October. Germans suspect that the accuracy of Allies operations due to Italian treachery.	Phase 2 Operations in N Africa – Squadron located in Giancalis (30 miles behind front line) for bombing enemy shipping lanes Crete to Tobruk Displacement to Egypt also alleviates chronic fuel shortages in Malta
26 October	10 out of the 13 Axis shipping sunk in October due to Malta-based forces Decline in number of air raids on Malta due to successes in Allied air force in countering increased Fliegerkorps activity (~50% Axis a/c destroyed/damaged)	39 Squadron target - Axis convoy NW of Tobruk (tanker, 2 MVs, 4 barges, 4 DRs): <i>Proserpina</i> (tanker 4869 ton), <i>Tergesteia</i> (freight 5890 ton), <i>Dora</i> (steamer); air cover: Luftwaffe, Regia Aeronautica; only <i>Dora</i> reached Tobruk	TS – Convoy NW of Tobruk (5 sorties) no hits 47 Beaufort Squadron + 9 Beaufighters Second strike of 39 Squadron + 8 Beaufighters attack NE of Tobruk Third force: 38 Wellington Squadron (<i>Tergesteia</i> sunk)
29 October	Operation Train – 29 Spitfires to Malta		

30 October	Malta still experiencing severe shortages of food and fuel. Poor nutrition contributes to polio and meningitis outbreaks	Convoy Taranto to Benghazi carrying fuel : <i>Luisiano</i> (tanker 2552 ton), MV <i>Etiopia</i> 2153 ton) RAF attack on Benghazi: loss of <i>Portofino</i> (6424 ton tanker) Loss of this convoy proves catastrophic for Rommel Docking of <i>Etiopia</i> at Tobruk brings in sufficient fuel to allow Rommel's imminent retreat	(Wellington & Beaufort bombers 47 Squadron)
			Phase 3 of Operations in Malta – Squadron moved back to Malta (November – January) to act as stand-by to attack Italian battle fleet when relief convoys were run from Egypt to Malta, stand-by for attack on Axis shipping in the N African campaign and anti-shipping offensive on the Tripoli-Tunis-Sicily sea lane.
1 November		Squadron target - NW of Tobruk: <i>Tripolino</i> (1464 ton) & <i>Ostia</i> (steamer) sunk	(Wellingtons 221 & 38 Squadrons)
2 November		39 Squadron (E) target - 2 MVs carrying petrol and ammunition (1976 ton <i>Zara</i> sunk, 1987 ton <i>Brioni</i> reached harbour but sunk before being off-loaded) + 1 destroyer NNW off Tobruk Rommel messages Berlin to alert to imminent Axis collapse in El Alamein	(E) – TS – Convoy Tobruk (6 sorties), one Di, one FTR. 5-6000 ton sunk, one damaged, 1 Ju 88 SD (E) – OS (3 sorties) 6 x 39 Squadron + 7 Beaufighters to attack convoy (5000 & 3000 ton est) 2 x 39 Squadron shot down during shipping strike off Tobruk
3 November			(E) – OS (2 sorties)
6 November	8 November Operation Torch (Allied invasion of French N Africa) commences 10 November – 4 supply ships reach Malta unchallenged 11 November Admiral Cunningham directs Malta-based submarines to concentrate on attacking ships on the Tunisian Route	4 November Rommel finally obtains Hitler's permission to retreat. Axis retreat from Alamein begins to gather momentum	Squadron movements /reorganisations: 272 Squadron to Malta 46 Squadron temp. under 201 47, 459, 13(Hellenic) to LG.39 821 to LG.21, 247 Wing (inc. 38 & 458 Squadrons) to LG.05 from Gianacis, Egypt Operations begin over northern Tunisia
12 November			Mines – Tunis (5 sorties)
13 November	Allies capture Tobruk.		Mines – Tunis (5 sorties)
20 November	Some friction between Operation Torch and Malta convoys – Admiral Pound : 'protection of Malta convoys must have priority over Torch'. Allies capture Benghazi.	Target – <i>Lago Tana</i> 785 ton sunk	OS - Malta – Tripoli, Coastwise to Kuriat. 2500 ton (sunk) MV attacked with torpedo OS (4 sorties) 2500t-MV damaged
21 November	Allies flying over Tunisia report absence of enemy shipping or aircraft		OS (6 sorties) off Bizerta OS (6 sorties)
22 November	Admiralty directs Cunningham and Harwood to signal plans for naval support for Torch operations	Kesselring re-establishes air superiority over the Sicilian Channel restricting daytime Allied surface operations	B – Linosa Island (4 sorties) TS – Convoy (3 sorties) nro
23 November	Counter-mining by Allies within Sicilian Channel	MV <i>Numidia</i> 5339 ton spotted by 39 Squadron (Gaine) sailing north; not attacked on suspicion of carrying Allied POWs	TS – MV Tunisian coast (3 sorties) nf B – Lampedusa (3 sorties)
24 November			Mines – Bizerta (8 sorties)

