

Malta, 10th April 1942: a German ace is vanquished; Hermann Neuhoff versus George Buchanan

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George Buchanan



Hermann Neuhoff

Introduction

Soon after 6 o'clock on the evening of 10th April 1942, *Leutnant* Hermann Neuhoff landed by parachute only about 50 m from one of the defence posts on Luqa airfield while the remains of his aircraft slammed into the ground ca. 300 m away¹. Neuhoff was the leading ace of III/JG 53 at the time and had just been appointed as *Staffelkapitän* 6/JG 53 in the 2nd *Gruppe* the day before^{2, 3}. He was wounded in the leg, but refused any assistance from British soldiers manning the defence post and limped to it unaided, where he was given tea and a cigarette¹.

Hermann Neuhoff was a big catch; his 40th victory claim, submitted on 9th April had seen him take second-place in the active *Geschwader* list, topped by its C/O Major Günther *Freiherr* von Maltzahn whose score reached 61 on the same day^{3, 4}. Only one other ace, Erich Schmidt had achieved a better score than Neuhoff, of 47 before being posted missing on the Russian front in August 1941³. Neuhoff was a pre-war pilot who had first seen action during the Phoney War over France in III/JG 53, then led by the father of German fighter tactics, the famous Werner Mölders³. Two victories there were followed by five more during the invasion of France in May-June 1940, and three more in the Battle of Britain; over Russia during 1941 Neuhoff added a further twenty one claims, before a transfer to North Africa late in that year brought him a further four⁴. III/JG 53 moved to Sicily in mid-December along with the rest of the *Geschwader* which provided the core of the German fighter cover over Malta during the main 'Blitz' on the island, from March to May 1942; here Hermann Neuhoff added his final five claims to raise his total to the forty noted above³. He was thus a German combat veteran, one who had survived 452 operational sorties⁵.

In the *Luftwaffe*, victory tallies were considered of great importance in a force where the pervasive ace culture rested on a foundation firmly established in the First World War already, with the inimitable 'Red Baron', Manfred von Richthofen whose 80 victories were never surpassed in that conflict. The RAF pilot most commonly credited with shooting Neuhoff down was Flying Officer George Buchanan of 249 Squadron, although there was one other claimant (Flight Sergeant Garth Horricks, 185 Squadron) and even a German colleague who inadvertently fired on Neuhoff's Me 109 and admitted as much upon his return to Sicily^{1, 2, 3}. 'Buck' Buchanan has quite often been portrayed as a relative neophyte, especially compared to his apparent victim. Upon arrival on Malta, Buchanan had a total of 58 hours and 20 minutes operational time in his logbook, achieved over the U.K., Channel and Northern France in the period March 1941 – January 1942. He had shared a communications biplane shot down over France in September 1941 during a sweep mission over the Ostende area. At Malta, and before meeting Neuhoff in combat, Buchanan had flown twelve operations (6 hours, 20 minutes total), claimed two damaged German aircraft as well as a Ju 87 shot down; he himself was shot up on 10th March and crash-landed at his base, with many small shrapnel wounds to the legs, and was hospitalised for four days followed by nine days off flying.

This article will examine his RAF service as a fighter pilot, to throw more light on this assumption. Fortunately George Buchanan's logbook has been preserved by his son (the co-author) and provides copious information to assess him as a pilot, combat flier and how his training and experience might have fitted him to indeed down (with greater or lesser help from others, both friend and foe) the highly experienced Hermann Neuhoff. In addition, the logbook provides an insight into RAF fighter pilot training at a critical period of the war, during the second half of 1940, as well as into the reality of Buchanan being thrown into the cauldron that was Malta at the peak of its ordeal at the hands of the *Luftwaffe* during the apex of the major 'blitz' on that island.

Joining the RAF and training as a fighter pilot

RAF training comprised initial military training (at the ITW, Initial Training Wing): introduction to service life, square bashing etc.), followed by:

1. Elementary flying training school (EFTS) – light aircraft such as Tiger Moth – taught how to fly.
2. Service flying training (intermediate training) (SFTS) on more advanced trainers such as Miles Master. Wings awarded after successful completion of this. Teaching now more on service flying specifically. Training to this stage included also more instrument flying, Link Trainer (10 hours instrument flying course), night flying, cross-country flights and a small amount of air navigation, formation flying, aerobatics and low flying (including bad weather low flying, a necessity for UK-based trainees).
3. Advanced training, on service types at an Operational Training Unit (OTU) to enable transition into an operational squadron.

After this, generally there was a posting to a squadron, and normally one which although on active service, was not involved in the front line, heavy combat role, but in a quiet backwater, where occasional alarms went hand in hand with lots of patrol work and also training. Gunnery training generally only came in here, as well as tactical formations, practice attacks and dogfighting.

Details of George Buchanan's service record and time on active service with the RAF are derived both from his logbook, and from an article on his time in the RAF written by Bill Musgrave⁶. A South African by birth (Dundee, 28.11.1912), George Buchanan later moved to what was then Northern Rhodesia (now Zambia), living and working in Livingstone, a town lying on the border with then-Southern Rhodesia (Zimbabwe) and very close to the famous Victoria Falls. He applied for pilot training to the RAF, being accepted for this early in 1940 and leaving in April. After arrival in the UK, George enlisted on 25th May as an Aircraftman Second Class (AC 2, or more colloquially, a 'plonk'), then the lowest rank in the service. His first posting was to 3 ITW (Initial Training Wing).

After this inevitable start for anyone joining the forces then or now, and promoted one step up to Leading Aircraftman, Buchanan left for 14 EFTS (Elementary Flying Training School) at Elmdon near Birmingham, where he underwent basic flying training from 20th August till 2nd October 1940, a period synchronous with the Battle of Britain raging across the southern parts of England. Although they were apparently spared any

enemy incursions, cities such as nearby Birmingham and Coventry suffered night bombing and Elmdon was well within range of Me 110 'Zerstörer' twin-engine fighters. In their Tiger Moth biplane trainers they would have had little chance if ever accosted by such aircraft, which also flew reconnaissance missions.

F/Lt. G.A.F. Buchanan DFC – Flying Logbook

(columns, left to right: date, aircraft type and number; first pilot/instructor; second pilot/student; flying assignment; flight duration in hours.minutes, instrument flying in italics)

Elementary flying training: No. 14 E.F.T.S. Elmdon

1940

Aug	20	Tiger Moth	N6647	Sgt Sawyer	Self	Air experience; familiarity with cockpit layout; effects of controls; taxiing; straight and level flight	.45
	20	Tiger Moth	N6647	Sgt Sawyer	Self	Effects of controls; taxiing; straight and level flight; climbing, gliding and stalling	.40
	25	Tiger Moth	R5178	Sgt Sawyer	Self	Effect of controls; straight and level flying; climbing, gliding and stalling	.40
	25	Tiger Moth	R5178	Sgt Sawyer	Self	Taxiing; straight and level flying; climbing, gliding and stalling; medium turns	.45
	26	Tiger Moth	K4248	Sgt Sawyer	Self	Medium turns; taking off into wind; gliding approach and landing	.45
	26	Tiger Moth	K4248	Sgt Sawyer	Self	Medium turns; taking off into wind; gliding approach and landing	.40
	27	Tiger Moth	K4248	Sgt Sawyer	Self	Medium turns; taking off into wind; gliding approach and landing	.35
	27	Tiger Moth	K4248	Sgt Sawyer	Self	Medium turns; taking off into wind; gliding approach and landing	.35
	28	Tiger Moth	K4248	Sgt Sawyer	Self	Spinning; action in event of fire; abandoning aircraft; restarting engine in flight	.25
	30	Tiger Moth	K4248	Sgt Ludman	Self	Medium turns; taking off into wind; gliding approach and landing	.35
	30	Tiger Moth	K4248	Sgt Ludman	Self	Medium turns; taking off into wind; gliding approach and landing	.50
Sept	1	Tiger Moth	N5485	Sgt Ludman	Self	Medium turns; taking off into wind; gliding approach and landing; spinning	.30
	1	Tiger Moth	N5485	Sgt Ludman	Self	Taking off into wind; gliding approach and landing	.25
	1	Tiger Moth	N5485	Self	Self	First solo	.15

1	Tiger Moth	N5485	Sgt Ludman	Self	Taking off into wind; gliding approach and landing	.25
1	Tiger Moth	N5485	Self		Taking off into wind; gliding approach and landing	.30
2	Tiger Moth	N6835	Sgt Ludman	Self	Taking off into wind; gliding approach and landing; low flying; climbing turns	.20
2	Tiger Moth	N6835	Self		Taking off into wind; gliding approach and landing; climbing turns	.25
2	Tiger Moth	N6835	Self		Taking off into wind; gliding approach and landing; climbing turns	.50
2	Tiger Moth	N6835	Sgt Ludman	Self	Sideslipping; low flying	.30
2	Tiger Moth	N6835	Self		Sideslipping	.30
3	Tiger Moth	N6835	Sgt Ludman	Self	Steep turns; climbing turns	.30
3	Tiger Moth	N6835	Sgt Ludman	Self	Spinning; steep turns	.25
3	Tiger Moth	N6835	Self		Taking off into wind; gliding approach and landing; spinning; sideslipping; climbing turns; steep turns	1.00
4	Tiger Moth	T5844	Sgt Ludman	Self	Powered approach and landing; low flying	.40
4	Tiger Moth	T5844	Self		Taking off into wind; gliding approach and landing	.35
9	Tiger Moth	N6835	Sgt Ludman	Self	Taking off into wind; gliding approach and landing	.30
9	Tiger Moth	N6835	Self		Taking off into wind; gliding approach and landing; sideslipping; steep turns; climbing turns	1.00
9	Tiger Moth	N6835	Self		Steep turns; climbing turns	.30
9	Tiger Moth	L6941	Self		Taking off into wind; gliding approach and landing; spinning; sideslipping; steep turns; climbing turns	.35
9	Tiger Moth	L6941	Sgt Ludman	Self	Leamington	.45
10	Tiger Moth	L6941	Sgt Ludman	Self	Precautionary landing; forced landing	.35
10	Tiger Moth	N5453	Sgt Ludman	Self	Instrument flying	.30
11	Tiger Moth	L6941	Sgt Ludman	Self	Elmdon – Derby	.50
11	Tiger Moth	L6941	Sgt Ludman	Self	Derby – Elmdon	.40

