

JABBERWOCK

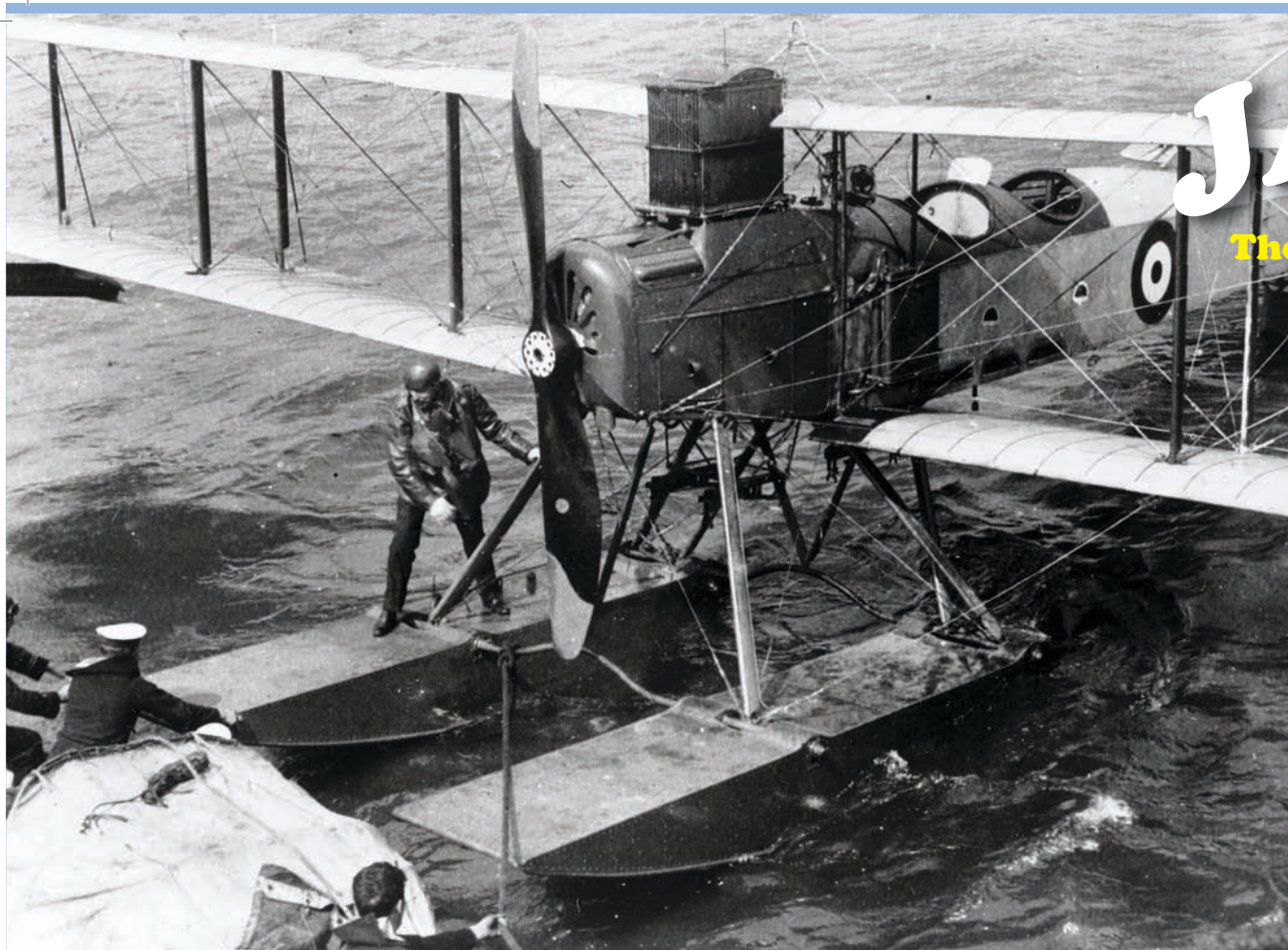
The Magazine of the Society of Friends
of the Fleet Air Arm Museum

IN THIS EDITION:

- *Memoirs of Captain Keith Leppard and Sqn Ldr Maurice Biggs*
- *Peter Twiss*
- *Christmas Lunch notice*
- *Hawker Sea Fury detail*
- *The first angled deck*
- *HMS Engadine at the Battle of Jutland*
- *Society Visit to the Meteorological Office*
- *Book Review - "Air War in the Mediterranean"*

PLUS:

All the usual features; news from the Museum, snippets from Council meetings, monthly talks programme, latest membership numbers...



No. 85
Published by The Society of Friends of the Fleet Air Arm Museum

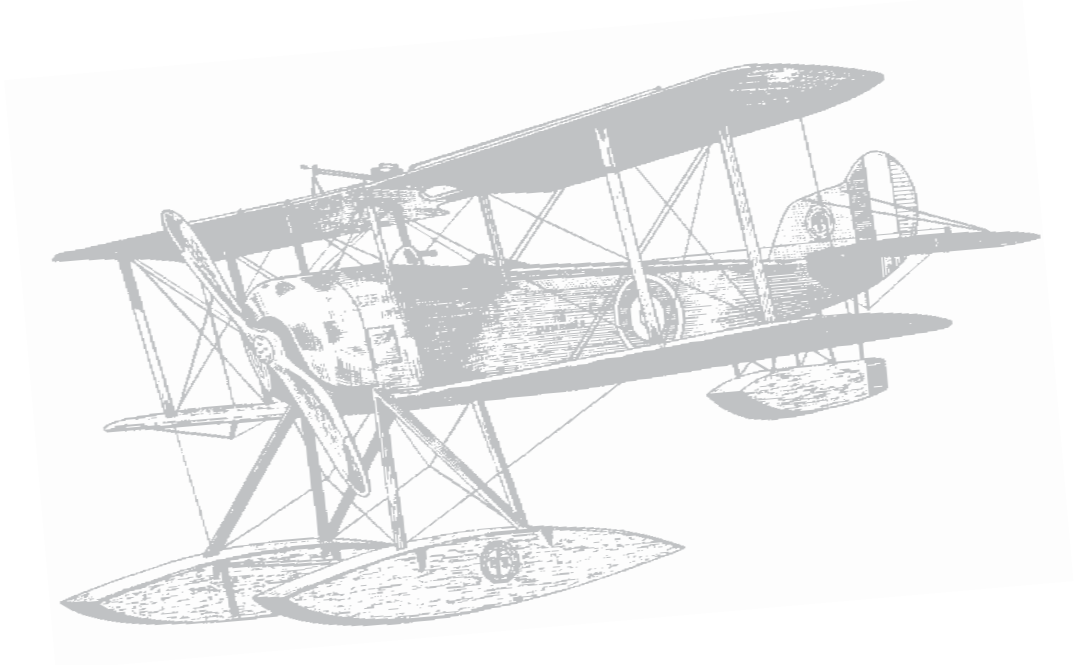
November 2016

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Published by The Society of Friends of the Fleet Air Arm Museum

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SOCIETY OF FRIENDS
FLEET AIR ARM
MUSEUM



Sunset - HMS Illustrious
copyright Derek Hyumson

Patron: Rear Admiral A R Rawbone CB, AFC, RN
President: Gordon Johnson
FLEET AIR ARM MUSEUM
RNAS Yeovilton
Somerset BA22 8HT
Telephone: 01935 840565
SOFFAAM email: fleetairarm.sof@nmrn.org.uk
SOFFAAM website: fleetairarmfriends.org.uk

Registered Charity No. 280725

The Society of Friends of the Fleet Air Arm Museum

Vice Presidents

Rear Admiral A R Rawbone CB, AFC, RN
F C Ott DSC BSc (Econ)
Lt Cdr Philip (Jan) Stuart RN
David Kinloch
Derek Moxley
Gerry Sheppard
Bill Reeks

Chairman

Richard Hufton
sof@fleetairarm.com

Vice Chairman

Graham Mottram
shalefan@btinternet.com

Secretary

Malcolm Smith
smalcolm355@outlook.com

Treasurer

Martin Turner
martinturner111@yahoo.co.uk

Membership Secretary

Robert Heath
8B Cecil Road
Weston-Super-Mare. BS23 2NQ
Mob: 07811 254955
soffaam.mem@gmail.com

Talks and Events Organiser

Rosanne Crowther
01935 822143
rosannecrowther678@btinternet.com

Editor

Malcolm Smith
T: 01935 478304, Mob: 07765 950806
5, St Michaels Close, Over Compton, Sherborne, DT9 4QR
smalcolm355@outlook.com

Admission

Members are admitted to the Museum free of charge, on production of a valid membership card. Members may be accompanied by up to three guests (one guest only for junior members) on any one visit, each at a reduced entrance fee, currently 50% of the standard price. Members are also allowed a 10% discount on goods purchased from the shop.

Note: These concessions are provided at the discretion of the General Manager of the Museum and could be removed at any time.

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Reprints

Reprints of Jabberwock articles can be supplied. See our website at fleetairarmfriends.org.uk for the request procedure.

Contributions

We are extremely grateful to all those who contribute articles and material to the magazine, even though it is not always possible to use every item!

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Cover Pictures - Floatplanes of the Jutland era

The two aircraft embarked in HMS Engadine at the Battle:
Main picture: Short 184
Below: Sopwith Baby

Pictures courtesy of the National Museum of the Royal Navy

EDITORIAL

In this issue, we remind our readers of the sad news of the deaths of Captain Keith Leppard and Sqn Ldr Maurice Biggs, both of whom had been Life Vice Presidents of the Society. Maurice additionally was the Chairman and Editor of Jabberwock for many years. For the general public, Captain Leppard should perhaps best be remembered for his successful efforts in 1974, when he was the Director of Public Relations (RN) in persuading the Admiralty to agree to the making of the television series "Sailor", a fly-on-the-wall documentary about life on board HMS *Ark Royal*. He also wrote the proposal that persuaded the Admiralty to establish the Fleet Air Arm Museum.