26 November			TS – Convoy, Bizerta (5 sorties) one drop, nro
27 November			Mines – Bizerta (9 sorties)
28 November	End of November – up to 26-strong Malta-based submarine force	Continued shipping losses restricts Axis capacity to smaller MVs	Mines – Bizerta (3 sorties) TS – Convoy (3 sorties) one drop, nro Mines – Tunis (8 sorties)
29 November	Continuing fuel shortage in Malta hamper operations until alleviated by Stoneage		Mines – Palermo (8 sorties) 'H' FTR
30 November	Areas of Africa closest to Malta remain under Axis control	Axis supplies losses for November – 26% to Libya, 0% to Tunisia	Mines – Bizerta (8 sorties) 'S' & 'Y' FTR
November 1942	Operation Stoneage convoy to supply Malta: 4 MVs from Port Sudan – all docked in Valletta with Allied air cover throughout		
December	Tripolitania offensive Malta-based air forces concentrate on night bombing of Tunis and Bizerta Force Q and R DRs sink 4 MRs and naval ship rescuing survivors 6 November – Churchill to First Sea Lord 'first duty of the Navy in the next 10 days is to stop [Axis] reinforcement of Tunisia'	By December Italy has lost about 50% of its mercantile capacity due to Allied naval and air attack and mining operations. Kesselring suspends night crossings and directs extensive mine barriers to the W of Bizerta	Phase 4 of Operations (N Africa and Malta – December to January) for ASP, torpedo and mining operations against shipping; day and dark night attack using flares 39 Squadron: aircraft at Luqa Shallufa – ground personnel only
5 December	Operation Portcullis for Malta: 5 cargo ships + 1 tanker (Stoneage & Portcullis provided 56000 tons of supplies)	No counter Axis activity	
7 December			ASP – Support own convoy (3 sorties)
8 December	Convoy Pocket to provision Malta 46, 238, 252 Squadrons		SS – Tanker (7 sorties) nf
9 December			39 Squadron move to Shallufa
10 December			ASP – Support own convoy (2 sorties)
13 December	'Malta launches largest-yet bombing raid on N African docks'		ASP – Support own convoy (3 sorties)
15 December			SS (3 sorties) nf
16 December			
18 December	Air raid on Luqa destroyed 7 Wellingtons and damaged 3 others		ASP – Support own convoy (3 sorties) 4 depth charges dropped. nro
17/18 December		Squadrons target - No damage reported – reached Tunis	Waxing moon allowed Beauforts and Wellingtons from Malta from 39, 69 and 458 Squadrons to attack convoys at night
20 December			ASP – Support own convoy (1 sortie) (E) – Mines – Homs, Misurta (5 sorties)
21 December			ASP – Support own convoy (2 sorties)
22 December	In broadcast from London, former Governor Dobbie: 'Malta now enjoys a measure of relief'		
24 December			(E) – Mines – Homs, Misurta (2 sorties)