12	Tiger Moth	L6941	Sgt Ludman	Self	Spinning; climbing turns; aerobatics	.50
12	Tiger Moth	L6941	Self		Spinning; climbing turns; aerobatics	.30
13	Tiger Moth	T7240	Sgt Jameson	Self	Low flying; forced landings	1.00
13	Tiger Moth	T7240	Self		Forced landings	.25
13	Tiger Moth	T7240	Self		Spinning; steep turns; forced landings	.45
13	Tiger Moth	T7240	Sgt Jameson	Self	Spinning	.25
14	Tiger Moth	N6835	Sgt Jameson	Self	Taking off into wind; gliding approach and landing	.15
14	Tiger Moth	N6835	Self		Taking off into wind; gliding approach and landing; forced landing	.55
14	Tiger Moth	6938	Self		Spinning; forced landing	1.05
15	Tiger Moth	L6941	Sgt Ludman	Self	Taking off into wind; gliding approach and landing; <i>instrument flying</i> ; taking off and landing out of wind	.30 plus .20
18	Tiger Moth	L6941	Sgt Ludman	Self	Taking off into wind; powered approach and landing; gliding approach and landing; steep turns	.35
18	Tiger Moth	L6941	Self		Taking off into wind; powered approach and landing; gliding approach and landing; steep turns; climbing turns; aerobatics	.40
19	Tiger Moth	T7240	Sgt Ludman	Self	Low flying; aerobatics	.45
20	Tiger Moth	R5060	Sgt Ludman	Self	Spinning; low flying; <i>instrument flying</i> ; aerobatics	0.20 plus .25
20	Tiger Moth	R5060	Sgt Ludman	Self	Instrument flying	.40
21	Tiger Moth	L6941	Self		Air navigation	2.10
21	Tiger Moth	T7236	Lt/Com Bramwell	Self	E.O.T.	.20
23	Tiger Moth	R5060	Sgt Ludman	Self	Taking off into wind; gliding approach and landing	.10
23	Tiger Moth	R5060	Self		Spinning; steep turns; climbing turns; aerobatics	1.10
23	Tiger Moth	R5060	Self		Precautionary landings; steep turns; climbing turns; forced landings; aerobatics	1.15

23	Tiger Moth	R5060	Sgt Ludman	Self	Low flying		.10
23	Tiger Moth	T5844	Self		Sideslipping; steep turns; climbing turns; forced landings		.55
24	Tiger Moth	T5844	Self		Steep turns; climbing turns; forced landings		.35
24	Tiger Moth	N5453	Self		Forced landings; aerobatics		.35
24	Tiger Moth	N5485	Self		Precautionary landings; forced landings		.45
24	Tiger Moth	L6941	Sgt Ludman	Self	Instrument flying		.35
25	Tiger Moth	N5488	Self		Precautionary landings; forced landings; aerobatics		1.05
26	Tiger Moth	N6549	Self		Forced landings; aerobatics		.30
26	Tiger Moth	N6549	Sgt Ludman	Self	Spinning; low flying; forced landings; aerobatics		.35
26	Tiger Moth	N6549	Self		Taking off into wind; gliding approach and landing		.20
26	Tiger Moth	L6941	Sgt Ludman	Self	<i>Instrument flying</i> ; aerobatics		.15 plus .20
27	Tiger Moth	L6941	Self		Steep turns; climbing turns; forced landings; aerobatics		1.00
27	Tiger Moth	N5453	Sgt Ludman	Self	Instrument flying		.30
27	Tiger Moth	N5453	Self		Taking off into wind; powered approach and landing; gliding approach and landing		.30
29	Tiger Moth	N6647	Sgt Ludman	Self	Instrument flying		.30
29	Tiger Moth	N6647	Self		Taking off into wind; powered approach and landing; forced landing		.40
29	Tiger Moth	N6549	Sgt Ludman	Self	Instrument flying		.35
29	Tiger Moth	6549	Sgt Ludman	Self	Air navigation		.35
29	Tiger Moth	N6549	Sgt Ludman	Self	Air navigation		1.10
Oct 2	Tiger Moth	T7236	Sgt Ludman	Self	Instrument flying		0.35
2	Tiger Moth	T7236	Sgt Ludman	Self	Powered approach and landing; sideslipping; steep turns; climbing turns; forced landings; aerobatics		0.35

2	Tiger Moth	T7236	Self	Precautionary landing; forced landing; aerobatics	0.35
2	Tiger Moth	T7240	Lt/Com. Bramwell	Self E.O.T.	0.30
2	Tiger Moth	T7236	Self	Elmdon – Desford	0.30
2	Tiger Moth	T7236	Self	Desford – Elmdon	0.20

Certified L.A.C. Buchanan has satisfactorily completed a dual and solo cross country Test – signed F/Lt O.C. B Flight No. 14 E.F.T.S. Signing off on elementary training: Chief Flying Instructor, No. 14 E.F.T.S. Elmdon, 3-10-40, S/Ldr; 28.20 hours dual and 23.25 hours solo, which includes 5.00 hours instrument flying; proficiency as pilot – Average; special faults in flying which must be watched – nil.

Examination of the EFTS course shows clearly that it was thorough (repetition of critical skills training repeated throughout the course: e.g. spinning, take-off and landing), and that the primary intention was to teach the student to fly (rather than to train them as military pilots), including most elements thereof, with a surprising amount of instrument flying and encompassing also some low flying experience. Including aerobatics not only gave confidence but allowed the intending pilot to enjoy what he was doing, as would the low flying also. For George Buchanan, the entire course was completed within 44 days, just over six weeks, with multiple flights per day being the norm, up to six in number. While thorough thus, the training was also intense, a course that would normally have taken 10 weeks (as in 1941 and thereafter^{7, 8}) being completed in just over six. At the beginning of the war, and even more so during the Battle of Britain when the shortage of trained fighter pilots was at a critical junction, fighter pilot training which previously had encompassed about 200 to even 300 flying hours achieved over about 18 months, had been compressed to only 6 months and a total of ca. 150 hours up to award of the wings at the end of the Service Flying Training School (SFTS) phase^{7, 8}. For George Buchanan, his training up to wings stage was a mere 117 hours, 55 minutes, with a duration of just over 20 weeks; receiving his training during the Battle of Britain and immediately thereafter did significantly reduce his total flying hours. New trainees from 1941 onwards enjoyed much greater flying time (ca. 200 hours, increased even more as the war went on), with training spread over ca. 50 weeks up till achievement of the wings^{7, 8}. Buchanan's proficiency as a pilot was assessed after EFTS as 'average', which should be seen within the context of a greatly compressed training period and reduced total flying hours.

Having survived initial flight training, George's next step was to proceed to Number 8 SFTS at Montrose in eastern Scotland, freshly promoted to the rank of Sergeant. Rapid wartime promotions, brought on by the need to produce large numbers of flying crew in short time periods, were commonly a source of annoyance to the old sweats amongst the senior NCOs in the RAF, many of whom took twenty years or more to reach the

more senior non-commissioned ranks. Buchanan's next course, at Montrose, ran from 7th October 1940 till 8th January 1941; here he would fly a more complex and more advanced training aircraft, the Miles Master. The Master was a modern, low wing monoplane with retractable undercarriage, with a relatively powerful engine and thus much faster than the Tiger Moth, a docile and slow little biplane. The sequence of instruction offered on the Master, listed below according to standard codes, encompassed an initial stage similar in outline to that offered at the EFTS, but with more advanced instruction on a much more powerful machine, more intense experience of instrument flying, low flying and aerobatics as well as more solo flights rather than those with instructor present.

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1. Air experience
 - 1A. Familiarity with cockpit layout
 2. Effect of controls
 3. Taxying
 4. Straight and level flight
 5. Climbing, gliding and stalling
 6. Medium turns
 7. Taking off into wind
 8. Power approach and landing
 9. Glide approach and landing
 10. Spinning
 11. First solo
 12. Sideslipping
 13. Precautionary landing. 1
 14. Low flying (with instructor only)
-

(a) Operational

(b) Bad weather

15. Steep turns
 16. Climbing turns
 17. Forced landing
 18. Action in event of fire (with instructor only)
 - 18A. Abandoning aircraft
 19. Instrument flying
 20. Taking off and landing out of wind
 - 20A. Night flying
 - 20B. Formation flying
 21. Restarting the engine in flight (with instructor only)
 22. Aerobatics
 23. Navigation
- Solo test; forced landing test; instrument flying test; navigation test; cross country test, 1 and 2; height test; interim test (flight and group cmdr.); C.F.I.'s test; passenger test.
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Service flying training: No. 8 S.F.T.S. Montrose

1940

Oct 7	Master	N7507	Sgt Clarkson	Self	1, 2, 3, 4, 5, 6 and 14A; bad weather low flying	.35
8	Master	N7826	Sgt Clarkson	Self	1A, 3, 7 and 8	.30
8	Master	N7633	Sgt Clarkson	Self	6, 7, 8	.30
10	Master	7826	Sgt Clarkson	Self	3, 6, 7, 8	.55
10	Master	7558	Sgt Clarkson	Self	6, 7, 8, 18, 18A	.35
10	Master	7558	F/Lt Young	Self	7, 8; solo test	.20
10	Master	7929	Self		11	.10
11	Master	7948	Sgt Clarkson	Self	7, 8, 10; spinning – 22	1.05
11	Master	7948	Self		6, 7, 8	.30
12	Master	7689	Sgt Clarkson	Self	7, 8	.20
12	Master	7929	Self		6, 7, 8	.45
12	Master	7633	F/O Cherrington	Self	N flying – 4 landings	.35
13	Master	7558	Sgt Clarkson	Self	7, 8, 19 <i>instrument</i> flying	.30 plus .25
14	Master	7633	Sgt Clarkson	Self	7, 8	.25
14	Master	7633	Self		6, 7, 8	.50
16	Master	7826	Sgt Clarkson	Self	15, 16, 22	.30
16	Master	7836	Self		7, 8, 15, 16	.30
18	Master	7633	Sgt Clarkson	Self	13, 14b low flying	.50
18	Master	7802	Self		7, 8, 15, 16	1.00
23	Master	7889	Sgt Clarkson	Self	7, 8	.30
23	Master	7802	Self		6, 7, 8, 13	.50
24	Master	7826	Sgt Clarkson	Self	13, 19 <i>instrument</i> flying	.15 plus .30
24	Master	8015	Self		7, 8, 13, 15, 16	.55
24	Master	7633	Self		5, 15, 16	.50
25	Master	7802	Self		7, 8, 13	.30
25	Master	7929	P/O Fifield	Self	22	.45
25	Master	8015	Self		13, 15	.20
27	Master	7802	Self		10 spinning, 22	1.00
28	Master	7558	Sgt Clarkson	Self	9, 19 <i>instrument</i> flying	.45 plus .20
29	Master	8334	Self		6, 15, 16	1.00
31	Master	8334	Sgt Clarkson	Self	22	.30
Nov 1	Master	7802	Self		10 spinning, 22	.50
1	Master	8334	Self		10 spinning, 22	1.05