Readers will see from the Membership page that the Society has experienced a surge in new members, so that the total membership now is 1063. All these new members are most welcome and we look forward to seeing some of them at our monthly talks. We carry a letter on the Correspondence page from a potential member, who raises the possibility of introducing a family membership of the Society.

We are fortunate to have some eminent military historians among our members and this issue carries a lengthy extract by Ian Burns on the role of HMS *Engadine* in the Battle of Jutland. Council member Chris Shores has recently completed his magisterial trilogy on the history of the Air War in the Mediterranean and we carry a review of this publication, which will provide a fruitful source to all future historians of those protracted battles.

Page 16 carries details of the monthly talks programme into the New Year and readers will see that the January talk is by Council member and previous Director of the FAAM, Graham Mottram, on the Seafire aircraft. In February, we will be hearing from Cobham Hall Curator, Dave Morris, on the progress in the restoration of the Barracuda. This will provide an opportunity to visit the aircraft to see how far the restoration has progressed.

In "Snippets from Council Meetings" we describe recent changes in the make-up of our Council, with four members standing down to make way for four others. We have also taken the opportunity to agree minor changes to our Constitution to clarify the role of all Council members as Trustees.

We carry news of the Christmas lunch, which, for reasons beyond our control, will be celebrated in January 2017. We hope that the later date will not deter members from joining us on what is always an enjoyable event. Finally, with the end of the year approaching, we take this opportunity to wish all our readers a Merry Christmas and a Happy New Year!



LETTERS TO THE EDITOR

Dear Malcolm,

It was a surprise but delight to see the picture of TSR2 in the



Another view of the TSR2 at Cosford. One of its Olympus engines is alongside. The development of these engines made possible the power plants for Concorde

August edition of Jabberwock but how ironic that it should appear in a 'naval' publication. Having worked on naval carrier jet designs within the aerodynamics office of Supermarine at Hursley Park in the 1950s, my father then joined the TSR2 Head-Up display design team at Weybridge. While everybody involved in the futuristic project was moving heaven and earth to bring about its service introduction little did they know that Mountbatten on behalf of the Navy was actively campaigning against it. Not widely known is that the second test pilot scheduled to fly TSR2 after

Roland Beamont was former FAA pilot David Morgan who had a reputation for clearing the chalets at Farnborough whenever he was displaying. The best aircraft the RAF never had, the Cosford example should really be transferred on free loan to the Brooklands Museum - its spiritual home.

**Yours sincerely,
Chris Penney**

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Malcolm

Re the caption for the Avro Lincoln on page 29, the Lincoln was used twice in anger: during the Mau Mau Uprising in Kenya and also during the Malaysian emergency, both of these occurring in the 1950s, but then I'm sure you're aware of this.

Tony Jupp

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Hi Malcolm,

Thank you for another interesting edition of Jabberwock. I was particularly interested in the Jutland coverage – the photo of Trewin looks to be wonderful, perhaps we could reproduce it in the next Jabberwock? Jim

Humberstone has done a fine job of illustrating the flight of the Short. Necessarily both articles were brief. I wonder if there is any interest in a fuller account of Engadine at Jutland? Just in case there is, I have attached an edited version of the text from my book "The RNAS and the Birth of the Aircraft Carrier 1914-1918" (Oh, but I hate that title!) published by Fonthill Media in 2014.

**Best regards,
Ian Burns**

By the Editor: An edited version of Ian's account appears on page 31

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Dear Malcolm,

I have just come in to see an episode of "Flog It" recorded in the Museum. As I recall, when the Museum was being set up we only had three aircraft, the Martlet, the Shagbat (Walrus) and the Seafire which had been grounded due to lack of spares. During the programme we saw the Martlet being restored by gently stripping back the paint schemes. Presumably that is the same Martlet that we used to wheel about trying to find the best way to display three aircraft in 11 Hangar. Also, there was a vignette of 815 Squadron. During that bit, it was stated that in 1958 the Squadron had helicopters - not so!

I was on 814 Squadron (my first front liner) at Culdrose. There

were three hangars to the south of the control tower, housing 814, 815 and 825 Squadrons, all equipped with Gannet Mk4s. We of 814 were the Flying Tigers, but we were not allowed to decorate ours with the Esso Tiger. 815 featured the Guinness harp on their vertical fins on the tailplanes. 825 were the Spangles (a sweet) and they featured a sort of rainbow decoration to reflect the different colours of the sweets.

Incidentally, when the Scimitar was donated, it was put through the Paint Shop. By one of those odd coincidences, having been involved at the start of the Museum, I was in temporary charge of the Paint Shop during a retard leave period (despite being an armourer Mechanician!). I don't know what became of the parachute and dinghy pack subsequently, but at a distance of more than 50 years, I can admit that the dinghy pack contained a pile of old rags and newspapers when it left for the Museum!

**Regards
Dave Rowland
Barnstaple**

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Dear Malcolm

I am writing about the letter you received, and published in the May No 83 Jabberwock, from Willem D. du Plooi, about a WW1 Victory Medal his father had found in the loot recovered from a thief in South Africa. The medal was awarded to

a Captain G. Llewellyn Davies, who was a POW in Holzminden camp in Germany 1917/18, and may have served in either the RNAS or RFC.

It so happens that my father-in-law (sadly long gone) ex RFC, was a POW in Holzminden at that time. My brother-in-law has a number of papers related to those times and is searching to see if we can find any trace of Llewellyn Davies, and if we can perhaps we can have the medal returned to the family.

I greatly enjoy Jabberwock.

**Best Wishes,
Rear Admiral John Roberts**

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Dear Malcolm

I do not like loose ends and am at last able to draw a line under the business of slapping paint on HMS Cumberland.

Thank you for sending me the details of Sam Watson, I had a telephone conversation with him and there is no doubt that I was totally wrong in saying that the ship had been engaged in cadet training. I apologised to him and we parted friends. Subsequently I tracked down an old colleague who was in a sister ship to mine at the time but escaped the round up for the painting party, he is now living in Australia and certainly recalls that it was Cumberland on the mud. Thank you for producing one excellent Jabberwock after another and long may it continue,

**Yours Sincerely,
Jan Stuart
Crewkerne**

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Dear Sir/Madam,

I am interested in applying for SOFFAAM membership for my husband, my two young children and me. I have printed off four membership forms, but, before I start filling them in, I just wanted to clarify a couple of points, if that is all right.

Do I have to fill in a separate standing order form for each member of the family, even though the bank standing order details will be the same for each application, or can I fill in the right-hand side of every form, but just fill in the standing order form once, for £40 (if I have done my maths correctly)? And secondly, can I still buy junior membership for my boys, although they are six and three (your form gives the age as being between 14 and 18)? They are very keen to become members in their own right, despite their young ages.

I look forward to hearing from you.

**Regards,
Georgie Hookings**

By the Editor: This is one of several enquiries we have received about the possibility of family membership of the Society. The matter will be discussed at the next Council meeting in December.

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SNIPPETS FROM COUNCIL MEETINGS

From the September Meeting:

• *The General Manager gave the following report:*

Health and Safety Update: On the 7th of June, the Museum was subject to a routine Health and Safety Audit with Neville Gardner, NMRN Health and Safety Advisor. I am delighted to report that the Museum was upgraded to a 5* rating following this recent audit. The Museum has made significant progress and completed a number of key actions in order to obtain this rating. The key work is now to maintain our standards and rating over the coming year.

Visitor Numbers: Visitor numbers have fluctuated over the last few months in comparison with last year. Since the 1st of April 2016, overall visitor numbers have been down by 6%. There are several factors for this, although the primary reason in my opinion is the weather. I would expect our annual footfall for 17/18 to now be in the region of 106,000 this current year.

Exhibitions: The Museum was proud to display a small temporary exhibition dedicated to the career of Capt. Eric Brown, built around the Vampire (which was moved to Hall 4). The exhibition was launched to mark and support the commemorative event held on base

for Capt. Brown on Thursday 21 July. The Museum was delighted to unveil ZA 298 as part of a new display on 4 August 2016. A small media launch was held involving former pilots and others involved in service with ZA 298. The airframe is being exhibited in Hall 4 which we hope will form part of a bigger 'modern conflicts' exhibition in 2017/18.

Events: The Museum is very pleased to announce that the next behind the scenes tours to Cobham Hall are nearly sold out (airframe tour). The Museum has three scheduled time slots for tours on the 15th of September, with only a handful of tickets remaining for the 10am tour. The council will remember that the Museum hosted similar tours over the last nine months in a successful trial to provide more regular access to Cobham, instead of one large Cobham Open Day. The Museum will host a reserve collection tour of Cobham Hall, focusing on small objects and the archive on the 31st of October. Additional tour dates focusing on the aero hall will be announced shortly, for December.

• *The Chairman gave the following report:*

He opened by paying tribute to the late Society Vice President

Capt. Keith Leppard and to our former Chairman and Jabberwock Editor, Sqn Ldr Maurice Biggs. Both contributed hugely to the success of the museum and to the longevity of the Society. They will be greatly missed by friends and family.

The main topic will be our forthcoming AGM on Sunday 2 October. Council retirees are: Derek Moxley, Gordon Johnson, Bill Reeks and Gerry Sheppard. Each has contributed more than 25 years service in support of the Society – a truly outstanding achievement.

Council Nominees are: Gordon Johnson (President), Graham Mottram (Vice Chairman), Martin Turner (Treasurer), David Smith and Richard Macauley. All other members have indicated their willingness to serve for a further 12 months. It is proposed to appoint Derek, Bill and Gerry as Honorary Life Vice Presidents.

Yeovilton Air Day: The Society was well represented in the FAAM's marquee; thanks to Marc and Staff for their co-operation. Our new banners were on display and looked very good. Bill Ellison will confirm air show Grand Draw statistics but I can record that it was a successful exercise, well received by the public. Council also extends thanks to member Peter Cowlan for his help on the day.