30 December	Malta-based forces account for 59% losses of all Mediterranean Axis shipping Jul – Dec 1942		OS (3 sorties) 2 MVs bombed, nro
31 December	<i>The Times of Malta</i> : ‘The year 1942 will live in history as the year in which the Axis lost the war’	Axis supplies losses for December – 53% to Libya, 29% to Tunisia	ASP (1 sortie)
1943	January – outbreak of polio in Malta Malta’s main task – sink, damage or delay Axis shipping, with more emphasis on bombing ships in harbour	From January 1943 Axis resorting to small fast Kriegstransport (KT-boats, 700 ton) to provision N Africa – approx. 50,000 tons of cargo transported using KT-boats.	Phase 5 of Operations (Malta) from January to June 1943. The Squadron was reunited in Malta when Tripoli fell to the Allies. Offensive transferred to Sicilian straits and from Sicily to Naples; day and night shipping and Rover sorties plus mining operations.
1 January	8 th Army moving closer to Tripoli		ASP (1 sortie)
3 January			
6 January	‘RAF and Maltese AA destroyed more Axis a/c in 1942 than Fighter Command over Britain and the Channel’		Mines – La Goulette (4 sorties) ‘P’ FTR
9 January		Kesselring flies to Tunisia to meet von Arnim, Rommel & Messe to plan offensive operations	
10 January			ASP (1 sortie)
11 January	Mid January – improved food and fuel provisioning in Malta		A Beaufort crew from 39 Squadron on anti-sub patrol ahead of a convoy 136 miles SE of Malta located & crippled large supplies-laden submarine heading from North Africa to Italy
12 January			Mines – Melita Island (4 sorties)
14 January	Casablanca Conference: Churchill, Roosevelt and respective Chief of Staffs		ASP (3 sorties) depth charges dropped, submarine damaged, sunk by DR Mines – Kerkennah (3 sorties)
15 January			Mines – La Goulette (4 sorties)
16 January	Resumption of all-out Maltese offensive on Tripolitania through Tunisia to Sicily	Afrika Korps in full retreat from Egypt Successful Axis convoy from Palermo to Tunis (MVs <i>Campania</i> 5287 ton, <i>Jacques Schiaffino</i> 1757 ton, <i>Gerda Tofz</i> 1960 ton)	Mines – La Goulette (4 sorties)r
17 January			Mines – Sousse (4 sorties) SS – Sicilian Channel (2 sorties) attacked, no hits
18 January			TS – Convoy (2 sorties) attacked, no hits
19 January			Mines – La Goulette (3 sorties)
20 January		Squadrons target - Convoy to Naples from Bizerta: <i>Saturno</i> (5022 ton), <i>Sudest</i> escorted by torpedo-boats <i>Ardito</i> & <i>Animoso</i> . <i>Saturno</i> sunk, <i>Sudest</i> reached Naples	SS – North of Cap Bon (2 sorties) MV hit 39 & 69 Squadron plus US 310 th Bomb Group

21 January			Shallufa-based detachment return to Luqa TS – North of Cap Bon (1 sortie) attacked, no hits ASP (1 sortie) Mines – Kerkennah (5 sorties)
23 January	Tripoli falls to Allies Some a/c deployed back to Malta from Africa for mainly escort duties		
23/24 January		39 Squadron target - Convoy left Naples 23/1 for Bizerta: freighters (<i>Carimare, Pistoia, Verona</i>) escorted by torpedo-boats (<i>Groppa, Fortunale</i>) <i>Verona</i> and <i>Pistoia</i> hit	Night operations – full moon SS (5 sorties) MV damaged. Destroyer hit with bombs <i>Pistoia</i> latter sunk by Wellingtons (221, 458 Squadrons)
27 January			SS – Mantimo – Cap Bon (5 sorties) nf Mines – Sfax (3 sorties)
28 January			ASP (3 sorties)
29 January	Operation Bruce HMS <i>Pozarica</i> * damaged & later lost 13/2 when under salvage		Mines – Kerkennah (5 sorties) 32 Squadron (Hurricanes) convoy duty
31 January		Axis supplies difficulties – insufficient supplies from Sicily due to Allies attrition over, on and under the Mediterranean	TS – N of Sicily (3 sorties) nf
1 February		Von Arnim's 5 th Army rendered 'unfit' for large offensive actions due to supply shortages	ASR (1 sortie) nf Mines – Tropan (7 sorties)
2 February			ASP (1 sortie) Mines – Sfax (4 sorties)
3 February			SS (3 sorties) nf Mines – Rasaboudia (2 sorties)
5 February			(Watlington) Air and V.H.F. Test. 5 mile radius Malta
9 February			Mines – Tropana (6 sorties)
10 February			ASP (2 sorties)
14 February		Operation Spring Breeze begins – von Arnim offensive at Sidi bou Zid	ASP (3 sorties) Rover (4 sorties)
15 February	Failure of US counter-attack at Sidi bou Zid		SS – Sicilian Straits (3 sorties) TS – Convoy (7 sorties) attacked, nro
15/16 February		Squadrons target - Convoy from Palermo for Tunis: freighter <i>Capo Orso</i> (3149 ton), German <i>KT13</i> and DR <i>Lampo</i> ; <i>KT13</i> and <i>Lampo</i> arrived in Tunis. <i>Capo Orsa</i> sunk.	39 & 221 Squadrons on convoy attack <i>Capo Orso</i> hit