7	Master	7826	Sgt Clarkson	Self	22	.40	
7	Master	8334	Self	10 spinning,	15, 16, 22	.45	
13	Master	7508	Sgt Clarkson	Self	23	1.35	
13	Master	7948	Sgt Clarkson	Self	20B	.45	
13	Master	7558	Self	14B low flying		.30	
14	Master	8334	Sgt Clarkson	Self	20B	.35	
15	Master	7929	Sq/Ldr. Slater	Self	14A low flying, 19 (10 mins I.F.), 22	.10 plus .40	
15	Master	8334	Self	22		1.00	
15	Master	7689	P/O Sparks	Self	19 (3 take 'offs)	1.00	
15	Master	7507	F/O Judd	Self	N. flying (6. Lands)	1.10	
24	Master	8369	F/O Judd	Self	23	1.00	
25	Master	8369	Self	23		1.00	
27	Master	8406	Self	20B		.45	
28	Master	8369	Self	20B		.55	
Dec	1	Master	7689	Sgt Clarkson	Self	20B	.35
	1	Master	7948	Self	20B	1.10	
	2	Master	7948	Self	20B	.40	
	4	Master	8006	F/O Birkin	Self	I.F. Δ 19	1.00
	4	Master	7802	Self	13, 14B low flying (bad weather)	.30	
	5	Master	8406	Self	20B	1.00	
	7	Master	8338	Self	R.W.P. McKenzie	19 instrument flying	1.00
	8	Master	7802	Self	23 No. 1 X country	1.25	
	9	Master	7505	Self	23 navigation	1.05	
	9	Master	8430	Self	20B	1.00	
	10	Master	7505	Self	5, 10 spinning, 22	0.35	
	12	Master	8018	F/O Fifield	Self	22	0.30
	13	Master	8018	Self	23 No. 2 x country	1.40	
	15	Master	8018	Sgt Clarkson	Self	20B advanced	1.00
	15	Master	7889	Self	20B advanced	1.00	
	17	Master	7889	Self	Shearmuir	19 No. 2 I.F. x country	1.30
	17	Master	7889	F/O Fifield	Self	Backseat landings	.25
	17	Master	7889	Shearmuir	Self	Safety pilot (passenger)	1.20
	19	Master	7600	F/Lt. Judd	Self	Backseat landing	.15
	19	Master	7600	F/O Lenton	Self	19 – 3 I.F. take offs	.25

19	Master	8367	Self	5, 10 spinning, 22		1.30
20	Master	7511	Self	20B		1.05
20	Master	7856	F/O Birkin	Self Use of emergency selector		.15
20	Master	7806	Self	13		1.00
21	Master	7505	Self	13, 15, 16		1.00
21	Master	7846	Allridge	Self Safety pilot (passenger)		.30
22	Master	7810	Self	RT air – ground		.50
22	Master	7846	LAC Sisons	Self Safety pilot (passenger)		1.00
22	Master	7846	Sgt Clarkson	Self Night flying (4 landings)		.40
22	Master	8406	Self	Night flying (3 landings)		.30
22	Master	7846	F/O Birkin	Self <i>I.F. take off</i>		.15
26	Master	7929	LAC Willmot	Self Safety pilot (passenger)		1.00
26	Master	8018	F/Lt Judd	Self F/Com. test		.35
27	Master	8406	Self	20B		1.15
28	Master	7826	S/Ldr. Slater	Self 19 (20 mins) C.F.I. test	.20 plus	.35
28	Master	8003	Self	15, 16, 22		.50
28	Master	8002	F/O Cousin	Self N.F. (3 landings)		.55
28	Master	8002	Self	N.F. (3 landings)		.45
1941						
Jan 3	Master	7751	F/O Holden	Self Wings Test (20 minutes IF)		1.00 plus .20
7	Master	8038	P/O Gaskell	Self 14A low flying		.35
8	Master	8367	Self	5, 13, 15, 16, 22		1.00
<p>CFI's report on course: 'average' proficiency as pilot, special faults in flying which must be watched: heavy on controls; dated 9.1.1941; total hours by then = 117.55 (including 52.50 dual and 60.30 solo; grand total includes 4.35 hours night flying and 13.40 hours instrument flying). Officer in charge Link Trainer signed off on required 10 hours general instrument flying course on Link Trainer, on 4.1.1941.</p>						

Once more George Buchanan was given an 'average' proficiency grading, this time with a tendency to be heavy on the controls noted. It could not have been much fun flying intensively during the height of the winter season in northern Scotland, which again provides perspective on the average rating given. The SFTS course had been completed in thirteen and a half weeks; the average for 1941 would see this time increasing to sixteen weeks, and by 1944 ca. twenty five weeks would be the norm, with an added course (4-6 weeks) of NCO or officer training as well^{7, 8}. For Buchanan, no such relaxed timetable was to pertain; even the presentation of his 'wings', making him a service pilot, took place on the same

day he made his last flight at Montrose. He was then commissioned (15th January) and just over a week after completing the SFTS course, his posting to 55 OTU (Operational Training Unit), located at Aston Down, Chalford (just south-east of Stroud) in Gloucestershire began, on 17th January, and ran until 7th March 1941⁶. His log book details from this final stage of training as a fighter pilot appear below.

Operational training: 55 O.T.U. Aston Down

1941

Jan	17	Master	8013	S/Ldr Gouch	Self Test	.30
	17	Hurricane I	1992	Self	First solo	.50
Feb	4	Hurricane I	1768	Self	Practice on type	1.00
	6	Hurricane I	1786	Self	Local flying	.35
	7	Master	T8624	P/O Wylie	Self Safety pilot (passenger)	.55
	7	Master	T8624	Self	P/O Wylie I.F.	1.00
	22	Hurricane I	2433	Self	Local flying	.35
	22	Hurricane	1670	Self	Aerobatics	.50
	22	Hurricane	2592	Self	Local flying	1.00
	23	Hurricane I	2674	Self	Formation flying Crashed – Flying on Gravity Tank	.50
Logbook endorsed: By order of AOC 81 Group “Carelessness, Faulty Cockpit Drill”. Flying on Gravity Tank and running out of petrol leaving insufficient time to switch over. Signed W/Cdr, Training Wing, No. 55 O.T.U., 5.3.1941.						
	23	Hurricane	2089	Self	Local flying	.20
	24	Hurricane	2706	Self	Oxygen test	1.10
	24	Hurricane	1926	Self	Aerobatics	1.00
	25	Hurricane	2102	Self	Dogfight 1 on 1	.55
	25	Hurricane	2102	Self	Aerobatics	.55
Mar	1	Hurricane	1832	Self	Aston Down – Church Fenton	1.30
	2	Hurricane	1807	Self	Local flying	.40
	3	Hurricane	1807	Self	Local flying	1.10
	6	Hurricane	1807	Self	Formation	.40
	7	Hurricane	1807	Self	Formation	.25
	7	Hurricane	2389	Self	Formation and attack 1 on 3	1.05

Signed off from No. 55 OTU Usworth by W/Cdr Training, 10.3.1941, with average assessment, no points in flying to be watched, and total time of 134.55 hours (including 15.30 hours on Hurricanes).

As can be seen from the brief period of OTU training, where a pilot was to finally fly operational aircraft, as used by squadrons active in the field, and to learn the rudiments of operational flying, Buchanan flew a mere fifteen and a half hours on Hurricane I aircraft over seven weeks. While the time spent there was much the same as in later years of OTU fighter training, the hours of experience on the Hurricane were below what most squadrons would consider necessary as a minimum before any operational flying would be permitted. Pilot Officer Buchanan's total flying hours now amounted to 134.55. In 1941-1942, South African Air Force training (fully compatible with RAF norms) typically encompassed between ca. 150 and 200 hours before a squadron posting was given, of which ca. 32-55 hours were at OTU on operational type machines⁹. Once more, Buchanan was assessed as 'average', but so were the vast majority of these young men, anyway.

First squadron postings, 260 and 266 (Rhodesian) Squadrons: the quiet time

The RAF training philosophy saw an initial period of squadron experience as really addressing the gap between theory and reality, and this tradition of a squadron-based rounding off before a pilot was seen as a useful member of a front line squadron went back long before the war. The intention of the squadron postings of the recent graduates of the OTUs was to place the new pilot on an operational squadron, certainly, but one currently based in a rather inactive area where patrols, convoy patrols, the odd scramble against a reported lone intruder were the order of the operational day, interspersed with much training in operational flying, such as the various combat formations adopted, dog fighting practice and, apparently for many for the first time, live gunnery training. However, for Buchanan, his first noted exposure to gunnery training in his logbook only occurred within his next squadron posting (to 266 Squadron), which is really not only surprising but also alarming that such a gap be left unaddressed till so late in the creation of a fighter pilot to whom acquiring such basic skills would have seemed an absolute given.

260 Squadron, Skitten (Killimster, NW of Wick, Scotland) and then Drem (Edinburgh)

1941

Mar 19	Hurricane I	V7201	Self	Section recco.	.15
19	Hurricane I	V7201	Self	Section recco.	.50
19	Hurricane I	V7201	Self	Formation	.55
21	Hurricane I	T	Self	Test and local flying	1.05
21	Hurricane I	X	Self	Formation	.40
Apr 6	Hurricane I	Mw9125	Self	Local flying and landings	.40
6	Hurricane I	Mw9125	Self	Practice formation	.55

7	Hurricane I	Mw9125	Self	Practice formation	.30
7	Hurricane I	Mw9125	Self	Practice formation	.55
8	Hurricane I	Zv7201	Self	Practice formation	.50
8	Hurricane I	Ww9323	Self	Airtest (my machine)	.15
8	Hurricane I	Ww9323	Self	Dog fight	.35
9	Hurricane I	Ww9323	Self	To Montrose (visit F.T.S. instructors)	.50
9	Hurricane I	Ww9323	Self	From Montrose	1.00
12	Hurricane I	Ww9323	Self	Practice formation	.35
13	Hurricane I	Ww9323	Self	Practice formation	.20
13	Hurricane I	Ww9323	Self	Formation round the islands	.55
13	Hurricane I	Ww9323	Self	Aerobatics	.55
16	Hurricane I	Ww9323	Self	Skitten to Drem. Our first move	1.10
17	Hurricane I	Ww9323	Self	Scramble (my first: saw nothing)	1.00
17	Hurricane I	Ww9323	Self	Move to spinney dispersal	0.05
20	Hurricane I	Ww9323	Self	Aerobatics	1.00
20	Hurricane I	Ww9323	Self	Scramble (Buster: saw nothing)	.20
21	Hurricane I	P7679	Self	Dogfight with Sgt Croker	.45
21	Hurricane I	Ww9323	Self	Beam attacks	.45
23	Hurricane I	Pv7579	Self	R.T. test and sector recco.	.50
24	Hurricane I	Ww9323	Self	Sector recco with S/Lr Mount	.35
24	Hurricane I	Ww9323	Self	Patrol	1.25
25	Hurricane I	Ww9323	Self	Attacks	1.00
27	Hurricane I	Zv7131	Self	Practice formation	.40
28	Hurricane I	Zv7131	Self	Local	.35
28	Hurricane I	Yv7201	Self	Squadron formation	1.00
28	Hurricane I	Yv7201	Self	Local	.35

Total on Hurricanes 40.15 hours.