• *The Membership Secretary gave the following report:*

Membership has risen by 11

since the last meeting and some of this is quite probably due to the NMRN Gift Aid process change, as previously mentioned. For the record, 22 new applications have been received since June. Of these 12 have been downloaded from the web site and 10 are from the 'Join' leaflets in the FAAM.

Overall membership numbers are creeping up, from 1015 in 2013 to 1051 this year. I intend to renew contact with the libraries in Somerset, Dorset, etc. to ask if they will again display/dispense the SOFFAAM 'Join' leaflets in all of their branches. It is now three years or so since we last did this.

• *On the subject of Talks and Visits, Rosanne Crowther provided the following report:*

I am very sorry but due to other commitments I will not be able to attend the next two council meetings. With regret neither of us will be here for the pre-booked (with the museum) Christmas lunch on Saturday 10 December.

Proposed visit to the RNLI College in Poole on Thursday 23 March 2017: The coach will cost £375.00. The tour of the College will commence at 11 am followed by lunch in a private room at 12.30pm. The cost of the tour is £7.50 per person and the carvery lunch is £16.50 per person. The lunch includes two choices of meat and a vegetarian option which is served with all of the trimmings. This will be followed by dessert of the day and tea

and coffee.

Following Rosannes' statement, Gordon calculated that the cost per member would be £35.00. Members thought this might be excessive and suggested exploring other lunch options at RNLI to reduce the overall cost to members. Gordon thought attendees might prefer to buy lunch elsewhere. The meeting concluded there was time for further research before the next meeting in December.

• *The Publications Editor gave the following report:*

The website continues to attract a steady stream of visitors and it is gratifying to see that more than half of the bumper crop of new joiners downloaded the joining form from it. The Secretary commented that the design of the website, whilst functional, is somewhat plain. (He felt qualified to make this criticism, since he provided all the content and managed its updates.) He asked if the Museum could provide any assistance in improving its overall appeal to the casual internet browser. Marc replied that there were two members of his staff who had access to the Museum website who might be able to suggest improvements. Malcolm was grateful for this advice and would follow it up in due course.

• *Social Activities*

Following Rosanne's report on her unavailability to organise the Christmas lunch this year, the Chairman suggested that there were

two possible courses of action, viz: another member could volunteer to organise it or we could ask Rosanne to re-organise it for a date in January 2017. As no other member appeared to be willing to take on this task, it was provisionally decided to cancel the proposed December date. Graham Mottram suggested 14 January as a possible replacement date.

• *Bill Ellison reported on the Grand Draw ticket sales:*

A grand total of £352 in draw ticket sales had been raised at Air Day. Bill expressed his thanks to Amy Roberts for providing a good position in the FAAM marquee, also those others who helped on the day.

• *Any Other Business:*

The Secretary had circulated a draft of proposed amendments to the Constitution before the meeting. Graham Mottram suggested that the Constitution should say that SOFFAAM is an unincorporated charity. He also commented that, ideally, new Trustees should be required to certify that they understand the roles and responsibilities of trustees. This provoked a short discussion, in which a general view was that such a requirement was not essential in a Society like ours, which has a single aim (to support the FAAM) and in which trustees had no opportunity to use funds for any other purpose than for approved expenses.



CAPTAIN KEITH LEPPARD RN

By Graham Mottram



Photo courtesy of the National Museum of the Royal Navy

Regular attenders of past AGMs may remember the “Terrible Triplets” who usually sat together on the front row. They were Dennis White, John Carter and Keith Leppard. All were World War 2 veterans and all were men of strong opinions. We lost John first, and then Dennis and now, finally and sadly, old age caught up with Keith.

I learned of his passing through a phone call from Peter Hoare, naval obituarist of the *Daily Telegraph*, and passed on the news to the Chairman, offering to attend his funeral of behalf of the Society. Keith had been a regular caller on me during my time as Director

and I felt that I should be present at the passing of a friend and mentor.

His funeral took place in his home of Fernhurst, a typically green and tidy West Sussex village a few miles from Haslemere, on the warm and sunny afternoon of 9 August. As would be expected of such an open and generous character, his funeral was well attended. Rear Admiral Colin Cooke-Priest, a past FAAM Chairman, represented Navy Wings (of which he is now President). Another notable mourner was Admiral Sir Brian Brown, at one time the only “Flying Pusser” in the Navy, who had been an ally of Keith’s (at the time he was Director of Public Relations Navy) when he was attempting to convince the Navy Board to allow the filming of “Sailor”.

A very fine tribute was given by Rear Admiral Ray Rawbone, SoFFAAM Patron, who had met Keith when they were young aviators together in the late 1940s, and had remained friends ever since. Keith’s children shared happy and humorous memories of their dad. It is not true that only the good die young but it is also appropriate to be sad when an older person comes to the end of their allotted time. I shall harbour happy memories of knowing Keith Leppard and I am sorry that he is gone.

Keith Leppard 1924-2016

SQUADRON LEADER MAURICE BIGGS

By Richard Hufton

The Society was well represented at a memorial service held in late August at St. Michael's Church, Somerton to mark the passing of our former Chairman - Squadron Leader Maurice Biggs, RAF (Retd.). Maurice joined the Society in 1988 and soon re-organised our volunteers into dedicated groups - notably Group One which, over many years, restored several historic exhibits to a very high standard.

During his teenage years Maurice would often cycle from his London home to Croydon Airport, sparking an early interest in aviation. In 1944 while working for Tate & Lyle in the London docks he observed concrete Mulberry Harbour pontoons being launched in preparation for the Normandy landings.

Maurice volunteered for the RAF and was selected for pilot training. On gaining his wings he was posted to a Spitfire squadron at Chivenor. This prepared him well for the introduction of first generation jet fighters - Vampire and Meteor. In 1949 Maurice married Hazel and in due course twin daughters Marilyn and Valerie were born. Graduating to Bomber Command Maurice was now flying with a crew, first on Canberras and later the mighty Vulcan B2. As a 'V-Force' QFI, Maurice completed many overseas tours before moving to a VC10 Command at Brize Norton. During the Falklands conflict his aircraft was configured for CASEVAC, repatriating seriously injured casualties from Montevideo via Ascension Island and Dakar.

Retiring in 1984 after a long Service career, Maurice moved the family to Barton St. David where he was appointed Parish Clerk. He will be greatly missed by friends and family.



Maurice Biggs 1924-2016

PETER TWISS

A memoir by Keith Chadbourn

I joined Fairey Aviation at White Waltham early in 1959 after serving in the Royal Navy. Peter Twiss was Chief Test Pilot and already the wellknown and feted holder of the World's Speed Record in level



Fairey Fulmar N1854, pictured in the FAAM
Photo courtesy of the National Museum of the Royal Navy

flight (1132 mph). He was a modest and gentle man who disliked the occasional task of disciplining his pilots, though this was seldom necessary. During my training of Indonesian Navy pilots, I brought back to the airfield (which was somewhat confined, being well within the London TMA) a flight of three aircraft.

The two Indonesian pilots were late in breaking into the circuit and overflew a neighbouring large estate belonging to an MP. He was quick to object and I was asked to attend on the CTP. Peter was quick to stress that it was not my fault and confined himself to saying, "Brief them not to do it again" and brought out the sherry bottle.

We had a variety of aircraft ...

We had a variety of aircraft at White Waltham: Swordfish, Fulmar, Dove, (known in the Service as Devon) Dragon Rapide, Stinson Reliant, Tiger Moth, Topsy Nipper and Junior, Druine



Stinson Reliant - four- to five-seater, manufactured by the Stinson Aircraft Division of the Aviation Manufacturing Corporation of Wayne, Michigan.

Turbulent, plus the Douglas DC 4s belonging to Fairey Air Surveys. We were encouraged to fly the lot. Having come from a culture that demanded a longish course before being allowed to fly an unfamiliar aircraft I was astonished one Wednesday to be asked by Peter if I had flown a Fulmar. "No", said I, whereupon he put the Pilot's Notes on his desk and said, "You'd better study these then, you're taking it to Gaydon Air Day on Saturday". A Naval Observer (Peter Salkeld, who was at Faireys evaluating the new Gannet AEW3) was changing into flying kit and asked what I was going to fly. He said, "Can I come?" "It's my first time, better ask Peter." He said yes. I was unprepared for the huge swing on take-off - until the tail came up and I could see over the nose I found that I was headed for the runway control hut (Waltham is a grass airfield). We cleared it. I did some gentle manoeuvres, during which I had trouble trimming the aircraft in pitch. The Fulmar has a large rear cockpit (you can see for yourselves - this same Fulmar, N1854, is in the Museum), I discovered that Peter was walking about in the back. I came in to land, first doing a roller before attempting a final landing. Touching down, I opened the throttle and took off again. Finally landing and coming to rest on the apron I was astonished to see

that Peter's face was black. He had been leaning out of his cockpit when I opened the throttle after the roller and received a face-full of oily black smoke. "Serve you right," I said.

An affable man ...

Peter was an affable and possibly vulnerable man. His fame led to many parties and receptions in London and elsewhere and it is no surprise that many of his marriages ended. He had married in the USA while serving there in the Royal Navy, though that wife never came to England. The second was Vera, no great beauty, but that ended. Then came Cherry Huggins, daughter of a Governor of Jamaica, tall, lissom and blonde. They lived on a Thames sailing barge moored at Hurley, nothing to look at but almost luxurious inside, a huge sitting room, a dining room, kitchen and two bedrooms. Peter said he often came topsides on a Sunday morning to find a dozen or so fishermen on his deck. Being Peter, he didn't turf them off. He and Cherry were very good to my wife as she waited, with a one-year-old, for a month or so before joining me in Indonesia. According to his obituary, he married in all five times (we knew of four) and I'm not surprised.

Peter Twiss ran a very happy ship, due mostly to his easy-going nature and his belief that as all his pilots were former officers they knew what they were about.