16 February		Operation Morning Air – Rommel advance to capture Gafsa & Tozeur	
17 February			Search (4 sorties) nf
18 February			Rover (4 sorties)
19 February			Search (5 sorties) nf
20/21 February	End of February 1943 - Allied air forces now unified under command of Air Chief Marshall Tedder	Squadron target - <i>Thorsheimer</i> (9955 ton) & <i>Fabriano</i> (2493 ton) accompanied by <i>Orione</i> & <i>Animoso</i> (joined later by torpedo-boat <i>Pegaso</i>) left Naples 20/2 for Bizerta with 13,000 tons of petrol & 1700 tons ammunition & other supplies. Convoy held up to transport dying CO to Trapani & take on board replacement (captain of <i>Fabriano</i>), slight damage to <i>Orione</i>	SS – Convoy (4 sorties) attacked, nro 4 Beauforts dispatched but crews experienced electrical storms and very poor visibility Later flight a few hours later – better visibility: <i>Fabriano</i> hit, <i>Thorsheimer's</i> CO hit by Albacore fire Just after sunset – 3 more 39 Squadron Beauforts (inc Tilley) – strike on <i>Thorsheimer</i>
21 February		Rommel's Afrika Korps advancing through Kasserine Pass, Tunisia, but over-stretched	TS – Convoy (5 sorties) attacked, nro TS – SW of Martino (6 sorties) 7-10000 ton tanker sunk
22 February		Rommel's forces restricted to 1 day's ammunition and limited food supplies	OS (6 sorties) attacked destroyer, no hits
23 February		Rommel's forces in retreat	OS (3 sorties) nf
24/25 February		Squadron target - 3 MVs left Bizerta empty to return to Naples: <i>Alcamo</i> , <i>Chieti</i> , <i>Stella</i> , escorted by torpedo-boats <i>Fortunale</i> , <i>Monzone</i> , <i>Animoso</i> <i>Alcamo</i> reported sunk.	Rover (3sorties) AW349 FTR, Attacked MV and destroyer NW of Ustica, nro 2-day series of attacks on the 6987 ton <i>Alcamo</i> : 89 & 39 Squadrons, 2 a/c lost inc. 39 Squadron Beaufort AW349 'R' shot down by Flak during shipping attack. <i>Alcamo</i> sunk 2 Beauforts lost: 1 crew POW, 1 crew MiA
25 February	Allies re-occupy Kasserine Pass, Sbeitla & Sidi bou Zid though with heavy US losses		SS – Same convoy (3 sorties) DD910 FTR. 8000 ton MV sunk
26 February			TS – South of Naples (5 sorties) attacked MV, nro
27 February			OS (4 sorties) nf
28 February			39 Squadron – a/c at Luqa Gianaclis – ground personnel only Search (5 sorties) attacked, nro
3 March	Wellingtons night raid on Palermo harbour 2/3 March	6 March – Rommel launches another attack	SS (3 sorties) DD899 FTR, nf 39 Squadron attack shipping off Cap san Vito a/c DD899 'Q' crashed: 3 (inc. Sq L Marshall) KiA, 1 picked up by ASR