Buchanan's short time (six weeks) on 260 Squadron stationed in the far north of Scotland might not have exposed him to much, especially no gunnery training, but at least his Hurricane time was boosted to just over 40 hours, which would have been seen as a bare adequate minimum time on that aircraft for normal squadron duties. In April 1941, 260 Squadron was to begin preparing for a move to the Middle East and Pilot Officer Buchanan was thus posted to 266 Squadron, Wittering, on 12th May, not yet being ripe for intense combat as would have been implicit

in the move to North Africa. By then he had 159.05 total flying hours, which essentially equates with the norm accompanying award of the 'wings'.

266 Squadron, Wittering

1941

May 13	Spitfire II	Ap8010	Self	Experience on type	.25
13	Spitfire II	Ap8010	Self	Circuits and landings	.45
13	"	Ap8010	Self	Sector recco	.50
13	"	Ap8010	Self	Formation practice	.45
14	"	Ap8010	Self	Sector recco	.40
16	"	Ap8010	Self	Sector recco	1.10
16	"	J 7686	Self	Formation practice	.40
16	"	Ap8010	Self	R.T. and D.F. procedure	1.15
16	"	Cp8096	Self	Formation practice	.45
16	"	Hp8190	Self	Sector recco	.40
17	"	Jp7686	Self	Sector recco	1.10
18	"	Jp7686	Self	Standing patrol Stamford	1.50
18	"	Jp7686	Self	Formation practice and dog fight (P/O Cook)	1.00
18	"	Jp7686	Self	Battle climb	.45
20	"	Ap8010	Self	Circuits	.40
20	"	Ap8010	Self	Formation	.40
21	"	Ap8010	Self	Formation and dog fight (F/Lt Armitage)	.50
21	"	Ap8010	Self	Aerobatics	.55
22	"	Ap8010	Self	Cloud flying	.30 plus .15
22	"	Jp7686	Self	Steep turns	.45
23	"	Jp7686	Self	Formation cloud penetration	.20 plus .40
23	"	Gp8608	Self	Camera gun	.30
23	"	Ap8010	Self	Dog fight	.50
23	"	Ap8010	Self	Advanced formation	1.00
24	"	Ap8010	Self	Sqn. Formation over Brixworth aid of War Weapons Week	.45
25	"	Jp7686	Self	Cloud formation	.50 plus .20
25	"	Gp8608	Self	Camera gun: practice interception	.35

26	"	Hp8190	Self	To Duxford with squadron	.25
26	"	Hp8190	Self	Practice wing with Squadron 310; intercepted by 19 Squadron	1.40
26	"	Hp8190	Self	From Duxford	.35
27	"	Hp8190	Self	Combined attacks on single A/c	.50
28	"	Ap8010	Self	Squadron formation	1.10
28	"	Ap8010	Self	Practice fighting in pairs	.40
31	"	Cp8096	Self	Formation and dog fight	.40
Aug 16	Spitfire II	Dp8092	Self	Landing and local flying	.35
16	Spitfire II	Dp8092	Self	DR co-op	1.20
17	Spitfire II	Dp8092	Self	Local flying	1.00
18	Spitfire II	Kp7892	Self	Formation	.15 plus .55
19	Spitfire II	Jp7686	Self	Formation to Docking and return	1.10
19	Spitfire II	Jp7686	Self	Cloud flying	.30 plus .10
20	Spitfire II	Ep8515	Self	Cloud penetration in formation and C. gun	.20 plus .35
20	Spitfire II	Kp7892	Self	Dusk landings (night flying)	.20
21	Spitfire II	Ap8010	Self	Squad. Scramble and interception	1.30
21	Spitfire II	Kp7892	Self	Dusk bumps (night flying)	.35
22	Spitfire II	Bp7974	Self	Dusk bumps (night flying)	.55
24	Spitfire II	Bp7974	Self	Practice scramble	.15 plus .20
24	Spitfire II	Hp8190	Self	Night landings at Wittering (night flying)	1.00
25	Spitfire II	Hp8190	Self	From Wittering	.10
25	Spitfire II	Jp7686	Self	Formation practice	1.05
26	Spitfire II	Bp7974	Self	A/c test ailerons	.10
26	Spitfire II	Bp7974	Self	A/c test ailerons	.10
26	Spitfire II	Ap8010	Self	Formation cloud flying	.20 plus .40
26	Spitfire II	Bp7974	Self	To Docking	.25
27	Spitfire II	Bp7974	Self	From Docking	.30
27	Beaufighter	- Sq/Ldr Ruskin	(passenger)	From Wittering to Tangmere	.50

Wittering was in the Midlands, in 12 Group of Fighter Command and thus closer to the action but without being exposed to regular combat, even of a limited nature. Converting onto the Spitfire II, Buchanan remained with this squadron until 27th August 1941, but flew only one operational patrol. Most of his time in the 44 hours flying he experienced on Spitfires with the unit, went on practicing formations of different kinds, including one practice wing assembly and flight; cloud flying in formations was also undertaken. A few flights were devoted to dog fighting

practice and on three occasions Buchanan practiced with the camera gun, but still no live firing experience, and now on his second fully fledged squadron! In the short intermission between his time on 260 and 266 (Rhodesian) squadrons, Buchanan got married (3rd May, to May Marshall in Glasgow), and his time in 266 Squadron was broken by a lengthy period of ca. one month's illness and sick leave from mid-July to mid-August⁶.

Action at last: with 41 Squadron in the Tangmere sector, English Channel

With his total flying hours now up to 203.05 hours, George Buchanan was posted again, on 27th August 1941, to 41 Squadron, stationed initially at Merston, a satellite airfield of Tangmere on the Sussex coast, before moving to another satellite, Westhampnett on 16th December. The Tangmere squadrons were right in the front line and undertook frequent operations over northern France. Almost exactly a year after starting flying training (20.08.1940) he was about to experience war in the air for the first time. Although still unschooled in aerial gunnery, he at least had a solid 80 plus hours on modern fighters, Hurricanes and Spitfires. His new C/O, as was normal practice for a new arrival, almost certainly perused Buchanan's logbook and would have noted his lack of live firing experience and limited camera gun training. There was an immediate result this time round, George being sent on a live firing exercise only three days after arrival! And this training was kept up for several months thereafter, in between many active operations and general training (particularly of various formations, and lesser dog fighting); this included both live firing as well as camera gun training, on eight further occasions right up to the day before leaving 41 Squadron. This reflects very creditably on 41 Squadron's commanders at this time, S/L's R.J. Abrahams, L.M. Gaunce (killed in action 19.11.1941) and P.H. Hugo.

George Buchanan's logbook summary of his time with 41 Squadron is shown below. An uneventful scramble on 1st September preceded his first real taste of combat on 4th September 1941, with a sweep over Le Touquet, where the squadron formed part of the rear support wing for a circus against Mazingarbe power station; this proved uneventful for 41 Squadron¹⁰. Prior to his first taste of combat, Buchanan had built up a total of 210.30 flying hours; this figure has been termed pre-combat hours, and a comparison of average values through the war for Allied and German air forces⁷ shows that Buchanan's total was about average:

Pre-combat hours ⁷	1942	1943	1944
German	240	170	110
British	200	335	340
US	-	320	360

Three records of SAAF pilots who joined squadrons and experienced their first combat in 1942 reflect pre-combat hours varying between 219 and 313 flying hours⁹.

George Buchanan's exposure to real combat operations continued on 11th with a false alarm scramble; this was followed by his being part of six squadron Spitfires which formed part of the escort to a Blenheim-mounted anti-shipping roadstead mission, but no ships were found¹⁰. The 17th September saw Buchanan flying a convoy patrol, followed by his being part of the forward support wing for a return to Mazingarbe (during which his C/O tangled with a couple of Me 109s), and later again flying a similar mission as part of an abortive circus mounted against the Marquise Shell Factory¹⁰. The next day was to be an important one for Buchanan: his first aerial combat and his first victory as well, always cardinal events and influences on the life of a fighter pilot. Forming the top cover to a three-Blenheim roadstead operation against German coastal shipping, 41 Squadron became detached due to cloud, and ended up over a *Luftwaffe* airfield in the Ostende area, where various engagements took place between elements of the squadron and Me 109s, FW 190s and communications aircraft¹⁰. George's section leader, F/Lt Charles Bush saw a German biplane (identified as a Hs 123) and dived to attack, hitting it hard from 250 yards down to only 50, to be followed by wingman Buchanan who gave it a further burst (of 2 seconds) from 100 down to 50 yards¹⁰. At this the already seriously damaged Gotha 145 light biplane, broke up, the lower wing planes breaking off and the remains bursting into flames; the pilot, *Feldwebel* Jozef Andreus never had a chance¹⁰. The devastating effects of very close range (50 yards) cannon and machine gun fire, even from a very brief burst, would have impressed themselves on George Buchanan's mind, especially in view of his very limited live firing experience to that point, also emphasised by his continuing to receive further such practice and camera gun training throughout his time with 41 Squadron, as is noted in his logbook. On the way home, a brace of Me 109s attacked Buchanan and his section leader, they evading easily and Buchanan even getting in a short burst at one of them from 450 yards, without any effect¹⁰. The lesson of the value of a close range attack must have been convincing after this first combat with the enemy.

41 Squadron 41, Merston, a satellite airfield of Tangmere, Sussex; from 16.12.1941 squadron moved base to Westhampnett, another Tangmere satellite.