MEMBERSHIP

Welcome to the new Members who have joined us since the last issue:

3477	Mr S.R. Dixon	Borehamwood, Hertfordshire
3478	Mr S. Penny	Yeovil, Somerset
3479	Mr B.A. Leete	Williton, Somerset
3480	Mr O. Leete	Williton, Somerset
3481	Mr D. Maclean	Bower Hinton, Somerset
3482	Mrs M. Staples	Cambridge, Cambridgeshire
3483	Mr C. Fry	Yeovil, Somerset
3484	Mrs E. James	Minehead, Somerset
3485	Mr C. Wilkinson, MBE	West Camel, Somerset
3486	Mr A. Parsons	Martock, Somerset
3487	Mr K. George	Gillingham, Dorset
3488	Mr D. Vaughan	Taunton, Somerset
3489	Mr C. Solway	Heathfield, Devon
3490	Mr A. Jones	Martock, Somerset
3491	Mr M. Hornsby	Middlezoy, Somerset
3492	Mr B. Pickford	Putney, London
3493	Mrs J. Hornsby	Middlezoy, Somerset
3494	Mr T. Elley	Merriot, Somerset
3495	Mr G. Scott	Sherborne, Dorset
3496	Mrs C. Scott	Sherborne, Dorset
3497	Mrs H.J. Gale	Lymington, Hampshire
3498	Mr L. Martin	Thornford, Dorset
3499	Dr R. Lillington	Bidford on Avon, Warwickshire
3500	Cdr J.P. Phillips	Helston, Cornwall
3501	Mr R. Redmore	Wookey, Somerset
3502	Mr D.J. Macleod	Shepton Mallett, Somerset
3503	Mr P.K. Tuck	Kingsbridge, Devon
3504	Mr D. Johnson	Martock, Somerset
3505	Mr R. Martin	Weymouth, Dorset
3506	Dr D. Hardie	Dorchester, Dorset
3507	Mrs A. Hardie	Dorchester, Dorset
3508	Major R. Munro	Warminster, Wiltshire

Members who pay by cheque are reminded to post their renewal fee to the Membership Secretary (see page 2 for his contact details) when it is due. To save on postage, we do not routinely send out reminders. To save this annual task, members are encouraged to pay by standing order.

MONTHLY TALKS PROGRAMME - 2016/17

Talks are held in the FAAM Auditorium on the last Thursday of each month at 19.30. Entry price is £7, pay at the door. These events are usually well-supported and total numbers are limited. To be sure of a place book your tickets on-line in advance at www.fleetairarm.com/events, or buy from the Museum shop. Non members are welcome.

The price includes light refreshments, including a glass of wine.

24 November 2016

Will Iredale

"The Kamikaze Hunters" - The men who fought for the Pacific - 1945

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26 January 2017

Graham Mottram

"The Seafire and Beyond"

With the FAA desperately short of fighter capability in its embarked air groups at the start of World War 2 navalisation of the Spitfire was one of the attempts to put this problem right.

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23 February

David Morris

Curator of Aircraft

Hear and see the progress being made on the restoration of the last remaining Barracuda.

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30 March

Captain Peter Chapman-Andrews

Director of the Royal Institute of Navigation

"Navigating the Royals - HMS Ark Royal and the Royal Yacht Britannia"

●●●●●●●●●●●●●●●●

27 April

Sir Christopher Colville KCB FRAeS FCIPD
Chair of the British Helicopter Association

' From Scouse to Grouse: A Fighter Pilot's Story',

Programme correct at the time of printing

NEWS FROM THE MUSEUM

It was a busy week last week at the Fleet Air Arm Museum for Curator of Aircraft David Morris and his Team. Dave was in Edinburgh

Dave had been asked to attend by the Association to do a presentation looking at the benefits and problems concerning using objects in Museums,

and formed part of a debating panel with Chris Knapp from the IWM Duxford and Chris Van Shaardeburgh from the Tank Museum, Bovington.

On 28 September, back at the FAA Museum, Dave and his team hosted a group of Japanese museum professionals from the International Research Department of the Institute of Cultural Properties, Tokyo. The Japanese delegates were specifically interested in some of the conservation methods and techniques being

used on the FAA Museum restoration projects, including the Grumman Martlet, Fairey Barracuda and Seaplane Lighter Projects.



Museum Restoration Engineer William Gibbs showing the Japanese Institute delegates details of the Barracuda restoration, and how he is re-incorporating as much original Barracuda material as possible back into the rebuild.

on Monday 26 September for the International Association of Transport Museums' annual conference (being held this year at the National Museum of Scotland).

**SOFFAAM CHRISTMAS LUNCH 14 JANUARY
2017**



Complimentary glass of Mulled Wine or Orange Juice on arrival

Roast turkey and all the trimmings

OR

Grilled fillet of Scottish salmon with hollandaise sauce and grilled asparagus

OR

Mushroom, brie, redcurrant and rocket parcel (V)

Traditional Christmas pudding, with Brandy Sauce

OR

Fruit salad, with Chantilly cream or ice cream

Mince Pies (v)

Coffee or tea and mints £21.50

CHRISTMAS LUNCH BOOKING FORM

Once again we shall be holding a (slightly belated) Christmas lunch for SOFFAAM Members, it will be held on Saturday 14 January 2017 instead of the usual December date. The menu appears on the opposite page. Kindly complete the application form below, and return your cheque for **£21.50** made payable to SOFFAAM, to me by **Saturday 17 December**. Please arrive at the Warneford Restaurant by **12.00**, lunch will be served at **12.30**. Wine or fruit juice will be served with the meal and is included in the price.

I will not be sending acknowledgements; however, should demand exceed the maximum seating in the Warneford Restaurant, you will be advised accordingly.

Captain Phillip Jackson has kindly agreed to give a talk in the Westland Auditorium after lunch. Members and guests are very welcome to remain to listen to this talk, entitled "Captain's table", based on his career as a Captain on P&O ships.

To: Mrs Rosanne Crowther, St David's, 5, Church Close, Martock, Somerset, TA12 6DS

Name

Name of Guest(s)

Address

.....Post Code.....

Tel No

E-mail address.....(Not compulsory)

Please indicate your choice of menu by ticking the boxes:

Traditional Roast Turkey

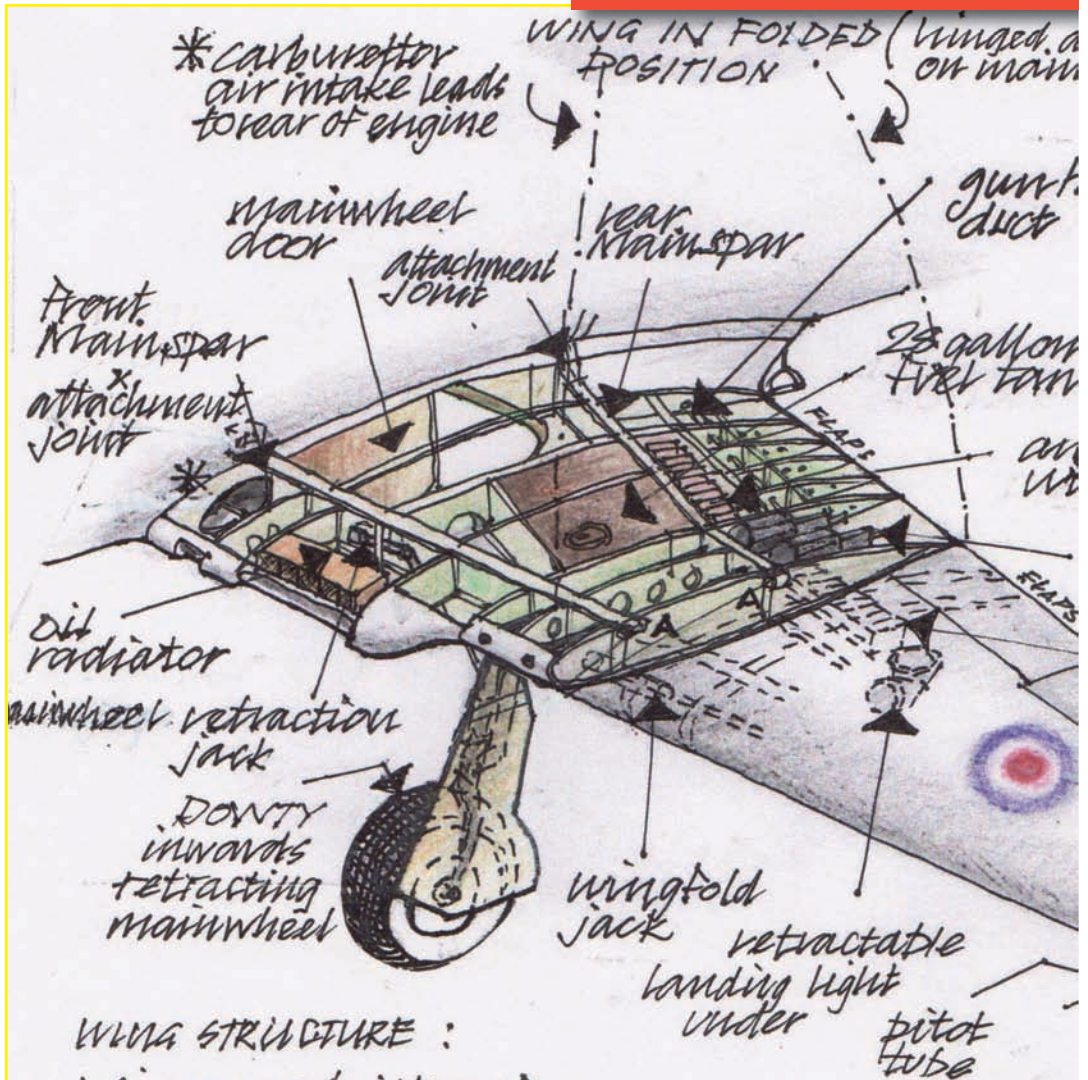
Salmon

Mushroom, brie and redcurrant parcel

Fresh fruit salad with cream or ice cream

Christmas Pudding with brandy sauce

HAWKER SEA
Drawing and text by



WING STRUCTURE :
Wings are built up of two 'I' section main spars, with pressed alloy ribs notched for stringers and covered with alloy stressed skin

PORT WING D.
HAWKER SEA
(- Bristol Centaur.