9 March			SS (8 sorties) recalled
12 March		Convoy from Naples to Tunis: <i>Caraïbe</i> (4047 ton), <i>Esterel</i> (3165 ton), escorted by torpedo-boats <i>Sirio</i>, <i>Ardito</i>, <i>Pegaso</i> joining with another convoy from Messina to Bizerta: <i>Sterope</i> (10496 ton) with false funnel to disguise, escorted by torpedo-boats <i>Cigno</i>, <i>Orione</i>, <i>Cascino</i>, <i>Libra</i>, corvettes <i>Persefone</i>, <i>Antilope</i> plus 2 Italian & 5 German submarine-hunters <i>Sterope</i> turned into Palermo, escorted by <i>Pegaso</i>, <i>Cascino</i> <i>Esterel</i> hit by submarine torpedo; headed for Trapani accompanied by <i>Orione</i>, <i>Persefone</i> Italian records indicate that none of the ships reported damage (cf Allied claims). Allied accounts accurate – now accepted that squadron was approaching from land to sea, accurately-aimed torpedoes hitting wreckage, rocks or sandbanks.	OS (6 sorties) DD928 and DD934 FTR. One MV damaged 39 Squadron attack, heavy Flak Attack on Italian tanker <i>Sterope</i> (some damage) 2 Beauforts (39 Squadron) casualties – 1 crew safe (Flak), 1 crew MiA Awards – DSO Gaine, DFC McGarry Enemy a/c: one destroyed, one probable and 4 damaged.
13 March			OS (3 sorties) nf
17 March		39 Squadron target - Axis convoy departed Taranto to Bizerta: MVs <i>Marco Foscarini</i>, (6406 ton) <i>Nicolò Tommaseo</i> (4573 ton) escorted by DR <i>Lubiana</i>, torpedo-boats <i>Tifone</i>, <i>Antares</i> & submarine chaser VAS221 All Italian vessels were undamaged (missed) Convoy continues, after stop-off at Messina	SS – Punto Stilo (9 sorties) DD902 FTR. 10000 ton tanker sunk 39 Squadron Beaufort – abortive daylight shipping strike – MiA Convoy spotted 9 Beauforts led by Gaine set off to intercept convoy off Punto Stilo: reporting 3 definite, 4 possible torpedo hits from 7 Beaufort crews on MVs, attacking from inshore out to sea. 5 Beauforts (inc Gaine) reported hits on Bf 110s (Messerschmidtt) – 1 shot down (by Gaine's rear gunner), 2 probables, 5 damaged
18 March			Search (2 sorties) nf
20 March		Convoy attacked earlier by 39 Squadron departed Trapani for Bizerta	OS (3 sorties) nf
22 March	US bombing (24000 ft) of Palermo harbour	Axis loss of ammunition ship (<i>Alessandro Volta</i>), 7 other MVs (<i>Modena</i>, <i>Lentini</i>, <i>Trentino</i>, <i>Rosa</i>, <i>Labor</i>, <i>Monovi</i>, <i>Franco M</i>) all sunk plus 2 small vessels (<i>Spiga</i>, <i>San Gennaro</i>) thrown ashore Total loss 11500 tons	Search (5 sorties) attacked MV, nro
23 March			OS (2 sorties) nf
23/24 March		<i>Bernadette</i> (302 ton) towed to Trapani	TS - Convoy (4 sorties) 5000 ton MV hit 4 Beauforts from 39 Squadron set out at 20:00 to seek shipping off west coast of Sicily

			23:58 pm one convoy spotted by 1 crew near Trapani: MV (already damaged in Tunis & being towed) hit + tug sunk
24 March			OS (2 sorties) nf OS (2 sorties) nf
24/25	Heavy aerial assaults maintained on Axis forces in Tunisia		OS (3 sorties) nf
27 March			Beaufort AW348 'M' – FTR abortive daylight shipping strike, nro
31 March	Whole of Libya in Allied hands		
1 April			SS - Maritimo (2 sorties) nf
3 April			Search for missing MTBs (1 sortie)
4 April			
5 April			Mines – Trapani (6 sorties)
5-27 April	Operation Flax to cut off air supply lines between Italy and North African Axis forces involving direct interception of aerial convoys, offensive action against Tunisian & Sicilian air fields + anti-shipping offensives Allied claims of over 400 Axis transport planes with Allied losses of 35 fighter a/c	Considerable attrition – last transport aircraft mission 4 May which brought in 117 tons fuel and ammunition. Subsequent supply drops, brought to a close with Allied ground capture of Flak, signals, transport & admin staff on 13 May	
10 April			OS (3 sorties)
11 April			ASR (1 sortie) OS (4 sorties) DD892 FTR
11/12 April		Squadrons target - Convoy left Naples for Tunis: 3 MVs, 2 torpedo-boats and a corvette MV <i>Fabiano</i> broke down & escorted to Palermo by corvette <i>Driade</i>	4 Beauforts from 39 Squadron + 3 Wellingtons 458 Squadron set out to patrol Marettimo & Ustica area to seek convoy 1 Beaufort FTR, crew MiA <i>Fabiano</i> sunk by Wellington Mine-laying by Beauforts – corvette <i>Artemide</i> damaged, rendered un-serviceable
14 April			SS - Martimo (2 sorties) nf
15 April			Search – Sicilian Channel (5 sorties) MV attacked, nro
18 April	'Palm Sunday Massacre' in Operation Flax – high attrition rate of Axis forces in Tunisia	Very heavy Axis aircraft losses	(A.L.T on K Force – Allied cruisers and destroyers based in Malta). SW of Malta with Fighters and Spitfires)
23 April			TS – Maritimo (4 sorties) MV sunk