1941

Aug 28	Spitfire 5B	Bw3565	Self	Formation practice and attacks	.55
28	Spitfire 5B	Tw3719	Self	Formation practice and attacks	.45
29	Spitfire 5B	Bw3565	Self	Formation practice and attacks	1.10
29	Spitfire 5A	Cr7297	Self	Sector recco	.55
30	Spitfire 5B	Gw3383	Self	Cannon firing	.25
30	Spitfire 5A	Cr7297	Self	Formation and attacks	.40
31	Spitfire 5A	D	Self	Squadron formation	.15
Sept 1	Spitfire 5A	Cr7297	Self	Operational scramble	.30

2	Spitfire 5A	Cr7297	Self	Search formation		.40
2	Spitfire 5A	Hw3374	Self	Search formation and dog fight		1.10
4	Spitfire 5B	Kq8782	Self	Sweep – Le Touquet		1.30
5	Spitfire 5B	Kq8782	Self	Air test		.15
5	Spitfire 5B	Kp8782	Self	Search formation		1.00
7	Spitfire 5B	Jp8759	Self	Formation attacks		.45
8	Spitfire 5B	Kp8782	Self	Search formation		.55
9	Spitfire 5B	Kp8782	Self	Formation attacks		.55
10	Spitfire 5B	Kp8782	Self	Cloud flying and dog fight	0.30 plus	0.20
10	Magister	L8275	Self	F/O Gush Local flying		.35
11	Spitfire VB	Jp8759	Self	Operational scramble		.05
11	Spitfire VB	Jp8759	Self	Sweep escorting Blenheims		.25
15	Spitfire VB	Kp8782	Self	Cannon test		.25
15	Magister	L8275	Self	To Wittering		1.30
16	Magister	L8275	Self	From Wittering		1.30
16	Spitfire VB	Cr7297	Self	Dog fight		.30
17	Spitfire VB	Jp8759	Self	Convoy patrol		.25
17	Spitfire VB	Bw3565	Self	Sweep top cover		1.35
17	Spitfire VB	Bw3565	Self	Sweep top cover		1.20
18	Spitfire VB	Jp8759	Self	To Manston		.35
18	Spitfire VB	Jp8759	Self	Sweep - Ostend (Hs 123 - ½) (Shared Hs 123 with F/Lt Bush) Had a squirt at Me 109E.		1.00
18	Spitfire VB	Jp8759	Self	Eastchurch to Manston		.10
18	Spitfire VB	Jp8759	Self	Manston to base		.35
18	Magister	L8275	Self	To Friston		.45
18	Magister	L8275	Self	Sgt Palmer To base		.45
20	Spitfire VB	N52720	Self	Sweep – close escort to Rouen Me 109 dived into beehive straight for bomber. Was shot down by F/O Bache and Wing Co.		1.40
21	Spitfire VB	Jp8769	Self	Sweep – Gosnay power station Bounced on reaching French coast. There after formed beehive. Target smashed		2.00
23	Spitfire VB	Gw3383	Self	Armament test		.30
24	Spitfire VB	Gw3383	Self	Scramble		.05
24	Spitfire VB	Gw3383	Self	Operational scramble: intercepted Intercepted P.R.U. Spitfire near Dungeness		.40
27	Spitfire VB	Aw3636	Self	Practice wing		.50
27	Spitfire VB	Bw3565	Self	Sweep over Amiens No excitement		1.40

	28	Spitfire VB	Fab826	Self	Convoy patrol My first section	1.20
	29	Spitfire VB	Fab826	Self	Squadron practice	1.05
	29	Spitfire 5B	Kr8782	Self	Air test	.20
	30	Spitfire 5B	Kr8782	Self	Search formation	1.00
	30	Spitfire 5B	Kr8782	Self	Attacking formation and air firing	.55
	30	Spitfire 5B	Kr8782	Self	R/T test	.15
Oct	2	Spitfire VB	Jp8759	Self	Sweep Blenheims messed up show. Returned from Beachyhead	1.10
	2	Spitfire VB	D	Self	Fighter sweep Started late. Failed to join Squadron over Manston so returned	1.00
	3	Spitfire VB	D	Self	Formation practice	.55
	5	Spitfire VB	Kr8782	Self	Air test	.10
	5	Spitfire VB	Bw3565	Self	Rhubarb Returned owing to weather being too good	.55
	5	Spitfire VB	Kr8782	Self	Air test	.05
	6	Spitfire VB	Kr8782	Self	Air test	.10
	6	Spitfire VB	Kr8782	Self	Air test	.10
	6	Spitfire VB	Kr8782	Self	Air test	.10
	7	Spitfire VB	Cr7297	Self	Formation practice	.55
	8	Spitfire VB	Kr8782	Self	3 air tests	.45
	9	Spitfire VB	Gw3383	Self	Formation practice	.55
	9	Spitfire VB	Gw3383	Self	Squadron formation	.55
	9	Spitfire VB	Gw3383	Self	Formation practice	.45
	10	Spitfire	Aw3636	Self	Rhubarb Weather down to the deck; returned	1.00
	10	Spitfire	Bw3565	Self	Scramble Saw nothing	.40
	11	Spitfire	Aw3636	Self	Rhubarb Reached coast. Visibility very bad. Saw nothing to fire at. A.A. on coast pretty hot. My first experience of cannon shell zipping past.	1.05
	12	Spitfire	Aw3636	Self	Sweep – withdrawal wing Nothing doing	1.25
	12	Spitfire	Aw3636	Self	Formation practice	.45
	21	Spitfire	Gw3383	Self	Formation practice	.40
	22	Spitfire	Bw3565	Self	Recco mock invasion	.20
	22	Spitfire	Bw3565	Self	Convoy patrol	1.05
	23	Spitfire	Jp8759	Self	Rhubarb Reached coast. Weather too good. Returned	1.05
	24	Spitfire	D	Self	Air test	.15
	24	Spitfire	Gw3383	Self	Fours drill	1.10
	25	Spitfire	Jp8759	Self	Rhubarb Returned owing to good weather	.30
	26	Spitfire	Bw3565	Self	Formation aerobatics	.30

	26	Spitfire	Bw3565	Self	Rhubarb	La Harve too clear. Proceeded to Monteville. Shot up power station, no visible results. No A.A.	1.25
	27	Spitfire	D	Self	Rhubarb	Red section of four. Shoot up barges in canal at Caen	1.10
	28	Spitfire	Bw3565	Self		Fours drill	.45
	31	Spitfire	Bw3565	Self		Squadron formation	.35
	31	Spitfire	Bw3565	Self		Formation	.35
Nov	2	Spitfire V	Aw3636	Self		Formation	.50
	3	Spitfire V	Aw3636	Self		Fours drill	.50
	3	Spitfire V	Gw3383	Self		To Tangmere (night flying)	.15
	4	Spitfire V	Gw3383	Self		From Tangmere	.10
	11	Spitfire V	Bw3565	Self		To Shoreham	.15
	11	"	Bw3565	Self		Air firing and return from Shoreham No score	.35
	11	"	Bw3565	Self	Sweep	Appalling weather. Shot at by vlakship and ground A.A. A.A. ruddy awful	1.20
	12	"	Bw3565	Self		Fours drill	.50
	14	"	Bw3565	Self		Camera gun and aerobatics	.30
	15	"	Bw3565	Self	Rhubarb	Weather unsuitable	1.00
	17	"	Bw3565	Self		To Shoreham	.15
	17	"	Bw3565	Self		Air firing and return to Merston Scored seven hits, 4 and 3	.30
	18	"	Bw3565	Self	Rhubarb	Weather unsuitable. Attacked and sank seagoing tug.	1.00
	19	"	Bw3565	Self		Weather test	.20
	20	"	Bw3565	Self		Fours drill	.45
	20	"	Bw3565	Self		Formation	.55
	21	"	Bw3565	Self	Rhubarb	Shot up distillery at Fauville with Sgt Shelley. Good show.	1.25
	22	"	Bw3565	Self		Convoy patrol	1.25
	22	"	Bw3565	Self		Convoy patrol	1.15
	23	"	Gw3383	Self		Formation	1.05
	24	"	Jp8759	Self	Patrolling invasion barges	Barges returning from France	1.30
	25	"	Bw3565	Self		Air test	.20
	26	"	Bw3565	Self		Formation and camera gun	1.10
	29	"	Bw3565	Self		Formation and cloud flying	.20 plus .30
	30	"	Bw3565	Self	Shipping recco	Weather too bad	.20 plus 1.20
Dec	1	Spitfire V	Bw3565	Self		Local flying	.20
	5	Spitfire V	Bw3565	Self	Roadstead near La Harve	Shambles. Saw Hurricane EGF returning to France	1.40
	6	Spitfire V	Bw3565	Self		To Manston	.45
	6	Spitfire V	Bw3565	Self	Shipping patrol	Minesweepers, returned owing to bad visibility	.50

	6	Spitfire V	Bw3565	Self	From Manston	.45
	16	Spitfire V	Gw3383	Self	Fighter sweep	1.25
	17	Spitfire V	H	Self	A.A. exercise	.20
	17	Spitfire V	H	Self	Army co-op.	.05
	18	Spitfire V	Ww3852	Self	To Manston	.45
	18	Spitfire V	Ww3852	Self	Minesweeper patrol	1.15
	18	Spitfire V	Ww3852	Self	From Manston to Westhampnett	.30
	19	Spitfire V	Bw3565	Self	Fours drill and camera gun	1.00
	20	Spitfire V	Bw3565	Self	Submarine patrol	1.45
	22	Spitfire V	H	Self	Air test Used emergency CO ₂ bottle. It worked!	.20
	24	Spitfire V	Ww3852	Self	Night flying	.30
	25	Spitfire V	Ww3854	Self	To Merston	.05
	26	Spitfire V	Vw3654	Self	Fours drill	.55
	29	Spitfire V	Ww3854	Self	Squadron formation	1.05
1942						
Jan	3	Spitfire VB	Ww3852	Self	Patrol over St. Caths.	.30
	24	Spitfire V	Vw3654	Self	Convoy patrol	1.15
	25	Spitfire	Vw3654	Self	Wing feint	1.25
	28	"	Naa931	Self	Air firing	.25
	29	"	Vw3654	Self	Local flying	.50
	29	"	Vw3654	Self	Local flying	.40
	31	"	Vw3654	Self	Squadron formation	1.05
Feb	6	Spitfire	Vw3654	Self	Cannon test	.15
	6	"	Vw3654	Self	Cannon test	.10
	8	Spitfire	Vw3654	Self	Air firing	.20
	8	"	Q	Self	Local formation	.35

On 20th September 41 Squadron formed part of the close escort wing to Blenheims bombing the Rouen shipyards, with isolated action against an Me 109 as described above in the logbook; the squadron history suggests that the lone Me 109 in question climbed up to the bombers¹⁰, rather than diving. Next day the squadron was involved in the escort wing to Blenheims attacking Gosnay power station, and suffered many attacks by small numbers of Me 109s and several actions ensued, but not including Buchanan¹⁰. For the rest of September 1941 Buchanan experienced only one more operation over France, apart from a few scramble/patrol sorties: only five Spitfires from 41 Squadron took part in

the escort of bombers attacking Amiens marshalling yards¹⁰. During October missions flown (as indicated in Buchanan's logbook) resulted in little of interest, many being ended early due to unsuitable weather, or turning out uneventful if completed; the four-man rhuarb on 27th against shipping in the Caen canal including a merchant vessel, a tug and several barges was exciting, with many hits observed but no further results¹⁰. November 1941 for Buchanan began with a wing-strength low level ramrod mission escorting Hurricane bombers planned to attack an ammunition dump southeast of Dieppe; low cloud led to scattering of the various units, no success against any ground targets and the loss of two escort and one Hurricane pilots¹⁰. Even 41 Squadron which did not penetrate inland¹⁰ remarked on the anti-aircraft fire received, as also noted by P/O Buchanan in his logbook. On the 18th Buchanan was one of eight pilots to sink an ocean-going tug off Fécamp¹⁰ during a rhuarb mission. His next action was three days later, when two of them attacked a distillery and enjoyed the sight of four German soldiers fleeing a building in undue haste¹⁰; in his logbook this one was noted as a 'good show'. Other missions in the logbook during November were essentially uneventful or shortened by the weather. The rather strange logbook entry for the 24th reflects 41 Squadron forming part of the air cover for returning commandoes from a raid on a German battery at Houlgate, Normandy (on the coast, ca. 16 km east of Sword Beach of later Invasion fame); the raid was not successful in achieving its objectives but suffered no loss¹⁰.