EA FURY FB11

by Jim Humberstone



In contrast to Supermarine's Spitfire, with around ten years of evolution but retaining substantially the same concept after a production run of over 20,000 machines, Hawker's WWII fighter development was a much more convoluted business. The progression Hurricane-Typhoon-Tempest-Fury saw substantial changes of direction, in the period 1940-1950. These major changes involved different choices of power-plant, coupled with the evolution of a radically different airframe.

Nowhere was the latter more evident than in the design of the wings. The Fury and its seagoing version of the late 1940s incorporated a thin section laminar flow design, called the Hawker High-Speed Section aerofoil. This design contrasted sharply with the earlier wings of Hurricane and Typhoon with their thicker, less efficient but more robust profiles. Planform changed too. An elliptical shape was chosen, not unlike the Spitfire's. This gave a good balance between the requirements of aerial performance and the all important capability of accommodating engine intakes, fuel, armament, ammunition and undercarriage, all as illustrated in the drawing.

MONTHLY TALKS REVIEW

Summarised by Robert Heath

JUNE TALK “My Military Flying Career” - by Adrian Childs

As Adrian was giving his talk, I looked around the audience and could see many people nodding in agreement as he progressed through his career, with descriptions of the various events, places and activities in general. On that basis you could easily say that he must have had a pretty routine and standard RAF flying career. But, what a routine and what a standard, and how mundane a life many of us have lived by comparison. Towards the end of his schooling Adrian faced the eternal question of ‘what shall I do?’ His father was ex-RAF and his elder brother was in the RAF as a pilot. A not too difficult step therefore was to apply to RAF Cranwell for an assessment. In case that did not work out, he also applied to the Hamble College of Air Training for an assessment. The outcome of both assessments was ‘get your two A-levels and we will see you in September’ (1964). And that is what happened. Adrian was in the delightful position of having a choice, and Cranwell it was.

Basic Flying Training commenced in 1964 and continued through to 1967, all based around the Jet Provost from the outset. 187 hours in all and not one minute of it on a

piston engined aircraft. The high point was the flying. The low point was the seemingly eternal marching, marching, marching around the parade ground. In due course, Advanced Flying Training followed, but not before the nail biting selection - who will be assigned to fast jets, who to transport and so forth. Adrian was very satisfied with his posting to RAF Valley to fly fast jets. In this instance, the fast jets were Gnats, on which Adrian spent 127 hours sharpening his skills, before experiencing the thrills of the Hunter for Tactical Weapons Training at RAF Chivenor. In this case, the Hunters were recently refurbished aircraft with lots of thrust, lots of flaps and generally an all-round pleasure to fly.

All this time, Adrian was still under training and a posting to RAF Coltishall in 1969 positioned him for the ultimate in fast jets - the Lightning, in which he made 10 or 11 trips in the T4 before going solo in a Lightning F6A carrying 7,728 lbs of fuel - which did not go far. Take off in a Lightning is absolutely exhilarating and it will climb 15,000 ft in just one minute. For all that joy, the Lightning also had its problems. Overnight, large trays had to be left underneath each aircraft to catch fuel. They leaked like mad. Finally, Adrian was posted to an operational

Lightning F3 squadron - No. 56 with the Phoenix emblem on its tail. As if that was not enough, 56 Squadron was based in Akrotiri, Cyprus. What more could you ask? Akrotiri was said to be the RAF's busiest airbase with a mix of just about every aircraft in its inventory passing through. Although Adrian served with No. 56 Squadron between 1969 and 1972, he first had to undertake a further six to eight months training on the squadron before he was combat ready. Five years of continuous

10 fuel stops to ensure diversion capability. The Lightning was a very thirsty aircraft with little space for fuel. Fuel was mainly carried in the wings and in the large ventral tank under the fuselage. For ferry flights, additional over-wing tanks were fitted (there was nowhere else to put them). Even so, whatever else the pilot was doing, he constantly kept an eye on the fuel state. Air-to-air refuelling was standard practice and so long as you watched the guide markers on the tanker wing it was



English Electric Lightning Mk 3, flown by the speaker

training so far. The Lightnings were equipped with Firestreak missiles where the infra red sensor steered the missile on to the heat source of its target. Red Top missiles were also fitted, plus in due course, two 30mm Aden cannon positioned at the front of the ventral fuel tank.

Twice each year the Squadron would fly back to RAF Valley for live firing training, when each pilot would fire one missile (they were expensive). Each flight from Cyprus to RAF Valley in Wales required

almost always successful at first attempt. If you looked at the probe instead, you were easily in trouble. Victor tankers could handle two aircraft refuelling at once - one on each wing. The Lockheed Tri-

Star could handle only one aircraft at a time, but at a much higher fuel-flow rate.

On a typical day, Adrian would expect to carry 10,000 lbs of fuel for a 37 minute sortie - straight up, intercept target and return. On average 2.5 sorties were flown per day and on that basis Adrian flew 300 hours per year. From where I am sitting, it says rather a lot for the reliability and availability of the Lightning.

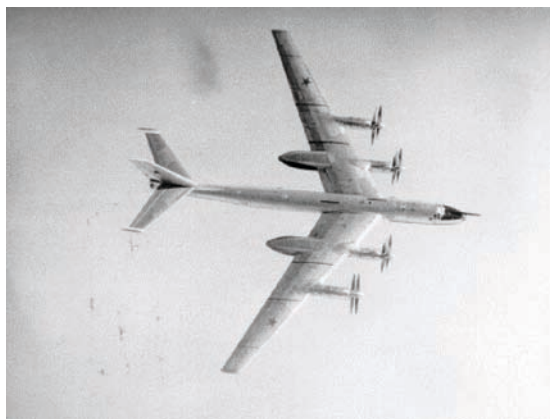
A QRA (Quick Reaction Alert)

from RAF Leuchars in Scotland required two aircraft to be available within 10 minutes. Their regular task was to intercept Russian Tu-95 Bears and M4 Bisons and Adrian presented us with numerous excellent photographs he had taken of these aircraft. Invariably the Russian crews were amiable and waved to the Lightning pilots - sometimes economically with just two fingers.

An interesting diversion came in the form of a posting to Canada - Chatham, New Brunswick, to fly the two-seat F101 Voodoo. Once again it was an air defence squadron on QRA ten-minute alert to intercept Russian aircraft over Newfoundland. In Adrian's words "The Voodoo was a great aircraft until you got airborne!" It reached 400kts in 11 seconds during take-off, but was not very manoeuvrable, unlike the Lightning. It was armed with the Genie missile which could achieve Mach 3.3 and carried a 1.5 kiloton nuclear warhead. Unfortunately, it had no guidance and you had to steer the aircraft onto the target and fire it like a bullet. Leisure time in Canada was a delight however, helped by the generous and easy-going mentality that allowed pilots to 'borrow' the T33 Shooting Star with a 1,300

mile range, to fly off on a navigation 'exercise' to stay over in Las Vegas, for example. A very civilised way to run an airforce.

On return, Adrian went to 111 Squadron at Leuchars to fly Phantoms. By now he was used to having a chap sitting behind him taking a good share of the workload. The Phantom was armed



Code-named "Bear" by NATO, the Tupolev Tu-95 is a large, four-engine turboprop-powered strategic bomber and missile platform. First flown in 1952, the Tu-95 entered service with the Soviet Union in 1956. They often approached British northern airspace during the Cold War

with Sidewinders, which had infra-red, 360° target acquisition, plus a Gatling gun capable of firing 6,000 rounds per minute. As you will gather from all the references to weapons, Adrian was Weapons Officer for the squadron.

In due course, Adrian was promoted to Wing Commander and appointed Officer Commanding Operations at RAF Coningsby.



The speaker at the controls of a Spitfire Mk 2

By that time the aircraft were Hawks and Tornados. The role of OC Operations at Coningsby included responsibility for the BBF (Battle of Britain Flight). Naturally Adrian was asked if he would like to fly any of the aircraft. Now that posed a problem. Of course Adrian wanted to, but he had never flown a piston engined aircraft! So, out came the Chipmunk and many hours later he started flying the Hurricane, because it was the more stable aircraft, also landing was easier due to its wide undercarriage. Then came the Spitfires, Mk2, MkV and in due course the Mk XIX, which was a different proposition because the Griffon engine rotated the propeller in the opposite direction to the earlier Merlin engined Marks.

Eventually in 2000, all the fun had to stop and Adrian retired from the RAF. He still kept in touch by flying Air Cadets in Tutor aircraft, flying around six sorties each day for around 25 minutes each; a perfect way to wind down.

On reflection which aircraft did

Adrian prefer? The Voodoo was fast but not manoeuvrable, the Phantom was not particularly nice to fly and did not turn well either. The Lightning was undeniably exhilarating, whereas the Tornado had a very good radar and was well armed. Was a single seater

best or two seater? For Adrian, it is a close thing, but in reality he would probably choose a Navigator/ Weapons Officer in the back seat; it is always a benefit to have an extra pair of eyes looking for what can often be the unseen enemy.

Thank you Adrian for a super evening's entertainment and so many good pictures to drool over.



JULY TALK "Warthog at work - Close Air Support at its best" Steve Ladd, Colonel (Rtd), USAF, DFC

This was not the first time that we had been entertained and educated by Steve Ladd. Two years ago we learned of his time flying the mighty F4 (Phantom) in Vietnam and what a time that was. (*An aside - I learnt recently that in Vietnam, the USA never actually declared war! Is it now out of fashion to do so? Food for thought*). The time came when the use of fast jets for ground

attack in support of ground forces was no longer satisfactory and not effectively achieving its aims. A specific ground attack capability was overdue. The Skyraider did a good



The Fairchild-Republic Thunderbolt II, universally called the Warthog

job in its time, but was vulnerable to small arms fire. The OV10 Bronco served well later, but was designed as a light attack and observation

aircraft. The A-10's time had arrived. It was designed for this purpose, without compromise. I was fascinated to discover, nevertheless, that although the Bronco was officially retired in 1995, the

US armed forces have brought some back into service from desert open-storage, for use in the counter insurgency role against ISIL.