23/24 April		Squadron target - Freighter <i>Aquino</i> (5079) departs Leghorn for Tunis	39 Squadron dispatched from Malta to finish off attack on convoy (initiated by 16-B24s) <i>Aquino</i> – last recorded torpedo strike by a Beaufort
30 April		Rommel down to 69 tanks in N Africa	
8-9 May	Capture of Tunis and Bizerta Malta-based forces account for 45% losses of all Mediterranean Axis shipping Jan – May 1943	Axis troops between Bizerta & Tunis begin surrendering Final surrender in Tunisia 12 May	

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- * *Rosolino Pilo* is both a class of eight destroyers of the *Regia Marina*, and an 8,236-ton merchant vessel (p.210, Delves) damaged by 39 Squadron on 17 August and later sunk by submarine. Similarly, there is an HMS *Pozarica* and an Italian MV *Poza Rica*.

Appendix 5 Flying Units in Malta 1942 – 1943

	Airfield							
	Luqa		Hal Far		Takali		Qrendi	
Jun 1942	39 Sq 69 Sq 126 Sq 217 Sq 221 Sq	Bf Ba/Sp Sp Bf Bf	185 Sq RNA Sq	Hu Al/Sw	603 Sq 1435 Sq	Sp Hu		
Nov 1942	23 Sq 39 Sq 40 Sq 69 Sq 140 Sq 113 Sq 126 Sq 1435 Sq	Mo Bf Wt Ba/Sp/ Wt Wt Wt Sp Sp	185 Sq 821 Sq 828 Sq	Hu Al Al	227 Sq 272 Sq	Bi Bi	229 Sq 249 Sq	Sp Sp
Jun 1943	1 SAAF 23 Sq 39 Sq – until May 40 SAAF 69 Sq 73 Sq 92 Sq 108 Sq 113 Sq 145 Sq 221 Sq 256 Sq 272 Sq 417 RCAF 600 Sq 601 Sq 683 Sq	Sp Mo Bf Sp Ba Hu Sp Bi/Mo Wt Sp Wt Mo Bi Sp Sp Sp Sp/Mo	43 Sq 72 Sq 93 Sq 243 Sq 828 Sq ASR&CR	Sp Sp Sp Sp Al Various	81 Sq 152 Sq 154 Sq 232 Sq 242 Sq 815 Sq 826 Sq	Sp Sp Sp Sp Sp Al Al	185 Sq 229 Sq 249 Sq	Sp Sp Sp
Bf – Beaufort Bi – Beaufighter Sp – Spitfire Mo – Mosquito Ba – Baltimore Al – Albacore Wt – Wellington Sw – Fairey Swordfish SAAF – South African Air Force RCAF – Royal Canadian Air force Hu - Hurricane RNA Sq – Royal Naval Air Squadron ASR&CR – Air-sea Rescue & Communications Flight								
Beaufort Beaufighter Spitfire Mosquito Baltimore Albacore Wellington Fairey Swordfish Hurricane				Long-range torpedo-bomber Long-range heavy fighter/strike Fighter Light bomber/reconnaissance Light bomber/reconnaissance Torpedo-bomber Medium bomber Torpedo-bomber Fighter				

Source: J.F. Hamlin, *Military Aviation in Malta G.C. 1915 – 1993* (Peterborough: GMS, 1994)