December 1941 began for Buchanan with an operation on the 5th which he described in his logbook as a 'shambles'. This was a low level ramrod, aimed at two groups of German coastal shipping in the Le Havre region, comprising two squadrons of Hurri-bombers each with a Spitfire escort, one being 41 Squadron¹⁰. Confusion reigned as the RAF formations became split up and various ships, larger and small, were attacked, Luftwaffe fighters interfering only on a limited scale; George was part of a 41 Squadron section which observed a lone Hurricane heading directly for France and though they tried to redirect it homewards, it persisted and may well have been a captured aircraft used as a decoy for two Me 109s seen above it¹⁰. In the first part of December two uneventful patrols over British minesweepers were interspersed by a sweep noted in Buchanan's logbook, but no mention is made thereof in the squadron history, and this was the day of their move to Westhampnett satellite airfield¹⁰. An unusual mission on 20th December completed operations for George for the month, with an anti-submarine patrol over the Channel¹⁰, surely an unusual use of Spitfires. Three uneventful missions in January 1942 completed P/O Buchanan's flying with 41 Squadron. On the 9th February, 41 squadron C/O Squadron Leader Piet Hugo signed off in his logbook, rating him 'average' in proficiency as a pilot. His total flying hours by then amounted to 307.40 hours of which 58.20 hours were operational.

Into the vortex that was Malta: the islands' peak period of action, March to May 1942

His next assignment was to be a completely different kettle of fish: the besieged island of Malta, one of the hottest wartime postings in terms of continuous bombing raids day and night and where almost every take-off led to combat of some kind. Life was about to change drastically for

George Buchanan, and this was also to be the apogee of his wartime career as a fighter pilot. There would be no more return from operations over the Channel to a civilised mess and quiet countryside; Malta suffered multiple day and night raids and alerts, massed anti-aircraft fire and abundant aerial combat overhead, daily. While the UK is a relatively small island which suffered widespread aerial combat and bombing during the Blitz and preceding Battle of Britain, Malta was tiny, the main island, Malta itself which was by far the main part attacked by the Germans and Italians, measured only 28 km by 13 km¹. Gozo was much smaller and also inhabited, with several much smaller uninhabited islets. Food was in very short supply and largely rationed (or very expensive via the black market), and there was nowhere to go to escape the intensity of the attack on the island(s). Stomach ailments and fevers were another common factor to endure. However, combat opportunities abounded and for the aggressive fighter pilot this was a theatre like no other^{1, 2}.

The months March, April and May 1942 reflected the worst of Malta's ordeal^{1, 2} and Buchanan had arrived near the beginning of that period and lasted almost till its end. April was by far the worst month: estimated bomb tonnage dropped on Malta amounted to 6727 tons out of a total estimate of 9827 tons for the three months². In April, 170 day alerts were matched by 182 night-time alerts; the raids killed 339 civilians and wounded another 550, with 208 service personnel also losing their lives; 3547 bomber incursions over the tiny island were recorded by its defenders². Never mind casualties suffered by Malta's fighters in the air (8 Spitfire and 7 Hurricane pilots killed in April), during this same month at least 22 Spitfires (there were a number of deliveries in the first half of 1942) and 19 Hurricanes were destroyed on the ground by bombing and strafing, with at least 100 killed amongst personnel manning the anti-aircraft guns². The three airfields of Malta and Valetta harbour remained the major targets of the German bombardment. It was into this cauldron of almost continuous attack round the clock, that George Buchanan had been plunged, and where he was to shine.

By now a Flying Officer, Buchanan was dispatched from Plymouth in the UK to Malta by Sunderland flying boat on 18.02.1942, where he joined 249 Squadron (and served with them from 21st February till 22nd May 1942), still flying Hurricane IIs, and operating out of Takali airfield. Some details of the flight from the UK, via Gibraltar where a two day stop-over gave some relief to tired crew and passengers, and on to Malta are shown in the logbook.

Transfer from UK to Malta, via Gibraltar

1942

Feb 18 Sunderland SE-J F/Lt Boccock P/O Kitto Left Plymouth for Gibraltar Uneventful except that port engines nearly packed off coast of Portugal. Took controls for 20 mins. Found them very heavy otherwise O.K. All hours as a

	passenger	10.30
20	Sunderland SE-J F/Lt Boccock S/Ldr Philson-Young Gibraltar to Malta Uneventful. Slept most of the time All hours as passenger	11.00

Within a few days, Buchanan had two short flights to familiarise himself with the tropical Hurricanes and flew one mission, on 24th February, searching for a missing pilot over the sea. On 7th March, at last, the first fifteen fighter (as opposed to a few reconnaissance versions) Spitfires to reach Malta arrived; the new aircraft were assigned to 249 Squadron which enjoyed a surfeit of pilots, encompassing those who had flown the Spitfires in from the aircraft carrier *Eagle* and those already on the island, like Buchanan. This explains the pattern of his Malta operations, with several gaps of multiple days in between intense periods of combat flying, as is evident from the logbook, shown in the table below. Another reason for this was that there were also more squadrons than available Spitfires to adequately equip them and they thus took turns in operating the small numbers of serviceable Spitfires generally available². As an experienced Spitfire pilot from the UK, Buchanan was amongst those carrying out air and cannon tests on the precious newly arrived aircraft, and once Spitfire operations began on 10th March, he flew three operations on this day: one was to escort in a Maryland, no doubt having been out on reconnaissance, in its vulnerable approach and landing on a base potentially subject to attack at any time (logbook); the next was in the late afternoon when radar revealed about 40 incoming enemy aircraft – Ju 88's escorted by numerous Me 109s – 4 Spitfires and 11 Hurricanes took off to engage, damaging two of the bombers one of which crashed-landed in Sicily, but one Spitfire was shot down, its pilot died due to parachute malfunction^{1, 2}. George Buchanan was flying one of the four Spitfires engaged, and managed to make two attacks on the Ju 88s, seeing hits on the one, in this his first combat experience over the island. The pilot of the Spitfire lost was initially thought, erroneously, to have been shot down into the sea and Buchanan went up shortly after landing as part of the three Spitfires escorting a RAF high speed launch sent to retrieve him². He was attacked by several Me 109s, his aircraft damaged and himself lightly wounded, having to make a crash-landing at base (Takali). Thus ended his first day of real action at Malta: three missions, two combats, one Ju 88 hit and himself wounded and crash-landed; quite a beginning! He spent four days in hospital as a result followed by 9 days off to get over this experience (logbook below).

Once recovered, Buchanan was in one of four Spitfires accompanied by six Hurricanes (these RAF numbers were typical of operations over Malta at this period) to tackle 24 Ju 88s, 18 Ju 87s, and Me 109 escorts attacking the ships of a recently arrived small convoy in Valetta harbour on 26th March; three of the Spitfires fired at the Ju 88s, four being claimed damaged before the inevitable Me 109s were upon them and forced them away (one damaged Ju 88 crash-landed in Sicily with a dead gunner)². That Buchanan's aircraft suffered from inoperable gun sights and radio on two successive missions in late March (logbook) reflects on the difficult conditions at continually bombed bases where the maintenance crews did the best they could under very difficult conditions and shortages of virtually everything.

249 Squadron, Takali, Malta, February – March 1942		
Feb 24	Hurricane II GN-C Self Experience on type	.10
24	Hurricane II GN-C Self Experience on type	.45

	24	Hurricane II	GN-C	Self	Sea-search for P/O Tedford, USA	Unsuccessful		.40
Mar	9	Spitfire VB	J334	Self	Air test and cannon test	Tropical Spitfires, first on Malta island		.20
	10	"	A262	Self	Escort for Maryland			.35
	10	"	A262	Self	Scramble	⚡ Attacked Ju 88 head on. Observed no results. Attacked another Ju 88 quarter astern. Observed hits on fuselage. (1 damaged)		.45
	10	"	A262	Self	Scramble, escort motor launch	⊖ Attacked by three 109F's. Received hits in fuselage and stb. wing. Crash landed on 'drome. 28 shrapnel wounds received in legs. Very slight. Spent four days in hospital. On duty 24 th		.40
	24	"	F850	Self	Scramble			.30
	26	"	M344	Self	Scramble	Reflector sight U/S, squirted at Ju 88 and Me 109F.		.25
	28	"	L	Self	Scramble	Prevented one u 88 from coming in, then R/T packed up. Saw another Ju 88. No go.		.35

On 1st April Buchanan had a busy day, it being 249 Squadron's turn to fly the available Spitfires². On his first mission soon after lunchtime, Buchanan reported that the six Spitfires met a returning reconnaissance Spitfire from Sicily, encountered also some Me 109s and that P/O Plagis, a fellow Rhodesian on 249 Squadron, shot one down (² and logbook). Plagis' victim was a 13 victory ace who went missing in the sea, and was one of four Me 109s on a reconnaissance². Buchanan's next assignment was after teatime when four 249 Squadron Spitfires and a Hurricane intercepted a Dornier 24 floatplane searching for the missing German ace, and became involved with the Me 109 escort who lost one of their number². Although, as noted in the logbook, there were two claims for Me 109s and two more for damaged German fighters, including one by Buchanan himself, only the one loss is recorded in Luftwaffe records. In the logbook Buchanan also records his being boxed in by three of the Messerschmitts before being able to evade their attentions. As the 249 Spitfires were making their way back, the last daylight raid of this very busy day was detected and seven Hurricanes were scrambled to cover their landings, with five 249 Squadron Spitfires going up about half an hour later². Amongst the latter was Buchanan once more, on his third mission of the day. A large formation of over fifty Ju 87s, some Ju 88s and numerous escorting Me 109s was encountered, their attacks aimed as usual at the air bases on Malta, another Ju 87 formation going for the harbour². With the twelve RAF fighters becoming involved with the big Stuka formation, an intense combat began in which five Stukas were claimed shot down, five more as probables and three damaged, as against two actually lost and one more damaged with a wounded pilot². This was typical of large scale actions against Stukas, and very likely the three aircraft actually hit were fired upon by multiple claimants; the Ju 87s were very slow but also rather tough aircraft and didn't fall out of the sky that easily despite being vulnerable. In a complex whirling battle involving many aircraft, each pilot opening fire only had mere seconds to observe what happened to his intended victim and to watch the sky around him. Each pilot of course was convinced that he alone had shot a particular aircraft down, but it was seldom a lone effort. Buchanan, while claiming to have destroyed one of the Junkers in his logbook, was only awarded a probable; his note on the gunner returning fire right to

the end fits either of the Ju 87s actually lost, the gunner being killed in each case (logbook and ²). While there can be no doubt from such a detail noted by George Buchanan, that he did fire at and presumably hit the Stuka repeatedly, one also has to assume that he attacked it once it had already been hit by other RAF fighters. There is no dishonesty in any of this so-called over-claiming, it is endemic to high intensity aerial combat. One of the Spitfires was damaged during this action but the most amazing escape was that of Franz Pilz of II/JG 53 who on a low level strafing run against anti-aircraft guns on Luqa airfield, hit one of the many stone walls dividing the fields on Malta with his tailwheel and ploughed into the ground at full speed, surviving this high speed inadvertent belly landing virtually uninjured and with his aircraft remarkably intact^{1, 2}. One more mission on 6th April 1942 recorded 'no excitement' in Buchanan's logbook.