Having enjoyed the F4 flying, in 1979 Steve Ladd and his squadron colleagues found themselves being offered the opportunity to convert from the F4 to the new

A-10 Thunderbolt II. It was not an easy decision. The F4 was fast, powerful, well armed and enjoyable. The A-10 by comparison, was new and oh, so UGLY. Very ugly indeed, Steve thought. Nevertheless, it did look purposeful and had just a single seat, unlike the F4. Steve decided to make the change, unlike some of his colleagues. The A-10 Thunderbolt II soon earned its own nickname of Warthog by the squadrons operating it. It is a formidable aircraft and even now, almost 40 years after introduction into service, no other aircraft can match its ability to undertake the degree of close air support for ground troops. It is a big aircraft,



The frequently-reproduced picture of the GAU-8 Gatling gun removed from the aircraft. Photo US Air Force

57ft 6in (17.5m) span, over 53ft (16.2m) long and 14ft (4.5m) high) and it is said to have been built around its principal armament of the 30mm GAU-8/A Gatling type gun. If you note that the undercarriage nose leg is offset to accommodate the gun, you can well believe this. The 30mm shell is very big indeed

and truly dwarfs the more familiar 20mm round. To understand the scale of the gun, which has a 19ft long barrel, and weighs around 2 tons (without the ammunition), Steve showed a lovely photograph of a VW Beetle standing in front of the gun and believe me, the Beetle



*The "business end" of the GAU-8 30 mm Gatling gun.
Photo Matthew Zalewski*

looked small. The magazine holds 1174 rounds and the gun fires at a rate of 70 rounds per second. To make his point, Steve's talk was profusely illustrated with film and photographs. Without doubt, the sound and sight of the gun in operation against tanks, in training, is deeply impressive. All the shell cases are retained on board. In addition the A-10 has 11 wing hard points for carrying a mixed weapon load, including 8 Maverick air to surface missiles, Sidewinders, ECM (Electronic Counter Measures) pod,

hard bombs, flare dispensers and so forth.

As previously mentioned, the A-10 is purpose designed for Close Air Support, which means flying low and slow (relatively). The maximum speed is around little more than 380kts and cruising speed about 300kts. The range is typically about 290 miles, however, with its slow speed capability it can loiter for a decent time, but is rather dependent on in-flight refuelling to get home. It takes about 5/6 minutes for a full fuel reload and is nicely stable in the process.

Survivability and interoperability were key features of the design. Typically, this is demonstrated by the fact that the pilot and vital controls sit in a titanium 'bath-tub' to provide a very high degree of protection.

Most controls are duplicated. Many components are also interchangeable, for example, the landing gear, moveable fins and other control surfaces, plus the engines, etc.. To minimise the risk of being attacked by heat seeking missiles, the engines are fan jets which run cooler, and they are mounted high on the fuselage close to the twin fin/rudders for additional heat-shielding. The engines are also well separated so that if one is hit the other stands a better chance of

surviving. If by bad luck the duplicate controls are both inoperable, manual control reversion is still possible and aircraft have been brought back safely using just the trim tabs alone. Not something pilots are trained for, but encouraging to know. A complete engine change takes around 90 minutes. Another 'safety' feature that was given some emphasis, that rather tickled me, is that the undercarriage casing sits under the wing, so that part of the wheels are always visible and exposed, thus enabling a softer landing in the event of a hydraulics failure. Nothing new there then. It worked well in the 1930s on the Avro Anson, etc., so why shouldn't it do so now?

Principal deployment of the A-10 was in Europe, where 108 were stationed at RAF Bentwaters, for example. The aircraft were always operated in pairs for mutual support and continually training. Typically, in 1990 when the Iraq war blew up, the Pentagon (the five-sided wind tunnel according to Steve) elected to send A-10s direct from the USA, with their 380kt speed and range of 290 miles, as a political show of force, rather than use the 108 A-10s sitting on the tarmac in Europe. Politicians move in mysterious ways.

Currently, A-10s are active in Syria. When Steve Ladd first flew the A-10 in 1980, it had very basic instrumentation with no GPS, hardly any electronics and navigation required a hand-held chart. Flying at 100ft was attention grabbing and the

pilot quickly lost sense of where he was. The 2016 upgrades are packed with the latest technology and an excellent HUD (Head Up Display) making life much more informed and easier to control at 100ft. Another benefit much appreciated by ground forces is the ability for them to laser-designate a target that can then be picked up by the Pave Penny pod laser receiver installed on the A-10, so that the A-10 can then put accurate fire on to the enemy. This same type of co-operation has been effectively developed between Apache helicopters and the A-10, whereby they can exchange target information. Not only is the A-10 good operating with helicopters, but it is also very good at hunting them down and destroying those operated by the enemy.

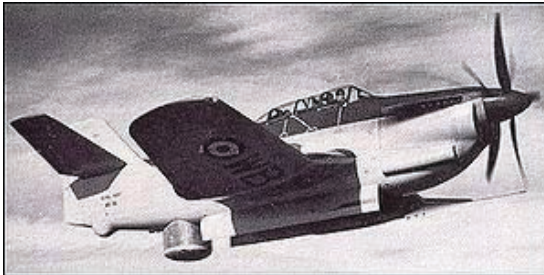
Typically, politicians have attempted to 'retire' the A-10 several times but, 40 years later it is still in service and is scheduled to be so until 2025. Meanwhile, many have been parked in one of the very dry American deserts, awaiting their recall at some future date. I often wonder why our MoD and politicians do not rent an American desert. We could then park politically unwanted aircraft, such as the Harrier, Nimrod, etc., instead of giving them away or worse still scrapping them before they have even flown. I don't understand politicians, do you?

Thank you Col. Steve Ladd for an excellent evening's entertainment once again.

THE FIRST ANGLED DECK

By John Blunden

I was serving in the light-fleet carrier HMS *Triumph* in 1951/2 as pilot, DLCO (Bats)



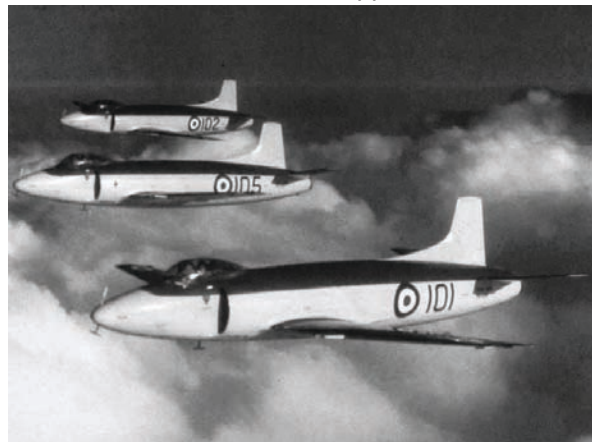
Blackburn YB1, the final version of several prototypes built by Blackburn to meet Specification GR 17/45 for an anti-submarine aircraft for the FAA. The competition was won by the Fairey Gannet.

and watchkeeper . At that time there were two carriers in home waters involved in Training and Trials . *Triumph* provided the deck for new pilots completing their training ; at that time on Fireflies and Sea Furies. HMS *Illustrious* was responsible for trials of new aircraft and equipment entering service. Squadrons were not normally embarked.

When called upon either ship could be employed on other tasks. During my time

on board we were required to transport the army, or part of it, with all its transport and kit to Cyprus and Port Said. It was whilst on our way home from one of these excursions that we received instructions to put the ship into dockyard hands at Portsmouth in order to carry out some modifications for trials with an experimental type of deck landing at an angle to the centre line of the flight deck. Initial trials were to involve numerous ADDLS (airfield dummy deck

landings) to be carried out at RNAS Ford and I was appointed as the



A formation of Supermarine Attackers in about 1952. The Attacker was the only UK naval aircraft to use the Rolls Royce Nene engine (although this powerplant was enthusiastically taken up by the USA and USSR).

Photo Greg Atkinson

batsman the DLCO (Deck Landing Control Officer) or in USN parlance, LSO (Landing Signals Officer).

At Ford the Carrier Trials Unit supplied the aircraft and pilots . The CTU fielded an extraordinary menagerie of aircraft for the task - Avenger, Firefly, Skyraider, Sea Hornet for the propeller group with

any serious problems, the bogey of having to fly through the turbulence astern of the funnel and island only affected the slower aircraft and the jets sailed straight through with no bother.

Despite the instruction that wheels were not to touch the deck one pilot, flying the Attacker, decided to run



HMS Centaur (left) and USS Antietam (right) showing two slightly different approaches to the establishment of the angled-deck design on early light fleet carriers. With acknowledgements to the French publication Marine Forum

Attacker, Hawker P 1084 (swept wing Seahawk) and the prototype Blackburn YB4 making up the rest.

I was firmly instructed that aircraft were to be brought down to the cut position, about 10 to 15 feet, and then waved off. The Wave Off was a mandatory signal. Wheels would not touch the ground. The same aircraft and the same rules applied when we went to the deck a week or so later. I do not recall

his main wheels up the angle and left tyre marks to prove it. Lt (later Captain) A B B Clark thus became, unofficially, the first pilot in the world to make an angled deck landing, albeit, not arrested. I suppose we were a little miffed to learn that the USN had, with typical enthusiasm, shortly after our trials, modified the USS *Antietam* and carried out arrested angled deck landings.