249 Squadron, Takali, Malta, early April 1942

Apr	1	Tr Spitfire	T	Self	Escorting P.R.U. Spitfire in from Sicily	Met 109's, Plagis got one.	.35
	1	"	T	Self	Intercepting float plane and escort	☠ Plagis and Hesselyn ea. 109. S/L Grant and self damaged 109 each. Trapped between three 109s. Managed to evade them.	.35
	1	"	T	Self	Intercepted Ju 87 raid	☠ Destroyed Ju 87. We're kept down at 6,000 ft by 109s so got 87's after they had bombed. 5 Spits. got 5 '87's. Rear gunner fired right to the end.	.40
	6	"	K	Self	Escorted Hurricane coming from M.E.	No excitement	.20
	10	"	W	Self	Scramble, investigate X raid, 74+	☠ Met 109's before bombers. Squirted 15 sec. burst at 109F. Confirmed later by ground personnel and ops. Pilot bailed out. Now in hospital. Signature of Me 109F pilot (<i>Hermann Neuhoff Lt.</i>) Said to have 38 to his credit. Iron Cross 1 st and 2 nd class and German X Gold. (forgot to enter time flown, also excluded from page total)	

On Friday 10th April, the main raid on Malta came in at about quarter to six in the evening, mounted by an estimated two *Gruppen* of Ju 88s and one of Ju 87s along with the usual Me 109 escort, attacking various targets, mainly the airfields and harbour as always; they were opposed by 12 Hurricanes as well as 4 Spitfires of 249 Squadron, one flown by George Buchanan². While some of the Spitfires attacked a part of the Ju 88s, F/O Buchanan saw a Me 109 attacking a Hurricane below, and dived down to help, firing at long range at the Me 109 just pulling up from firing at the Hurricane². He observed the Me 109 being hit, bursting into flames and the pilot bailing out and was credited with its destruction². The German pilot involved (Lt. Hermann Neuhoff, newly appointed *Staffelkapitän* of 6/JG 53) survived, albeit injured but not seriously, and provided a post-war account of the battle in the JG 53 history³, presumably influenced strongly by the report of his being shot down. The relevant official *Luftwaffe* loss report also survived the war and in the same history volume it recorded that Neuhoff led two *Schwarms* (4-plane finger-four

formations) in a free chase over Malta and was shot down over Luqa in flames by one of his own Me 109s and no bail-out was seen³. In his account of proceedings years later, Neuhoff subscribed to this view, and noted that the second pair in his leading *Schwarm* vanished at short notice and their place was taken by three Spitfires, and that as he shot at a Hurricane in front of him, his aircraft was hit by Lt. Schöw who reported his own first victory³ (Neuhoff makes a small error here; Schöw actually had four victories to his credit at that stage^{3, 4}). He stayed in his burning Me 109 trying to get out to sea intending to bail out there with the realistic hope of rescue by the German air-sea services which were quite efficient; as he did this he also took the wise precaution of getting rid of the cockpit canopy and undoing his straps, and when his aircraft exploded at about 8000 feet he was thrown out of the wreck and managed to parachute safely down near Luqa, the chute only opening at about 1200 feet, and this was thus not seen by his much higher flying comrades³.

Discussion of what might have ensued in the loss of Neuhoff

This discussion is based largely on accounts of the event provided in standard histories of the air war over Malta^{1, 2, 11, 12}. In these various books, this event is detailed with three rival claimants to shooting Neuhoff down. George Buchanan himself is quoted as having fired at long range and to have been surprised when the Me 109 burst into flames – but no definitive source of this information is given². From his logbook, Buchanan makes clear that he in fact fired a single 15 second burst at the Me 109 – this is an exceedingly long burst and equivalent to using up almost all his ammunition in a single, prolonged burst; from speed differentials (Buchanan was diving down onto Neuhoff's Me 109 which had just pulled up after firing at a Hurricane) one can assume a closing speed of ca. 26 m/sec for Buchanan's Spitfire – in 15 seconds of firing thus he would have got about 400 m closer to the Me 109. No pilot at that time would have opened fire at much beyond about 400 m – that would have been considered long range, 250 m being the norm for opening fire. Thus while his opening fire at long range may not have had any or much effect, by the time he closed right in at the end of his 15 second burst, the effects would have been devastating on the Me 109. From the logbook it is unclear what model of Spitfire Buchanan was flying on this mission, but it was most likely a Spitfire VB (which would have given him a total firing time of ca. 18 seconds for the machine guns but only ca. 6 seconds for the cannons^{15, 16}, assuming a standard load of ammunition). The much more lethal cannon rounds would thus presumably have been used up before the range closed that much, but the machine gun ammunition from very close range would most likely relatively easily have set Neuhoff's engine alight, especially through hitting either oil tank or hydraulic fluid tank, or piping carrying these fluids and fuel within the engine area. Effective armour protection of the Me 109 F fuel tank probably protected that from Buchanan's machine gun fire.

The second claimant was Flight Sgt. Horricks of 185 Hurricane squadron; clearly from the various accounts of his experience, he attacked the Me 109 he claimed at a lower level and without any other aircraft involved, German or RAF in close proximity. The lone Me 109 had presumably been detached from its fellows and/or was damaged already. He reported the Me 109 as exploding and bursting into flame (one would have expected the reverse, as once it has exploded it's likely to break up) and followed the remnants down to sea level. He also saw the pilot bail out (as did Buchanan from a higher level). It is clear from Neuhoff's own reports that he was preparing to get out of an already burning Me 109 and that when it did indeed explode he was thrown out, fortunately with his cockpit hood already gone and straps undone³ – otherwise he would have likely perished as the Me 109's main fuel tank was underneath and behind the pilot's seat. The explosion could have logically only come from this tank going up, presumably when Horricks made his 4 second burst of cannon fire during his attack on it; a World War 2 fighter often would have needed a longer burst or more than one burst for it to explode like that. Buchanan's fire had probably already set the engine alight which contained enough fuel and many gallons of oil, so it would burn but not send the entire plane up nor yet seriously burn the pilot.

The third 'claimant', although an inadvertent one, was *Leutnant* Schöw, a German pilot who had been in action since mid-1941 and had already claimed 4 victories (3 Russians and one Malta Hurricane)^{3, 4} and was thus no novice to have dumbly just attacked one of his fellow Me 109s (which looked from behind rather different to a Spitfire – radically different wing shapes and Neuhoff had just pulled up from attacking a Hurricane thereby displaying his wing shape to any pilot coming at him from above and behind). He did however admit to having fired on a Me 109 by mistake. The German fighters were escorting large bomber formations and encompassed Me 109s from all three *Gruppen* of JG 53³. Standard German operating procedure would have involved their fighters forming a close escort, one further removed (normally above and behind the close escort/bombers) and then a fighter sweep in the area or alternatively a higher top cover, even further back and higher. The raid was opposed by 12 Hurricanes and 4 Spitfires (Buchanan and three others from 249 Squadron). The latter type almost always operated above the Hurricanes with the much better altitude performance for the Spitfires. Buchanan describes diving out of the sun onto a Me 109 pulling up from shooting at a Hurricane, while another 249 Squadron pilot had gone for some of the bombers. The fact that Buchanan only mentioned attacking a Me 109 (itself attacking some Hurricanes) while one at least of his three colleagues went for the bombers, implies that Buchanan's Me 109 was from the more remote escort formation (close escort would likely have been right close to the bombers). If this was the case, then the German top cover would have come down on the attacking Spitfires and Schöw presumably opened fire on one of the British fighters – Buchanan – if he fired while Buchanan was closing in to short range with his excessive 15 second burst on the Me 109 of Neuhoff, then Schöw could easily have also hit (or thought he had hit) Neuhoff's 109 while actually aiming at Buchanan's Spitfire. He might also have actually missed the other Me 109 but seeing his tracer rounds going off in that direction and noting the effect of Buchanan's now close and devastating fire on Neuhoff's aircraft could have easily gained the impression that he had shot down his colleague. In the rapid confusion of fighting at high

speed in three dimensions pilots tended to watch their own gunfire and intended targets to the exclusion or lesser attention on other aircraft around them.

In conclusion, we suggest that Buchanan was the first to shoot at Neuhoff, from long range, but he continued firing as he closed fast with the Me 109, almost certainly doing it some major harm. While this was taking place over some 15 seconds, top cover Me 109 pilot Werner Schöw of 1/JG 53 dived down rapidly and fired at Neuhoff's attacker. Either he also hit Neuhoff's Me 109 and did further damage to it, or didn't actually do so, but gained this impression. Either way, down went the badly damaged Me 109 with Neuhoff in it, who in his own words headed for the sea away from the island, to enable a bail out there and inferred rescue by Axis floatplanes or flying boats. As he did this with a lame aircraft, burning nicely, Horricks saw the lone Me 109 and attacked it lower down and opened fire with a relatively short burst of 4 seconds at presumably a normal range (this is not given in the accounts anyway) and the already burning aircraft blew up, almost certainly when its main fuel tank was hit – Horricks may also have missed and the aircraft, on fire, could have blown up anyway once the main tank was reached by the flames from the engine. Thus while it might be true to say that Neuhoff was in reality hit (and 'shot down') by all three, Buchanan first, then Schöw and finally Horricks, the fatal damage was most probably that inflicted by Buchanan as he closed right in during his very prolonged 15 second firing burst. He thus deserves the victory, as given in most sources – the other two may or may not have hit the Me 109, and even if they did, they were hitting a machine already going down and on fire. After tangling with the first attacker (cf., Buchanan) Neuhoff in his own words³ stated quite clearly that he headed for the sea intending to bail out there in the hope of German rescue – in other words his Me 109 was already basically finished.

This is why over-claiming of victories was endemic in World War 2 air combat – few people were lying or claiming things that were vastly exaggerated, and a lame duck, already damaged, attracted enemy fighters like moths to a flame, because they were flying mostly lower and slower and thus caught the eye of anyone in the vicinity. Often the multiple attackers didn't even consciously observe the other attackers. In the case of Neuhoff, each of the attackers, Buchanan, Horricks and the unfortunate Schöw, saw actual events clearly and believed what they thought they had done and quite reasonably so. Our hypothesis of what may actually have happened, with individual events in rapid succession to each other, is in fact based on each of the three accounts. George Buchanan, as based on his logbook copied here, had enjoyed very little gunnery training and none is recorded in the logbook until he was flying active operations with 41 Squadron over the Channel and northern France. His only victory claim before coming to Malta had been made at very short range and the destructive nature of such fire must have impressed itself upon him, as the downed aircraft broke apart under his section leader and his own attacks. Once arrived on Malta, Buchanan recorded several ineffective squirts at enemy aircraft and damage to a Ju 88 and an Me 109. The one combat where he was sure he had downed his opponent, the Ju 87 claimed on 1st April 1942 was downgraded to a probable. Seeing as he clearly observed the gunner in this obviously doomed aircraft

firing to the end (and bearing in mind the attack was made at 6000 ft and lower) it must have been exceedingly frustrating to have this claim classified as a probable. Far more logical would have been a classification as a shared victory, with Buchanan's attack being on an aircraft already damaged at a higher level. Presumably the authorities had intelligence (radio intercepts etc.) to indicate that actual Ju 87 losses to the Germans were significantly fewer than total RAF claims and had to thus adjust as many of the claims made as possible.



It is thus in a way ironic that George Buchanan's apparent victory over Neumann, a highly experienced and talented ace fighter pilot, probably owed a lot (or at least something) to his limited earlier combat experiences and especially those recently undergone over Malta. These combat experiences together would have frustrated him while also giving a clear lesson that to achieve a confirmed victory, one had to get in really close, especially where shooting experience was relatively limited. His very first, shared success over France also made that clear. Buchanan had enough flying experience and combat hours to be able to function efficiently as a fighter pilot; even highly experienced experts like Neuhoff, had to place themselves at risk in order to get at their enemies and fire upon them. When Neuhoff thus attacked the lower flying Hurricanes he opened himself up to potential attack by the higher flying Spitfires of 249 Squadron, Buchanan included. However, in the *Luftwaffe's* standard combat philosophy, Neuhoff should have been protected by his own top cover of Me 109s of whom Schöw was one, and if Buchanan had been firing at the normal distance favoured by most RAF pilots to attack – 250 m – Schöw would have stood a good chance of shooting Buchanan down or at least getting him away from Neuhoff's aircraft. However, Buchanan's having closed right in to a ca. 50 m distance from Neuhoff protected him at least partly from Schöw's fire and this in fact may have actually hit Neuhoff. In ironic summary, thus, both Buchanan's dispatch of Neuhoff's Me 109 from very close range and his own survival against attack by Neuhoff's top cover, can be ascribed to Buchanan's relative lack of gunnery training. Such is war – despite all preparations, all experience and pre-operational planning, things often go awry and the unexpected can happen and often does. But it should be emphasised that Buchanan's closing in that close, whether by design and predicated by earlier experiences, or through excitement during combat, it was the action of a very brave man, as he thus exposed himself to considerable risk from debris detaching itself from the attacked Me 109.

George Buchanan's confidence would have been boosted by his success against Neuhoff, and the latter's signing of the logbook would have reinforced this feeling. Neuhoff recovered soon enough and spent the rest of the war in captivity; he died at the ripe old age of 87 in 2006¹³. For Buchanan, the intense battle over Malta continued, as shown in the logbook below. On 19th April, one source records there were no interceptions of the three raids that took place², but the logbook clearly records that Buchanan at least shot at one and its gunner ceased fire thereafter. His claim for a Ju 87 confirmed on 21st has no equivalency in the published sources which detail no losses of Stukas, and his first two claims in May also do not equate to any known losses². In Buchanan's combat against a Me 109 on 9th May, his claim was based on seeing the Messerschmitt diving away streaming glycol coolant but he lost sight of it against the sea as it dived down; while the logbook states that it was later confirmed,

it was classified officially as a probable². In his first mission on 10th May he was part of a large and confused battle with many German aircraft, including Stukas in which the RAF fighters claimed nine Ju 87s destroyed, with a further five probables and eight damaged; four Ju 87s were in fact lost and who was responsible for what damage in this context is impossible to determine². The fact that Buchanan and all the pilots on Malta made claims which are often difficult or impossible to tie in to specific German losses is no reflection on the pilots involved who could only record what they saw and remembered in a high speed three-dimensional contest during which their very survival was at stake and the adrenaline was running very high. His claim for a shared Me 109 on 14th May must also be seen in this context. On the 16th May Buchanan again closed to within 50 yards of an Italian fighter, and claimed another shot down, it last being seen at about 2000 ft and in a flat spin; one Reggiane Re 2001 was seriously damaged and force-landed at its base in Sicily; with two other claims for a damaged Italian fighter, Buchanan's claim for one destroyed must deserve all or the greatest credit for this success². George Buchanan's final operation over Malta was next day, the 17th, when he shot down a reconnaissance Ju 88 of 1(F)/122 which fell into the sea with no survivors from its crew; this time with only two intercepting fighters and a single intruder, clarity was obvious². The fact that he dispatched a large aircraft with only a 3 second burst of fire, again points to his having got very close before opening fire. Once more he bravely took on the risks of return fire from his victim as well as debris related to its demise.

249 Squadron, Takali, Malta, balance of April, and May 1942

	19	"	W1	Self	Scramble investigate X raid	☠ Damaged Ju 88, disabled rear gunner	1.10
	21	"	L2	Self	Scramble intercept E/A	Nothing doing	1.15
	21	"	L2	Self	Scramble intercept E/A	☠ Intercepted Ju 87s, attacked two, one Ju 87 confirmed.	1.20
	21	"	L1	Self	(nothing further)		
May	2	Spitfire 5C	G2	Self	Scramble X raid		.20
	2	Spitfire 5C	G2	Self	Scramble X raid	☠ 109 damaged.	1.00
	5	Spitfire 5C	E2	Self	Escorting P.R.U. Spitfire	Had a good squirt at 109 in climbing turn. Hesselyn also squirted at same 109. Later discovered it was damaged. Airman bailed out of bus and fractured skull.	.30
	9	Spitfire 5C	C15	Self	Scramble (new Spits. Battle of M.)	☠ Attacked 109F, later confirmed as destroyed.	.45
	9	"	C15	Self	Scramble: battle goes on		.25
	9	"	C15	Self	Scramble		.45
	10	"	C25	Self	Scramble: battle reaches climax	☠ Damaged badly 87. Squirted at 2 Me 109's. Spits smashed Ju 87 force completely	.40
	10	"	C25	Self	Scramble:		
	10	"	C25	Self	Scramble: } (2 bracketed together)	Collected 5 Spits from Luqa and mixed it with 5 Me 109's, had wizard battle.	

				Had a good two squirts, no obvious result.	.40
10	"	C25	Self	Scramble: No squirts	1.10
14	"	22	Self	Scramble: $\frac{1}{4}$  Intercepted Ju 88 over Luqa. Attacked 109 escort. Rolled over on my back and squirted at 109 coming towards me but below. Confirmed by ground personnel to go down streaming glycol, disappeared over Dinghli cliffs. May be shared by others. 3 other Spits. att. It.	1.15
15	"	22	Self	Scramble Intercepted Italian bombers and Macchi's. Was attacked by 8 Macchi's but managed to evade them	1.25
15	"	22	Self	Scramble Met fighter sweep	1.25
16	"	22	Self	Scramble (Italian fascia symbol) Self and F/Sgt Verral intercepted 12 Macchi 202's. Waded into them. 4 sec squirted at one. It spun down, last seen at 2000 ft in flat spin. Closed to 50 yards on another. Guns packed up. Wizard show. 1 confirmed	.55
16	"	22	Self	Cannon test	.10
17	"	22	Self	Scramble X raid  Went looking for 109s. Then the recco job turned up with 2 Me 109's. The 109s hopped it so shot down the Ju 88. 3 sec burst of cannon. Went down flaming. Crashed sea.	.50

Logbook signed off (not identified, presumably C/O) (only at end March 1942 did Buchanan sign off on that month but neither his flight commander nor the C/O did; no more sign-offs thereafter except the one here just before he left the island). Total flying hours then at 330.25 hours – operational hours over Malta = 20.30 hours.

The incomplete sign-offs in the logbook and a couple of places where Buchanan made incomplete entries (above in red in logbook sections) reflect the nature of combat over Malta, there was little time or interest in the niceties of administration and paperwork. Being now close to 200 hours on operational squadrons (260, 266, 41 and 249 Squadrons) George was tour-expired (see article on tour lengths on third author's webpage)¹⁴ and left Malta on 22nd May 1942, travelling as a passenger in a Hudson at night, to Gibraltar. On June 14th he left for the UK in another Hudson, landing as a passenger at Hendon after a second 11 hour flight. There was obviously no rush to get the tour-expired pilots home from Gibraltar, in contrast to their travel in the opposite direction.

George Buchanan was awarded a well-deserved DFC, gazetted on 5th June for his work at Malta, and thereafter saw out the war in training posts, and with the RAF Delegation staff in Washington, USA; he later completed an instructor's course, obviously with less enthusiasm, earning a rating of 'below average' as instructor⁶. He did not see operational flying again, which must have seriously frustrated him, and left the service as a Flight Lieutenant in June 1946⁶. Thereafter he returned to Northern Rhodesia (now Zambia) with his wife May, where he became a successful and innovative cattle farmer and raised a family, and after 22 years returned to South Africa where he passed away in 1973, his passing being at least partly related to his wartime experiences⁶, as happened to so many veterans who had been through the mill.

Sources, keyed to postscript numbers in the text

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- ⁸ www.rafmuseum.org.uk; online exhibitions on RAF training.
- ⁹ biltongbru.wixsite.com/ww2_saaf_heritage; excellent site with huge amount of information on SAAF.
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