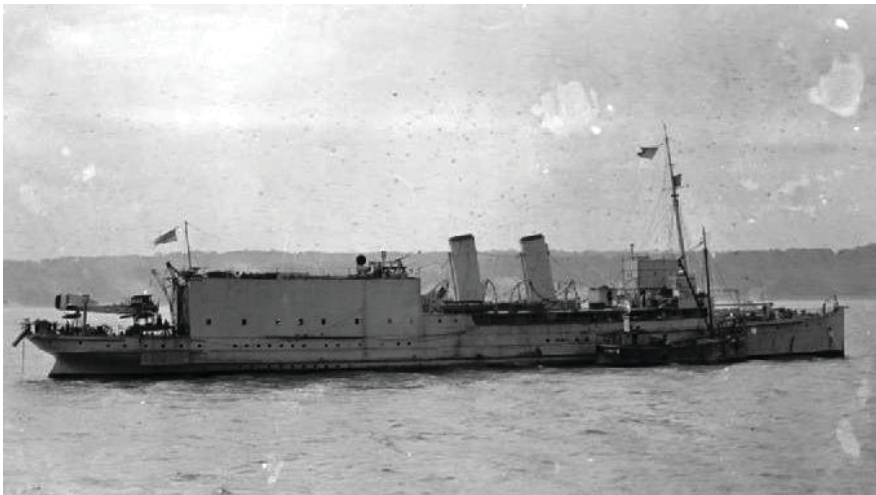
HMS ENGADINE AT JUTLAND

By Ian Burns (member 46)

This is an edited version of a much longer account by historian Ian Burns. The full account is to be found on our website at fleetairarmfriends.org.uk

The Battle of Jutland was the greatest naval battle of the First World War. Arguably, it was also the most indecisive. The battle brought together 58 dreadnought battleships and battlecruisers,

although they are usually relegated by historians to a footnote or a brief paragraph or two. *Campania* missed the battle for reasons outside the scope of this article. *Engadine's* captain was Lt Cdr Charles Gwillim Robinson, RN, and his second in command was Lt Handcock, RNR, her pre-war captain. She was attached to the 3rd Light Cruiser Squadron, a mixed squadron of



HMS Engadine at the time of the Battle of Jutland. She was converted from a cross-channel ferry and the large box-type hangar is clearly visible. A seaplane is parked on the quarterdeck, from where it could be craned into the water. Operating these flimsy, relatively underpowered aircraft in open sea could be challenging!

Photo courtesy of the National Museum of the Royal Navy

countless cruisers and destroyers, and a single seaplane carrier. There could, and should, have been two seaplane carriers, HMSs *Campania* and *Engadine* were both available,

several classes of light cruisers, all capable of at least 25 knots. At only 22 knots, *Engadine* was one of the slowest units of the Battlecruiser

Fleet, based at Rosyth.

By 28 May 1916 it was becoming clear to the staff at Room 40 OB that the enemy's High Sea Fleet was preparing a major operation. On the morning of 30 May, the code breakers were confident that the High Sea Fleet would be sailing that evening. At noon Jellicoe (Commander-in-Chief of the Grand Fleet) and Beatty (commanding the Battlecruiser Fleet) were warned that the High Sea Fleet was expected to put to sea early on 31 May. Jellicoe sent the Grand Fleet at Scapa Flow a preparatory signal; at the same time he signalled Beatty, '*Urgent. Raise steam*'.

At 8.50 pm Beatty signalled the Battlecruiser Fleet to begin leaving harbour. For the next ten hours *Engadine* proceeded in company with the cruisers, ten miles ahead of the main Battlecruiser Fleet. At times she was leading the fleet, in an area of less disturbed water and well positioned to send her floatplanes to scout ahead of the fleet. In her aft hangar were two Short 184s (8029 and 8359) and two Sopwith Babys (8175 and 8182). Early in the morning the weather was unsuitable for flying but at 11.25 *Engadine* signalled to Beatty '*Conditions suitable for large and small machines*'.

Leading Signalman H Y Ganderton, stationed on *Engadine*'s bridge recalled.

'By 2.20 pm we were approaching enemy waters, and everyone was on the alert... very soon the masts and funnels of two vessels hove in sight on our port bow, just

topping the skyline. The captain levelled his glasses at the strange ships as the Yeoman of Signals ran up to him with the message: "Enemy in sight, Sir. The signal flag is flying at the masthead of Inconstant." "Thank you," was the quiet reply.'

At 2.31 pm, Napier signalled *Engadine* '*.....two enemy Cruisers sighted about East. Take cover near battlecruisers*.' Robinson turned *Engadine* to the north towards the main fleet, and increased speed to 22 knots. Just a minute after Napier's first signal Beatty had ordered the Battlecruiser Fleet, '*Alter course leading ships together the rest in succession to SSE*.' *Engadine* and the Battlecruisers were now closing at over 40 knots. At 2.47 pm Beatty ordered *Engadine*, by searchlight: '*Send up Seaplanes to scout NNE*.' *Engadine* was now passing between the two Battlecruiser squadrons of Beatty's main force. Once past *Indefatigable*, Robinson turned the seaplane carrier across her stern and headed north-east looking for calmer water before launching the Short.

The pilots on *Engadine* flew according to a rota and on this day it was the turn of Flt Sub Lt Grahame Donald. As the enemy came into sight, he was '*Sitting in the cockpit, engine warming up, clad in flying gear, chain hooked on ready to hoist - we'd have been in the water and away in about a minute and a half. And just as I got my engine nicely warmed up unfortunately our Senior Flying Officer, Flight Lieutenant Rutland, appeared, waved me down and my observer and told me that he'd got the Captain's*

sanction that he was to go. So away went my old Short Seaplane 8359 – but without us.'

Robinson reported, 'Seaplane No. 8359 was hoisted out at 3.07 pm with Flight Lieutenant Frederick Joseph Rutland, RN as pilot, and Assistance Paymaster George Stanley Trewin, RN as observer, with orders to scout NNE for hostile ships The delay in hoisting out Seaplane was caused through the Ship having to keep clear of the Cruisers.' Engadine's clocks were out of synchronisation with Lion's, a not uncommon occurrence in those days.

Rutland: 'I steered N10E and at er about ten minutes sighted the enemy. Clouds were at 1000 to 1200 feet, with patches at 900 feet. This necessitated flying very low. On sighting the enemy it was very hard to tell what they were and so I had to close to within a mile and a half at a height of 1000 feet.'

Trewin reported, 'The clouds were very low, which necessitated low flying and therefore reduced the range of visibility which varied from nil to four miles, except for one short spell when it was about 7-10 miles. During this brief break in the mist clouds, I sighted 3 Cruisers and 5 Destroyers at about 3.20 pm. We closed this Fleet and from their position and composition it appeared to be hostile.' The exact location of Jellicoe's Grand Fleet was not clearly known and the ships seen could have been from his scouting forces, but any doubts were soon dispelled. 'When we had closed them to about 1½ miles, flying at a height of 1000 feet, I saw more Destroyers, and then heard the reports of bursting shell and saw shrapnel bursts around us.'

The appearance of the Short

came as a surprise to the Germans. Leutnant zur See Heinrich Bassange on SMS Elbing, a light cruiser attached to the II Scouting Group of the High Sea Fleet, recorded: Around 3.30 pm, 'a little enemy seaplane came up from the south east. We were much taken aback it was not known that there were any enemy planes at this time; it must have been kept aboard an enemy ship. We had never thought of this idea. The whole manoeuvre took about two minutes. The aircraft inspected us from front to back in length and then disappeared into the mist.'

Rutland: 'When sighted they were steering a northerly course. If few through several of the columns of smoke caused through bursting shrapnel. When the Observer had counted and got the disposition of the enemy and was making his W/T report, I sheered to about three miles, keeping the enemy well in sight. While the Observer was sending one message, the enemy turned 16 points. I drew his attention to this and he forthwith transmitted it.'

Trewin: 'In the middle of my sending a W/T message, timed 1530, I saw the hostile Fleet altering course to due South. On completion of that message, I transmitted another, timed 1533, giving their alteration of course. [Sent further] messages timed 1545 and 1548.'

Rutland, on spotting the battlecruisers during a brief break in the weather, believed that their messages had got through. Engadine certainly received the messages, but she was the only vessel to read them. The sad tale is reported by Robinson.

'The following signals were received from the Seaplane:

1530.- *Three enemy Cruisers and 5 Destroyers, distance from me 10 miles bearing 90°, steering course to the N.W.*

1533.- *Enemy's course is South.*

1545.- *Three enemy Cruisers and 10 Destroyers steering South.*

1548.- *Four enemy Cruisers and 10 Destroyers steering South.*

The last signal was not received in the Ship, which I think was due to Seaplane descending at the time and the amount of other W/T going on. Attempts were made to pass these signals on to Lion by searchlight but this could not now be done as apparently she had already opened fire on the enemy.'

Whilst Trewin was attempting to send the last message, the fuel pipe to the left front carburettor (the Sunbeam 225 hp V-12 Mohawk had four carburettors) fractured and the engine power fell significantly. Rutland had to make an emergency landing, with Trewin desperately winding in his long trailing aerial with one hand whilst continuing to transmit with the other. After landing, Rutland quickly repaired the fuel pipe with some rubber tubing carried for just this purpose. *Engadine* had come up whilst Rutland was working on the engine, and ordered them to taxi alongside to be hoisted in. The Short was hoisted in at 4.04 pm

For several hours thereafter, the seaplane carrier followed the movements of the new *Queen Elizabeth* class fast battleships of the 5th Battle Squadron. Beatty by this time was too busy to give a thought to *Engadine* and any further aerial

scouting and her moment in the spotlight was over, but she had one great role still to play.

[The author then describes the fate of the armoured cruisers, *Defence*, *Warrior*, *Black Prince* and *Duke of Edinburgh*, which most commentators on the battle believe should never have been risked near the enemy's capital ships. *Defence* and *Black Prince* were both sunk by gunfire, leaving no survivors. *Warrior* was hit by heavy calibre shells 15 times, but survived and "staggered off into the smoke of battle".]

Warrior on fire aft, one engine room flooded the other flooding, unable to control the remaining engine, over 80 dead or wounded, was limping off to the west. At 6.40 pm she was seen by *Engadine* who came to her assistance. Finally, at 8.00 pm *Warrior* semaphored, 'We are nearly stopped. Come and take me in tow.' With considerable difficulty, *Engadine* took the much larger cruiser in tow. At dawn it was evident that *Warrior* could not last much longer. At 7.20 am Captain Molteno ordered *Engadine* to drop the tow, and come alongside to take off *Warrior's* crew.

Grahame Donald later recalled the events of the next hour. The cruiser was many times the tonnage of the seaplane carrier and over 150 feet longer, but:

Our captain was a marvellous seaman. He and old Handcock, ex of the South Eastern and Chatham Railway, handling her like bringing her alongside the pier, but there was quite a sea running and the

Warrior was half under water, and she did punch one hole in our stoke hold with one of her casemate guns. One of our f remen saved the situation by stuf ng his cap in the hole and shouting to the other chaps "Come on, give us a hand" and they packed it up.

The two ships were tied together, with men on *Engadine* standing by with axes should *Warrior* take a sudden plunge, rising and falling alongside each other with the passing waves. *Warrior's* men were lined up in divisions ready to transfer, the able bodied men first to make room to transfer the wounded, when she gave a shudder as if she were about to sink.

It was unmistakable. Apart from pulling us with her, just for a moment there was that look on all those chaps' faces – and keep in mind they'd had an awful hammering. I mean the scuppers were running with blood and casualties. There might have been a panic. The Captain just signalled the bugler. He blew the "Still" - just one toot. Every man jack stood to attention – and then they carried on in a very orderly manner.'

Assisted by the officers and men lining *Engadine's* side all those who could jumped or scrambled aboard and were hustled below out of the way. Then the walking wounded and stretcher cases were brought aboard, but one fell from his stretcher into the maelstrom between the two ships. Men from *Warrior* attempted a rescue but had to be ordered to stop by their Captain because of the danger. But Rutland could see that the man was resting on the remains of a fender and being carried forward into clearer water where the hull curved towards

the bow. Coolly, he went down a rope, swam over to the man and pulled him back to be hoisted aboard. Rutland was awarded a well deserved Albert Medal for this act. The seaplane carrier set course for Rosyth with 35 officers, 681 men and 27 wounded aboard. *Warrior* was not seen again and probably foundered shortly afterwards.

Beatty, in his reports, praised the work of *Engadine* as well as Rutland and Trewin.

The work of Engadine appears to have been most praiseworthy throughout, and of great value. Lieutenant Commander C. G. Robinson ... actually towed Warrior for 75 miles between 8.40 pm, May 31st, and 7.15 am, June 1st, and was instrumental in saving the lives of her ship's company.

Beatty then turned his attention to the flight.

[My] order was carried out very quickly, and by 3.8 pm a seaplane ... was well underway; her f rst reports of the enemy were received in Engadine about 3.30 pm Owing to clouds it was necessary to f y very low, and in order to identify four enemy light cruisers the seaplane had to f y at a height of 900 f . within 3,000 yards of them, the light cruisers opening f re on her with every gun that would bear. Both Flight Lieutenant Rutland and Assistant Paymaster Trewin are to be congratulated on their achievement, which indicates that seaplanes under such circumstances are of distinct value.

The Admiralty also agreed. Rutland was awarded the DSC.



SOCIETY VISIT TO METEOROLOGICAL OFFICE

On the first day of October, the full allowance of 40 members and guests set off for Exeter in driving rain. Fortunately, by the time we arrived at the centre the sun was shining. The



well organised procedure allowed us into the building in time for all to have a substantial lunch before starting the tour. The three hours of walking up and down stairs in such a huge building certainly contributed to many having a quick doze on the way back to Yeovilton! Each

member of staff was specialised in their individual field and all were very professional, and willing to answer numerous questions. Certainly worth a visit, particularly as it's free of charge. *Photographs thanks to Ernest Lear*



BOOK REVIEW

Reviewed by Malcolm Smith

“A HISTORY OF THE MEDITERRANEAN AIR WAR 1940 - 1945”

By Christopher Shores, Giovanni Massimello and others. Three Volumes. Published by Grub Street, London

It would be difficult in a short review of this nature to give more than an overview of this hugely detailed and masterly study of the air war in the Mediterranean. Christopher Shores is a prolific and much-acclaimed author on military aviation matters, who writes as the head of a

A HISTORY OF THE MEDITERRANEAN AIR WAR 1940-1945



Volume Two: North African Desert February 1942 - March 1943

Christopher Shores and Giovanni Massimello
with Russell Guest, Frank Olynyk & Winfried Bock

formidable group of dedicated researchers. He is also a long-standing member of the SOFFAAM Council. His fellow-author Giovanni Massimello served in the Italian Air Force as a reserve officer and has provided the bulk of the information on the activities of the Regia Aeronautica during the War.

The three volumes provide first-hand accounts of every aspect of this long-running conflict from numerous

standpoints among commanders, airmen and supporting arms. These accounts vividly encapsulate the attitudes and knowledge prevailing at the time, so that (in general) the benefits of hindsight are sparingly employed. The inadequacies of the British Army's leadership and strategies at the outset of war, often described by other historians, are briefly alluded to; but the author claims that it has subsequently become accepted that the North African campaign became mainly a battle of airfields and that air power increasingly became the dominant and decisive factor in the final victory. This revisionist view contrasts with the many accounts of the land war, which often give the impression that air forces played little part in the conflict.

A vivid picture of desert conditions ...

These volumes give a vivid picture of desert conditions, in which searing heat during the day, coupled with the all-pervasive fine sand, made servicing and operating aircraft extremely difficult. Logistic supply difficulties resulted in strict water rationing being imposed, while fresh food and vegetables were almost unobtainable. The Fleet Air Arm's contribution to the desert war is effectively covered, with details of aircraft carrier operations and also the role of disembarked units, notably Albacore, Swordfish and Martlet squadrons.

Each volume employs a similar format, in which brief introductory material is followed by chapters covering phases of the war. Each chapter opens with an overview of the tactical position followed by diary-like descriptions of events on an almost daily basis. These descriptions are extraordinarily detailed and copiously illustrated with contemporary photographs of aircraft and aircrew.

Front line aircraft were of limited performance

Volume 1 first describes the Command structure of the RAF in the Middle East at the outbreak of war. It is not surprising to read that (in what was considered to be a secondary theatre) front line aircraft were of limited performance. Before Hurricanes began to arrive in any numbers, fighter aircraft included Gloster Gladiators and even some Gloster Gauntlets. When these were allocated to the RAAF and designated as dive bombers, they were sarcastically named "The answer to the Stuka". The most modern bomber available was the Blenheim Mk IV, while long range night bombing capability was provided by Bristol Bombay bomber/transports. The first volume describes the enormous efforts made to deliver better equipment in ever-increasing volume. Air battles against Italian and (later) German adversaries are

vividly described. RAF opinions of the Allied armies' reluctance to fight and readiness to withdraw are several times quoted.

Volume 2 opens with an overview of the position on the ground, in which Allied forces had been forced far back to the east of the region, when in some quarters there were fears that Rommel's Afrika Korps could break through to Cairo and the Suez Canal. There are warm words of praise for the performance of Air Marshall Sir Arthur Tedder (Commander Middle East Air Force) and Air Vice Marshal Arthur "Mary" Coningham, the Commander of the Western Desert Air Force. The author also describes in some detail the difficulties encountered in re-supplying the Desert Air Force, compared with the comparatively short supply chains of the Axis powers.

There was a marked reluctance to release Spitfires

As well as the distance involved in the sea route around the Cape and up the Red Sea, or the hazardous trans-Africa delivery flights, there was



Spitfire Mk Vb - Dominant fighter-bomber in the Desert Air Force

a marked reluctance in the UK to release modern fighters, particularly Spitfires, to counter the superior performance of the Bf109F. Spitfires did not begin to arrive in the desert until June 1942. When the tide turned after the battle of El Alamein in November 1942, we read details of the harrying operations carried out against the retreating enemy. To quote: "Throughout the day, Hurricanes, Tomahawks, Warhawks, Spitfires, Beaufighters, Bostons, Baltimores and B25s kept up continuous bombardment and strafing attacks on the mass of vehicles retreating

along the coast road". This description underlines the variety of allied aircraft in the theatre, including many supplied by the USA. The penultimate chapter in this volume concludes by the end of March 1943, when the whole of Libya was finally in Allied hands. The final chapter gives an overview of various interdiction operations against enemy strongholds, such as Benghazi and Tobruk.

A melancholy story

Volume 3 shifts focus to Tunisia and opens with the melancholy story of the destruction by the Royal Navy of major elements of the French surface fleet in 1940. Fleet Air Arm operations included the shooting down of a French aircraft by a Martlet from HMS *Formidable* and the subsequent disabling of the French battleship *Richelieu* by a Swordfish torpedo strike launched from HMS *Hermes*. The story moves on to the build-up to Operation Torch in November 1942 – the allied landings in French North Africa. By this time, the fortunes of war had started to swing favourably for the Allies. The USA had entered the war and had been persuaded to support the indirect approach to defeating Germany by first striking in North Africa. The author comments that it was regrettable that more use was not made of existing air warfare experience in the Western Desert by the joint planners of the air component of the Operation. A new command structure had to be initiated, which had to enable co-operation between the large RAF and Commonwealth air assets earmarked for the Operation with the bomber, fighter and air transport units of the United States Army Air Force. A detailed description is provided of the decision to make Tedder Air Commander in Chief following the Casablanca conference and the volume concludes with descriptions of air operations over Sicily. In a section entitled "Pilots' Views" the author re-issues earlier first hand reports from aircrew who are mostly no longer with us. One opinion, from Brigadier Harrison Thyng, commander of the US 309th squadron, 31st Fighter Group, was "The Spitfire was the best allied fighter for air-to-air combat in the Tunisian campaign".

An enormous bibliography

The narrative is supported by most detailed listings of aircraft types involved and various orders of battle. It includes an enormous bibliography, which illustrates the depth of historical research of the authors, and each volume concludes with a comprehensive index. Altogether, these three volumes provide a massive and scholarly addition to reference books of the period and the authors and researchers are owed a debt of gratitude from anybody with a serious desire to understand the Air War in the Mediterranean.

